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Issues in Fair Value Accounting under IFRS

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# Chapter 1

## Introduction

This dissertation investigates fair value accounting under IFRS. Due to the EU-wide IFRS adoption, fair value has just recently been introduced as a legal term in Europe. It is this incorporation into company law which allows a deeper understanding of the concept, since accounting principles can best be interpreted against the background of a legislative intention (Wüstemann (1999); Moxter (1997)). However, it is just the label which seems relatively new (for purely political reasons as some might argue, e.g. Sunder (2008)). The related theoretical accounting concepts of current prices or present values have a long tradition in German as well as international normative accounting research (see Ballwieser et al. (2004); Hitz (2005); Liang (2001); or Ronen (2008) for an overview). The careful procedure of integrating new legal terms into an established theoretical framework is at the very origin of any normative research in the field of financial accounting (Wüstemann and Kierzek (2007b)) and it is thus the benchmark for this dissertation. Sound normative studies such as Naumann (1995) who precisely outlined the theoretical origins of hedge accounting in early jurisdiction or Lorenz (2002) who derived the principle of substance over form from accounting theory have been among the first inspirations for my work.

In the development of a theoretical framework of its own, the dissertation is also inspired by the idea that financial accounting is interwoven with multiple dimensions of human behavior so that shortcomings of an accounting system are a result of human shortcomings rather than of mere technical imperfections (Hopwood (1974)). For this very reason, it is not sufficient to exclusively study the link between accounting figures and price movements on capital markets (Ricciardi (2008a,b)). It is rather necessary to clearly accentuate the individual behavior of market participants as the missing part



of this causal chain (Kachelmeier and King (2002); Koonce and Mercer (2005); Libby et al. (2002)). Two important groups of individuals in a market setting are investors and managers. Biases in the perception of accounting information by investors might be anticipated by managers who, in turn, might report accounting figures strategically, i.e. not unbiasedly. This very basic relationship already gives an intuition of the complexity in the interaction between individual perception of accounting information and reporting behavior by managers which is at the core of my studies.

I have chosen fair value accounting as an exemplary case to study this relationship for mainly two reasons. First, prior literature on fair value accounting is almost exclusively based on the concept of highly efficient capital markets whereas boundedly rational behavior (Simon (1959)) and biased perceptions have rarely been considered in these settings (one example is Bloomfield et al. (2006)). It is the extensive evidence for the value relevance of fair values (e.g., Ahmed and Takeda (1995); Barth (1994); Barth et al. (1996); Bernard et al. (1995)) which has been the motivation and the major criterion for proponents to endorse a fair value approach (Barth et al. (2001)). Value relevance relies on the relationship between absolute fair values and stock prices or between changes in fair values and stock returns. This reliance is tantamount to the ancient objective of financial accounting to approximate some “true” economic value of a firm by means of measurement. This objective is, for a wide range of reasons, as appealing as it is unattainable (Holthausen and Watts (2001)). A more general information content perspective is more easily compatible with the notion of imperfect (albeit not necessarily unrational) human behavior: an accounting system should strive to produce useful signals rather than exact values (Demski and Sappington (1990)). Whereas fair value seems to come closest to an exact value, it is much less clear whether it is a useful signal as long as it is not perfectly exact.

Recent development have casted doubts on the overall usefulness of the signal and they are my second motivation for studying fair value accounting. The political debate about fair value reached its first peak in 2004 when the IASB proposed a general fair value option for all financial instruments. Central banks and politicians feared artificial income volatility and real economic effects on capital markets resulting from the implementation of that approach (European Central Bank (2004)) and successfully opposed the introduction of the rules in Europe (Walton (2004)). The latest subprime crisis might have proven the critics to be right (Singer (2008)). Lacking any hidden reserves and with the obligation

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to replicate and disclose market prices on non-existing markets, a substantial change in ratings of subprime credits forced banks to report volatile income figures (Adrian and Shin (2008); Borio (2008)). The overreactions observed on capital markets (Greenlaw et al. (2008)) are at least anecdotal evidence for the importance of behavioral theory in the explanation of markets.

Both motivations have led to my research question of how the disclosure of the extent of a bank's engagement in fair value measurement, which is discretionary to some degree, is perceived by investors. Measurement is just a translation of an economic underlying into an accounting number. Disclosure of a measurement base should thus not affect prices if it is not accompanied by a change in the respective accounting number. Hirst et al. (2004) have provided some evidence that the choice of a measurement base is not neutral with respect to risk perception by investors due to its impact on income. Koonce et al. (2005b) have suggested that not only measurement bases per se, i.e. quantitative information, but also labels potentially cause biases in risk perception and has shown the existence of severe biases when the usage of financial derivatives is disclosed. During the 1990's, financial derivatives faced a media coverage which was probably as negative (Trombley (2003)) as today's news coverage of fair value accounting. Therefore, it is interesting to observe whether the recent media coverage has caused similar biases.

This question is of particular interest as my own empirical evidence shows that about one half of European banks present their financial instruments by measurement categories on the face of the balance sheet, whereas the other half does not separately disclose the application of the fair value category under IAS 39. This heterogeneity in the presentation of financial instruments directly results in the next research question of whether the underlying disclosure strategies tend to be neutral or discretionary. Thereby, I define a discretionary or biased presentation choice as a choice that is not based on the principle of materiality, since a neutral presentation strategy by banks would result in the observed heterogeneity of disclosure choices if the category was immaterial for those banks opting not to separately disclose it. A negative coefficient on materiality in a binary choice model would thus be evidence for discretionary disclosure. Such evidence could suggest that managers anticipate negative biases in the risk perception of financial instruments if it is publicly known that the fair value category is too broadly applied, notwithstanding the economic identity of the underlying cash flows. This is the theoretical link between both research questions.

My dissertation is structured around these research questions: In chapter 2, I diligently outline the theoretical tradition of fair value (or, more broadly, current value) accounting based on a framework which is derived from normative accounting research. Since such a framework has already been established for a wide variety of different types of assets, I concentrate on the role of debt instruments under a fair value approach. Thereby, I strive to derive the inconsistencies in fair value accounting under IFRS which are one basic assumption in the due course of my analysis. In chapter 3, I turn to the behavioral perspective outlined above and I examine the labeling effects of fair value disclosures on risk perception by individual investors. To understand the link between chapters 2 and 3, it is important to note that the biases can only exist because inconsistencies leave management with a substantial degree of discretion in their disclosure choices. In chapter 4, I directly investigate the interaction between those biases and the disclosure choices by banks using a sample of 200 European banks from 28 different countries. In this part, I also examine the effects of the recent major change in the institutional environment of bank disclosures when IFRS 7 was for the first time mandatorily adopted during the financial year 2007. In a last chapter, I conclude with a summary.

# Chapter 2

## Principles of Fair Value Accounting under IFRS: Theoretical Evidence for Debt Instruments

### 2.1 Der Grundsatz der Fair-Value-Bewertung von Schulden nach IFRS: Die Perspektive der deutschen Bilanzrechtstheorie<sup>1</sup>

#### 2.1.1 Problem

Das IASB ringt derzeit, auch um impliziten Auflagen der Europäischen Union zu begegnen, um eine bilanztheoretische Fundierung und prinzipienorientierte Systematik seiner im fallweisen Ansatz entstandenen IFRS. Diese prinzipienbasierte Bilanzierung nach IFRS folgt, in neuer Lesart, dabei erkennbar dem Assets-Liabilities-Ansatz, bekundet doch das IASB, dass “only items that are assets and liabilities should be recognised as such in the balance sheet” (IAS 39.BC177 (c)).

Nun wurden Grundlagen zu diesem Ansatz bereits im 19. Jahrhundert von Bilanztheorie und -rechtsprechung (vgl. Moxter (1982), S. 139-141; Moxter (1984), S. 5-28) gelegt, mit dem Zweck, eine Bilanz zu schaffen, an der sich das Bild der wahren Vermögenslage einer Unternehmung ablesen lässt: “Denn durch die Bilanz soll der augenblickliche Wert des Vermögens gefunden werden” (Simon (1910), S. 303) - eine Forderung, die sich analog und in leicht abgeschwächter Form in RK.16 und IAS 1.7 wiederfindet und damit verdeut-

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<sup>1</sup> Für wertvolle Anmerkungen danke ich Seminarteilnehmern an der ESSEC Business School in Paris und an der Frühjahrstagung 2006 des VHB (Kommission Rechnungswesen) in Würzburg sowie zwei anonymen Gutachtern.

licht, dass die IFRS die entsprechenden Grundwertungen zu teilen scheinen. Um einem solchen Zweck gerecht zu werden, müssen die vermögensorientierten, weil an Einnahme- bzw. Ausgabeüberschusspotenzialen ausgerichteten Ansatzvorschriften mit gleichgerichteten Bewertungsvorschriften einhergehen: Dies begründet die Zeitwertbewertung, oder (in der Diktion des IASB) die Fair-Value-Bewertung von Aktiva und Passiva.

Dahinter steht nicht zuletzt die (alte) betriebswirtschaftliche Idee, nach der sich der Gesamtwert einer Unternehmung additiv aus den Zeitwerten ihrer Investitionsobjekte ergibt (vgl. Neus (2005), S. 326): Das Vermögen der Anteilseigner kann dann ermittelt werden, indem von dieser Summe der Zeitwert der Schulden abgezogen wird. In einer nicht idealen Welt jedoch geht diese Gleichung regelmäßig nicht auf. Komplex ist zum einen das Zusammenspiel der aktivischen Investitionsobjekte, das typischerweise durch Verbundeffekte gekennzeichnet ist, die die gesamtbewertungsorientiert verstandene Zeitwertbewertung des einzelnen Objekts unmöglich machen (vgl. Moxter (1982), S. 107 f.). Einfluss auf den Unternehmenswert hat in einer nicht idealen Welt aber auch die Zusammensetzung der Passiva, denn die bei der Zeitwertbewertung von Aktiva identifizierten Einschränkungen gelten gleichermaßen für Finanzierungstitel. Im Ergebnis akzeptiert das IASB (wohl) die Unvereinbarkeit von Bilanzierung und Gesamtbewertung; für entscheidungserheblich wird es dennoch gehalten, einer Bilanz zumindest objektive, weil (im Gegensatz zum gesamtbewertungsorientierten Kalkül) nicht unternehmensindividuelle Zeitwerte entnehmen zu können. Im Schrifttum ist sowohl für materielle als auch für immaterielle Vermögenswerte differenziert und prominent gewürdigt worden, welche Gestaltungsfreiheiten trotz des vermeintlich objektiven Bewertungskalküls die Entscheidungserheblichkeit beschränken (vgl. Baetge and Zülch (2001), S. 558 f.; Ballwieser et al. (2004), S. 529; Böcking and Sittmann-Haury (2003), S. 195; Engel-Ciric (2002), S. 782 f.; Hommel and Hermann (2003), S. 2501; Jäger and Himmel (2003), S. 416; Kuhner and Hitz (2000), S. 900; Schildbach (1998), S. 580; Streim et al. (2003), S. 473 f.; Streim et al. (2004), S. 233 f.; Wagenhofer (2008), S. 187 f.).

Dies ist der Hintergrund, vor dem sich ein mit der Zeitwertbewertung der Passiva verbundenes Ziel verbietet, einer Bilanz den Zeitwert von Eigenkapitaltiteln entnehmen zu können. Überraschenderweise wirkt in der jüngsten Normsetzung des IASB genau dies aber nicht mehr unumstritten. Die restriktive Eigenkapitaldefinition des IAS 32 führt dazu, dass in Fachliteratur (vgl. zuletzt Küting et al. (2006a), S. 69) und Tagespresse (vgl. etwa Handelsblatt, 30.12.2005, S. 11) die plakativ formulierte (und sachlich berechtigte)

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Furcht geäußert wird, das gesellschaftsrechtliche Eigenkapital von Personengesellschaften und Genossenschaften qualifiziere sich bilanziell nunmehr als Fremdkapital und unterliege als Konsequenz einer Zeitwertbewertung. Dieses aktuelle Beispiel lässt eine weitreichende Bedeutung des Fair-Value-Grundsatzes für die Bewertung von Finanzierungstiteln erkennen, wie er explizit nur von IAS 39 und IFRS 3 gefordert wird, zeigt aber gleichzeitig das Spannungsfeld zwischen Einzelbewertungsgrundsatz und Effektivvermögensermittlung auf (vgl. auch Weindel (2008), S. 60), dem dieser Grundsatz bilanztheoretisch entspringt. Dies bildet den Anlass, die Passivierungsnormen (Ansatz und Bewertung) der IFRS einer systematischen Bewertung hinsichtlich der Bedeutung des Fair-Value-Grundsatzes zu unterziehen.

Die Untersuchung beginnt mit einer Rekonstruktion des Fair-Value-Grundsatzes aus den bilanzrechtlichen, bilanztheoretischen und rechnungslegungstheoretischen Traditionen der Zeitwertbewertung, die der internationalen Standardsetzung zugrunde liegen. Aus dem zu identifizierenden Beurteilungsgerüst ergibt sich der Würdigungsmaßstab dieser Arbeit, der vom IASB selbst angelegt wird, nämlich die innere und zugleich systematische Konsistenz der Bilanzierungsnormen. Unterschieden nach finanziellen und nicht finanziellen Schulden (und damit dem mutmaßlich neuen Sprachgebrauch des Standardsetzers folgend) wird im nächsten Abschnitt die Fair-Value-Bewertung von Fremdkapitaltiteln gewürdigt. Zu untersuchen ist dabei jeweils zunächst, ob der Schuldbegriff überhaupt einem Assets-Liabilities-Ansatz folgt und, darauf aufbauend, ob der Wertmaßstab sich einerseits explizit (nach der Auffassung des Standardsetzers) und andererseits implizit (in Abhängigkeit von den in die Bewertung einfließenden Faktoren) als Fair Value qualifiziert. Da sich die Schulddefinition nach geltendem IAS 32 wie skizziert auf klassische Eigenkapitaltitel erstreckt, schließt die standardbezogene Untersuchung der Passivseite mit einer Würdigung der (selbstständigen wie nicht selbstständigen) Bewertung dieser Titel. In der Gesamtschau des Systems der IFRS ergibt sich daraus die Begründung, warum der Fair-Value-Grundsatz auf der Passivseite einer Bilanz nur sehr begrenzt Geltung erlangen kann, und, in normativer Wendung, auch nur erlangen sollte. Das Kapitel schließt mit einer thesenförmigen Zusammenfassung.

## 2.1.2 Theoretische Begründungstraditionen des Grundsatzes der Fair-Value-Bewertung von Schulden

### 2.1.2.1 Bilanzrechtliche Traditionen der Zeitwertbewertung

Die ursprünglich herrschende Auflistung einzelner Bilanzposten zu ihren bei Anschaffung geleisteten Ausgaben wurde bei Einführung des Allgemeinen Deutschen Handelsgesetzbuches (ADHGB) nicht berücksichtigt, stattdessen vorgeschrieben, “sämtliche Vermögensstücke und Forderungen nach dem Werte anzusetzen, welcher ihnen zur Zeit der Aufnahme beizulegen” sei (Art. 31 ADHGB). Die Rechtsprechung leitete aus dieser Vorschrift ein Prinzip der Bilanzwahrheit ab (vgl. zum Grundsatz Berndt (2005)); dieses drücke sich wiederum darin aus, dass nicht nur Aktiva, sondern auch Passiva zu ihrem bei Fortbestand der Unternehmung objektiv realisierbaren Markt- oder Börsenpreis zu bewerten seien (vgl. ROHG (1873), S. 18; Gutenberg (1926), S. 506; Osbahr (1923), S. 43; Passow (1910), S. 96; Rehm (1914), S. 359; Schmaltz (1926), Sp. 1236), “ebenso wie in der Regel zur Bildung der Dividendenmasse keine andere, als in bar erlangbare Werte verwendet werden können” (von Strombeck (1882), S. 474). Diese Ausfüllung der “Lücke bezüglich der Schulden” durch die Rechtsprechung wurde vom Gesetzgeber im Wesentlichen bestätigt, als das ADHGB 1900 durch das neue Handelsgesetzbuch (HGB) ersetzt wurde; fortan waren “sämtliche Vermögensgegenstände und Schulden nach dem Werte anzusetzen, der ihnen in dem Zeitpunkte beizulegen ist, für welchen die Aufstellung stattfindet” (§ 40 HGB a. F.). Fehlten Marktpreise von Schulden, war der Gegenwartswert der Schuld nach juristischer Auffassung gleich dem Fälligkeitswert: “Auch unverzinsliche befristete Schulden werden nicht auf die Gegenwart diskontiert” (Rehm (1914), S. 434). Einher ging der bilanzrechtliche Fokus auf den objektiven Veräußerungswert mit einem gleichermaßen geprägten Verständnis des bei zivil- und steuerrechtlichen Bewertungsanlässen heranzuziehenden gemeinen Wert (vgl. Schmalenbach (1917 and 1918), S. 142 f.; Offenberg (1918/19), S. 579; Schubert (1926), Sp. 1289 f.).

## 2.1.2.2 Bilanztheoretische Traditionen der Zeitwertbewertung

### 2.1.2.2.1 Finanzwirtschaftliche Begründung eines messtheoretischen Zeitwertverständnisses

Ausgehend von dem betriebswirtschaftlichen Ideal einer Welt vollkommener und vollständiger Märkte ohne Steuern ist eine atomisierte Zeitwertbewertung einzelner Finanzierungstitel in der Summe sogar übereinstimmend mit einer Effektivvermögensermittlung: Es gilt zunächst die Unabhängigkeit des Unternehmenswertes von der Kapitalstruktur (vgl. Modigliani and Miller (1958), S. 268; Stiglitz (1969), S. 785). Erfolgt die Finanzierung einer Unternehmung durch Ausgabe einzelner Titel, die unterschiedlich am Risiko der Unternehmung partizipieren, ergibt sich der Unternehmenswert additiv aus den Werten dieser einzelnen Eigenkapital- und Schuldtitel, abhängig allein von dem bei der Kapitalverwendung gewählten Investitionsprogramm, unabhängig aber von der Ausgestaltung der Partenteilung (vgl. Neus (2005), S. 323). Der Zeitwert eines Schuldtitels als Anteil am Gesamtwert der Unternehmung ist dann “simply the present worth of the future income from the specified capital” (Fisher (1927), S. 202), mithin der diskontierte Anteil am erwarteten Zahlungsstrom aus dem Investitionsprogramm (Fisher (1930), S. 12 f.; vgl. auch von Böhm-Bawerk (1911), S. 1011). Bei der Diskontierung gilt, “that the rate of interest varies directly with the risk” (Fisher (1930), S. 279), denn “the more thoroughly lenders and borrowers understand their business, the more certainly will some classes of borrowers obtain loans at a lower rate than others” (Marshall (1949), S. 491).

Außerhalb dieser idealen Modellwelt wird der Wert einer Unternehmung durchaus von der Zusammensetzung der Passiva und nicht allein durch das Zusammenspiel der Aktiva bestimmt. So kann die Umschichtung von Eigenkapital- in Fremdkapitalfinanzierung etwa dadurch erreicht werden, dass die bei der Aufnahme von Darlehen oder der Emission von Anleihen zugeflossenen liquiden Mittel zum Rückkauf von Eigenkapitaltiteln eingesetzt werden. Die Höhe, um die der Gesamtwert des Eigenkapitals dabei zurückgeht, kann nun abweichen von der Höhe, um die der Gesamtwert des Fremdkapitals steigt: Auf den unter Eigenkapital- und Fremdkapitalgebern verteilbaren Jahresüberschuss entfällt eine geringere absolute Steuerlast als zuvor, der an den einzelnen Eigenkapitalgeber auszahlbare Überschuss nach Abzug von Steuern und Fremdkapitalzinsen steigt und mit ihm der Wert des einzelnen Eigenkapitaltitels (vgl. Modigliani and Miller (1963), S. 433; Miller (1977), S. 261). Gleichzeitig hat die Erhöhung des Fremdkapitalanteils an der Finanzierung nega-



tive Effekte auf den Unternehmenswert, steigt damit doch typischerweise die Wahrscheinlichkeit einer Insolvenz und des Anfalls der damit verbundenen Kosten (etwa der Verlust nicht liquidierbarer, weil immaterieller wirtschaftlicher Vorteile, vgl. Koziol and Thabe (2005), S. 936; grundlegend Warner (1977), S. 337). Ob eine Bonitätsverschlechterung, die aus Kapitalstrukturmaßnahmen resultiert, unternehmenswertsteigernd oder senkend wirkt, hängt davon ab, welcher der beiden Effekte überwiegt, und lässt sich am Zeitwert der Finanzierungstitel ablesen. Eine Bonitätsverschlechterung hingegen, die realwirtschaftlich bspw. auf Grund falscher Investitionsentscheidungen durch den Rückgang erwarteter Einzahlungsüberschüsse verursacht wird, geht grundsätzlich mit einem verminderten Unternehmenswert einher.

#### **2.1.2.2.2 Der Fair Value in der Ausprägung als Wiederbeschaffungspreis**

*Die organische Bilanztheorie Schmidts.* Die Idee der Bewertung einzelner Bilanzposten zu jeweils aktuellen Wiederbeschaffungspreisen entstammt der organischen Bilanztheorie, die Gewinn als Transformationsleistung einer Unternehmung begreift. In einem “Strom der Werte” (Schmidt (1929), S. 31) werden Güter erworben, um sie in anderem Zustand, an anderem Ort oder zu einem anderen Zeitpunkt zu veräußern. Soll Gewinn den zum Veräußerungszeitpunkt erzielbaren Wertsprung widerspiegeln, besteht er nach dieser Konzeption in der Differenz zwischen Wiederbeschaffungs- und Veräußerungspreis und nicht in der Differenz zwischen Anschaffungs- und Veräußerungspreis (vgl. Kalveram (1931), S. 630). Daraus ergibt sich die vor Veräußerung zwingende erfolgsneutrale Bewertung zu Wiederbeschaffungspreisen (vgl. Hommel (2005), S. 302). Dabei vorzunehmende Wertänderungen am noch nicht veräußerten Vermögen stellen keinen Gewinn dar (vgl. Schmidt (1926), Sp. 1349), durch sie werde aber gleichzeitig (im Sinne eines Reproduktionswertes) eine “Darstellung des wahren Vermögens” (Schmidt (1929), S. 355; vgl. Coutre (1926), Sp. 1421; Rieger (1930), S. 147) erreicht.

Der Theorie zugrunde liegt ein industriell geprägtes Verständnis, nach dem der Betriebsprozess und damit der Unternehmenswert maßgeblich von der Aktivseite einer Bilanz getrieben werden. In der Entwicklung der Theorie spielt demzufolge die Schuldenbewertung nahezu keine Rolle (vgl. Kovero (1912)). Auch in der von Schmidt geprägten Ausgestaltung wird Fremdkapital als “starrer Posten” (Schmidt (1929), S. 132) verstanden. Die Bilanzierung von Schulden zu ihrem Rückzahlungsbetrag soll demnach Gläubigern

die Feststellung ermöglichen, ob dieser Betrag trotz veränderten Preisniveaus durch die Aktiven aufgebracht werden kann.

*Replacement Cost Accounting nach Revsine und Edwards/Bell.* Das der organischen Bilanztheorie verwandte Konzept eines Replacement-Cost-Accounting entstand aus der identischen vom Betriebsprozess eines Unternehmens geprägten Idee, nach der die Gewinngröße sowohl aufgrund des Zeitablaufs von Preisänderungen auf Faktormärkten als auch von Veränderungen der an Absatzmärkten erzielbaren Mengen beeinflusst wird (vgl. Rorem (1929); Edwards and Bell (1961); Zeff (1962); Revsine (1973)). Im Ergebnis sollen damit nur die Preisänderungen Auswirkungen auf die Gewinngröße haben, die auf den betriebsindividuellen Faktor- und Absatzmärkten entstehen, nicht aber die Änderung des allgemeinen Preisniveaus (vgl. Revsine (1973), S. 57). Auf dieser Grundlage werden zunächst die Bewertung von Aktiva betreffende Bilanzierungsregeln abgeleitet und die Bilanz als Instrument zur Vermögensmessung beschrieben: “long-run enterprise viability requires replacement cost to at least represent the minimum value of an asset to a firm” (Revsine (1973), S. 69).

Dass die Veränderung des Preisniveaus sich auch auf den Nominalzins und mithin den Marktwert einer Schuld auswirkt, war bei Entwicklung der organischen Bilanztheorie bereits geltende betriebswirtschaftliche Erkenntnis (vgl. Fisher (1930), S. 493 f.). Da nominale Zinssätze sich aus Realzins und einem Aufschlag für den antizipierten Kaufkraftverlust zusammensetzen, führt eine das antizipierte Maß übersteigende Inflation zu einem Zinsanstieg. Die nominal vereinbarten Schuldkonditionen werden durch den nicht antizipierten Preisanstieg real günstiger, der Preisanstieg wirkt sich damit aus Sicht der Unternehmung auch auf den Marktpreis der Schuld aus (vgl. Kaplan (1977), S. 370 f.). Bilanzielle Konsequenzen wurden daraus erst in einem späteren Stadium der angloamerikanischen Replacement-Cost-Theorie abgeleitet, die solche Gewinne als “net increase in owners’ equity” (Revsine (1981), S. 25) und mithin als berücksichtigungspflichtig begriff, ohne aber deren Ausschüttung zu empfehlen. Eine analog zur Bewertung von Aktiva am Produktionsprozess ausgerichtete bilanztheoretische Begründung des Wiederbeschaffungswertes von Schulden erfolgt auf Basis eines Performance-Ansatzes für Sach- und Dienstleistungsverpflichtungen. Der bei Eingang einer solchen Verpflichtung zu erzielende Betrag enthält regelmäßig eine Gewinnmarge, die dementsprechend in dem zur Erfüllung aufzubringenden Betrag an Aufwendungen (gewissermaßen dem Ablösepreis) nicht enthalten ist. Mit einer Bewertung zu Wiederbeschaffungspreisen soll gewährleistet

werden, dass die Ertragsvereinnahmung erst in der Periode erfolgt, in der die Leistung (mithin die Performance) erbracht wird (vgl. Lennard (2002), Rn. 25 (ii); kritisch Samuelson (1993), S. 44).

### **2.1.2.2.3 Der Fair Value in der Ausprägung als Veräußerungspreis**

*Die frühe Fortführungsstatik Simons.* Gegenüber der bilanzrechtlich dominierenden Auffassung, eine “Bilanz der objektiven Wahrheit der wirklichen Vermögenslage” (ROHG (1873), S. 18) sei durch die Bewertung zu objektiven Veräußerungswerten zu erreichen, grenzte sich die statische Bilanztheorie ab, indem sie den individuellen Wert als für “die Darstellung des Vermögens einer bestimmten Persönlichkeit” (Simon (1910), S. 303) relevanten Maßstab entwickelte. Damit erfuhr zwar der Veräußerungspreis eine bilanztheoretische Begründung als Zeitwert solcher Posten, die tatsächlich zur Veräußerung bestimmt waren, in seiner Ausprägung jedoch als ein den individuellen Verkaufsmöglichkeiten entsprechender und daher gegenüber dem allgemeinen Marktpreis modifizierter “besondere(r) Verkaufswert” (Simon (1910), S. 359; vgl. Gutenberg (1926), S. 507 f.). Auch Schulden müssen in diesem Verständnis einer Bewertung zum individuellen Wert zugänglich sein: “Grundsätzlich unerheblich ist für den Wertansatz der Obligationen der Nennbetrag” (Simon (1910), S. 431). Eine Abweichung des Zeitwertes vom Nennbetrag wird in dieser frühen Betrachtung noch nicht aus Marktkursen abgeleitet, vielmehr allein aus einem zum Zeitpunkt der Schuldaufnahme vereinbarten (Dis)Agio, in dem sich gemeinhin ausdrückt, dass der Nominalzins nicht marktgerecht ist. Zu passivieren sei in diesem Fall zwar der Nennbetrag, die Wertkorrektur aber in einem aktivischen Disagiokonto (bzw. einem passivischen Agiokonto) zu berücksichtigen (vgl. Simon (1910), S. 435), so dass im Saldo Schulden “zu ihrem wirklichen Wert” (Simon (1910), S. 443) erscheinen.

*Die dynamische Bilanztheorie Schmalenbachs.* Die von Simon als vermögensorientiert verstandene Bewertungsmethode wurde von der dynamischen Bilanztheorie nahezu unverändert übernommen, freilich mit gegensätzlicher Intention: Die Bilanz hat nach dieser Lehre “nicht den Zweck der Vermögensübersicht, sondern den Zweck der Gewinnermittlung” (Schmalenbach (1908 and 1909), S. 81; vgl. Moxter (1982), S. 194 f.; Moxter (1984), S. 30 f.). Das (Dis)Agiokonto soll mithin keine Vermögenskorrektur, sondern durch seine im Zeitablauf gleichmäßige Auflösung eine richtige, weil periodengerechte Erfolgsrechnung gewährleisten (Schmalenbach (1948), S. 108). Erkannt wird dabei der Einfluss von

späteren Kapitalzinsänderungen auf den aktuellen Rückzahlungspreis der Schuld. Doch da “die Frage, ob der Betrieb in der Lage ist, den niedrigen Kurs zum Rückkauf zu benutzen, oft schwer zu entscheiden” sei und es ohnehin nicht gelingen werde, “die ganze Obligationsschuld durch Rückkauf zum geltenden Kurse zu tilgen” (Schmalenbach (1948), S. 150, beide Zitate), sollen diese Wertschwankungen unberücksichtigt bleiben. Schließlich könne sich im Kursrückgang der Schuld auch eine Bonitätsverschlechterung des Emittenten ausdrücken; werde diese aber über eine Abschreibung der Schuld gewinnwirksam, sei dies gar “eine humoristische Angelegenheit” (Schmalenbach (1948), S. 150).

*Das Full-Fair-Value-Modell der Joint Working Group.* International entstand die Interpretation des Zeitwertes als Veräußerungspreis maßgeblich in Abgrenzung zu Edwards und Bell (vgl. Chambers (1965), S. 740; Chambers (1982), S. 3; Sterling (1970), S. 327 f.), ohne dabei auf den Wiederbeschaffungspreis als Maßstab zu verzichten, der für die Bewertung etwa von Vorräten in Betracht gezogen wurde (vgl. Chambers (1966), S. 232 f.). Diese Inkonsistenz gründet auf der Forderung nach unternehmensindividuellen Werten, der nur durch die Annäherung über den Wiederbeschaffungspreis gerecht zu werden ist, und wurde denn auch zum hauptsächlichen Vorwurf; zu groß ist die Bedeutung der Bilanzposten, für die der Veräußerungspreis von den Befürwortern selbst abgelehnt wurde: “normally assets are not on their last legs, and firms are not on the brink of liquidation” (Baxter (1967), S. 212).

Die Auffassung setzte sich aber spätestens mit der Verabschiedung eines Standardentwurfs zur Bilanzierung von Finanzinstrumenten durch die Joint Working Group of Standard Setters im Jahr 1999 durch, in dem der Fair Value als Veräußerungspreis von finanziellen Vermögenswerten bzw. Ablösepreis von finanziellen Schulden definiert und die Bewertung zum “entry price” explizit verworfen wird (vgl. Joint Working Group of Standard Setters (1999), Abs. 28, BC4.1 f.; dazu Breker et al. (2005a)). Unternehmensspezifische Verkaufsmöglichkeiten werden dabei nicht berücksichtigt, denn sie seien “dependent upon internal estimates and assumptions” und nicht “comparable from enterprise to enterprise” (JWG (1999), BC4.9). Der mithin als Bewertungsmaßstab verlangte objektive Ablösepreis einer Schuld ist abhängig von der unternehmenseigenen Bonität; die durch diese verursachten Wertänderungen sind ausdrücklich erfolgswirksam zu behandeln (vgl. JWG (1999), BC4.50). Die Fair-Value-Bewertung ist dabei Ausfluss einer an der Vermögensgröße ausgerichteten Bilanzierung: “Only items that are assets or liabilities should be recognised and measured as such in financial statements” (JWG (1999), BC1.29).

### 2.1.2.3 Rechnungslegungstheoretische Traditionen der Zeitwertbewertung

Sowohl bilanzrechtliche als auch bilanztheoretische Traditionen einer Zeitwertbewertung basieren auf dem Anspruch, mit den Instrumenten der Bilanzierung eine bestimmte Größe (ein stichtagsbezogenes Vermögen oder einen Periodengewinn) zu messen. Diesem messtheoretischen Anspruch steht die von Beaver and Demski (1979) geprägte Auffassung entgegen, dass mit bilanziellen Bewertungsmethoden unter (realistischen) Bedingungen unvollkommener und unvollständiger Märkte keine widerspruchsfreie kollektive Präferenzordnung der Einkommensgrößen aus Sicht der Eigner abgebildet werden kann. Bilanzielle Größen sind unter dieser Perspektive daher nicht als Maß, vielmehr als unter der Voraussetzung entscheidungsrelevantes Signal zu verstehen, dass daran die Einschätzung über Wahrscheinlichkeiten künftiger Umweltzustände (die Partitionierung) verfeinert werden kann. Die Anwendung messtheoretischer Bilanzierungsmethoden kann diese Entscheidungsrelevanz ermöglichen (vgl. Demski and Sappington (1990), S. 381; Liang (2001), S. 234). Aufwandsabgrenzung durch den Ansatz von Rückstellungen etwa kann in diesem Sinne als Signal interpretiert werden, das Zuständen, in denen eine Auszahlung zur Begleichung der zugrunde liegenden (gerade ungewissen) Verpflichtungen erfolgen muss, eine höhere Wahrscheinlichkeit zuweist<sup>2</sup>.

Eine Verpflichtung zur Anwendung eines bestimmten Wertmaßstabes aber kann aus dieser Auffassung nicht abgeleitet werden. Vielmehr kann gleichermaßen eine neutrale Zeitwertbewertung als auch eine konservative (imparitätische) Bewertung in diesem Sinne entscheidungserhebliche Signale erzeugen (vgl. Demski and Sappington (1990)). Zentral ist nicht die absolute Höhe von Buchwert oder Periodenerfolg des Unternehmens, sondern die den einzelnen Investoren gegebene Möglichkeit zur Inversion des publizierten Signals in die jeweils gesuchte Größe. Die Rechnungslegungstheorie begründet daher keine unmittelbare Tradition der Zeitwertbewertung.

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<sup>2</sup> Zur Auseinandersetzung mit Beaver and Demski (1979) vgl. in der deutschen Literatur Ballwieser (1982), S. 786-788; zur Auseinandersetzung mit Demski and Sappington (1990) vgl. Ballwieser (1996), S. 519 f.

#### 2.1.2.4 Die Zeitbewertungstraditionen im Beurteilungsgerüst internationaler Standardsetzer

Zweck eines IFRS-Abschlusses ist die Bereitstellung von Informationen über die finanzielle Lage des bilanzierenden Unternehmens (IAS 1.7). In der Folge der Ergebnisse der Joint Working Group prägt der Assets-Liabilities-Ansatz erkennbar die Auslegung dieser Zielsetzung durch das IASB (vgl. IAS 39.BC177 (c); Wüstemann and Kierzek (2005b), S. 429). Vermögenswerte zeichnen sich demnach durch zukünftigen Zufluss und Verbindlichkeiten durch zukünftigen Abfluss von wirtschaftlichen Ressourcen aus (RK.49). Als adäquater Wertmaßstab versteht das IASB den stichtagsbezogenen Wert dieses Zahlungsstroms und basiert darauf seine (im Wesentlichen der Joint Working Group folgenden) Fair-Value-Definitionen in den Einzelstandards (Gebhardt and Naumann (1999)). Nachvollzogen wurden vom IASB damit die skizzierte bilanztheoretische Abkehr von betriebswirtschaftlich durchaus begründbaren Wiederbeschaffungswerten im Verständnis von Schmidt bzw. Edwards/Bell oder Revsine und die Zuwendung zu ursprünglich bilanzrechtlich aus Objektivierungsgründen herangezogenen Veräußerungspreisen. Vereinbar wäre ein Assets-Liabilities-Ansatz freilich auch mit anderen Wertmaßstäben (vgl. Wüstemann and Kierzek (2005a), S. 77; Sessar (2007), S. 217).

Da eine vermögensorientierte Zielgröße mit diesem Ansatz approximiert werden soll, gelingt dessen Begründung nur aus einer messtheoretischen Perspektive, unter der die Abbildung eines Effektivvermögens angestrebt wird. Dem folgen zuletzt etwa die Regelungen des IFRS 3 zur Bilanzierung von Unternehmenszusammenschlüssen (vgl. Duhr (2006), S. 228-233), nach denen eine zumindest anteilige Erfassung des originären Geschäftswerts verlangt wird. Der originäre Geschäftswert ist nämlich schon traditionell gerade Ausfluss eines Unterschiedes zwischen bilanzieller und effektiver Vermögensermittlung. Dies unterstreicht das Verständnis des zweiten Bilanzzwecks nach IFRS: Unter der Darstellung der Ertragslage wird zunehmend kein dynamischer an der Performance ausgerichteter, sondern ein statischer Gewinn verstanden (vgl. Wüstemann and Kierzek (2005a), S. 78 f.), der sich als Verzinsung des Unternehmenswertes ergibt und mithin allein Ausdruck von Veränderungen des Reinvermögens ist. Explizite Betonung findet dieser Paradigmenwechsel in der nunmehr öffentlich vorgeschlagenen Definition von Performance als Veränderung von reinen Vermögensgrößen innerhalb einer Periode (vgl. International Accounting Standards Board (2006b), OB23).

Streng effektivvermögensorientiert kann der Bilanzzweck dennoch nicht ausgelegt werden. Nicht nur hat sich die Bilanz dafür früh als schlechthin ungeeignetes Instrument erwiesen: Eine im dann notwendig weiten Sinne verstandene Einzelbewertung erforderte nicht nur zur vollständigen Identifizierung der rein wirtschaftlichen Vorteile eine vorrangige Ertragswertermittlung, die wiederum die Bilanzierung selbst besser ersetzt (vgl. Moxter (1982), S. 90). Vielmehr stellt auch der Fair Value gar nicht auf die Erfassung des Anteils eines bewerteten Vermögensträgers am Ertragsstrom der gesamten Unternehmung ab, sondern, wie skizziert, auf den objektiven Einzelveräußerungspreis. Die nach IFRS abzubildende Vermögenslage ist offenbar in atomisierter Betrachtung des Unternehmens hinreichend im Stichtagswert der einzelnen Bilanzposten ausgedrückt.

Die informationsökonomische Perspektive der Rechnungslegungstheorie findet sich nur in bestimmten Ansprüchen, die vom Rahmenkonzept des IASB, insbesondere aber den SFAC des FASB formuliert werden: “accounting information must be capable of making a difference in a decision by helping users to form predictions about the outcomes of past, present, and future events” (SFAC 2.47; ähnlich RK.26-28; vgl. Beaver (1998), S. 77). Im Ergebnis aber werden diese Ansprüche zurückgewiesen, implizit durch die an der Vermögensapproximation ausgerichteten IFRS, expliziter durch SFAC 1.42 und 1.48. Dies mag sich mit der Verabschiedung eines überarbeiteten Rahmenkonzeptes in der Version der Preliminary Views (IASB (2006)) ändern; die unmittelbare Abbildung einer Vermögens- oder Gewinngröße wird als primäre Zielgröße aufgegeben (vgl. IASB (2006), OB2), relevanten Bilanzgrößen vielmehr nur ein mittelbarer Bezug zu einer solchen messtheoretischen Größe zugesprochen (IASB (2006), QC10).

Das geltende Beurteilungsgerüst bei der Verabschiedung von Bilanzierungsstandards freilich ist sowohl beim IASB als auch beim FASB geprägt von Konsistenz und Widerspruchsfreiheit der Regelungen innerhalb eines Standards, aber auch im System der Einzelstandards, zu dem verfolgten Assets-Liabilities-Ansatz. Für die Schuldenbewertung sollen daher im Folgenden Existenz und Reichweite eines Fair-Value-Grundsatzes im Hinblick auf die Systemkonsistenz untersucht und gewürdigt werden. Das Spannungsfeld ist evident: Die Einzelbewertung der Schulden muss den dargelegten Approximationsbeitrag leisten, ohne Manipulationsfreiheiten zu eröffnen. Auch diese (verhältnismäßig) restriktive Objektivierungsanforderung der Verlässlichkeit scheint indes in einem zukünftigen Rahmenkonzept zurückgedrängt und von einer Forderung nach “faithful representation” (IASB (2006), QC16) abgelöst zu werden, die sich indes in einer (vorgeblich) korrekten

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Abbildung des wirtschaftlichen Gehalts von Geschäftsvorfällen erschöpft.

## **2.1.3 Bedeutung des Fair-Value-Grundsatzes für die Bewertung finanzieller Schulden**

### **2.1.3.1 Begriff der finanziellen Schuld: Maßgeblichkeit der zeitlich befristeten Kapitalüberlassung**

Ob eine Schuld als finanzielle Verbindlichkeit nach IAS 39 bilanziert werden darf und ob infolgedessen Regelungen zur Fair-Value-Bewertung greifen, richtet sich nach den für finanzielle Verbindlichkeiten geltenden Definitionskriterien des IAS 32: Weder nicht finanzielle Schulden noch emittierte Eigenkapitalinstrumente eines Unternehmens fallen in den Anwendungsbereich des IAS 39 (IAS 39.2 (d)). Der Ausschluss emittierter Eigenkapitalinstrumente von einer selbstständigen Bewertung folgt dem Verständnis des Rahmenkonzeptes, in dem Eigenkapital als eine "Restgröße" bezeichnet wird (RK.65), deren bilanzieller Wert sich mithin erst ergibt, wenn vom bilanzierten Bruttovermögen die bilanzierten Schulden abgezogen werden. Die Abgrenzung finanzieller Schulden gegenüber dem Eigenkapital folgt dieser grundsätzlichen Charakteristik nicht (vgl. Hachmeister (2005), S. 15): IAS 32.16 stellt bei der Legaldefinition finanzieller Schulden nicht auf die Verbriefung eines Anspruchs am residualen Unternehmenswert ab; zentrales Kriterium ist vielmehr die vertragliche Verpflichtung zur Rückzahlung des überlassenen Kapitals durch Tilgung oder Rückkauf, derer sich ein Unternehmen nicht durch unbedingte eigene Entscheidung entziehen kann.

Nicht alle Schulden, die die Definitionskriterien des IAS 32 erfüllen, sind als Finanzinstrumente nach IAS 39 zu bewerten. Ausgenommen von dessen Anwendungsbereich sind alle Schulden aus Leasingverhältnissen gemäß IAS 17, aus Pensionsvereinbarungen mit Arbeitnehmern gemäß IAS 19 sowie aus Versicherungsverträgen gemäß IFRS 4. Verpflichtungen gegenüber der öffentlichen Hand, die als latente Steuern nach IAS 12 zu passivieren sind, werden grundsätzlich (mangels vertraglicher Grundlage) als nicht finanzielle Schuld verstanden (vgl. IAS 37.5 (b)).



### 2.1.3.2 Der Fair Value als Wertmaßstab von finanziellen Schulden gemäß IAS 39

#### 2.1.3.2.1 Voraussetzungen einer Fair-Value-Bewertung

Bei Zugang sind alle finanziellen Schulden zum Fair Value zu bewerten (IAS 39.43). In der Folge stellt die erfolgswirksame Bewertung zum Fair Value die Abweichung von der grundsätzlich vorgesehenen Bewertung zu fortgeführten Anschaffungskosten dar (IAS 39.47). Zulässig ist sie, falls eine entsprechende Kategorisierung der Schuld vorgenommen ist. Diese Kategorisierung als “at fair value through profit or loss” (IAS 39.9) ist verpflichtend, wenn die finanzielle Schuld einem Handelszweck dient. Ein solcher wird allen derivativen Instrumenten sowie den in einem Portfolio verschiedener Instrumente enthaltenen Schulden, mit dem in der Vergangenheit regelmäßig als Folge kurzfristiger Transaktionen Gewinne erzielt wurden, unwiderlegbar unterstellt. Auch für emittierte Anleihen, deren kurzfristiger Rückkauf in Abhängigkeit der Marktpreisentwicklung beabsichtigt ist, ist diese Kategorisierung verpflichtend (IAS 39.AG15).

In Ausübung eines Wahlrechts ist die Kategorisierung überdies zulässig, wenn das Schuldinstrument in ein am Fair Value als Berichtsgrundlage ausgerichtetes Risikokontrollsystem einbezogen ist oder als Ergebnis ein “accounting mismatch” (IAS 39.9) beseitigt wird, weil etwa ein der Schuld genau gegenläufiges Instrument zwingend zum Fair Value zu bewerten ist (vgl. Löw and Blaschke (2005), S. 1732; Küting et al. (2006b), S. 603 f.). Sofern das gegenläufige Instrument ein Derivat i. S. d. IAS 39.9 ist, lässt sich das gleiche Bilanzierungsergebnis erzielen, wenn die Schuld als Grundgeschäft einer Fair-Value-Absicherung designiert wird und im sog. Hedge Accounting nach IAS 39.89 (b) erfolgswirksam zum Fair Value zu bewerten ist (vgl. Schmidt (2005), S. 272). Die Voraussetzungen, das Hedge-Accounting-Wahlrecht zu nutzen (vgl. Löw and Lorenz (2005), S. 556), sind indes ungleich umfangreicher als der bloße Nachweis eines möglicherweise zukünftig auftretenden “accounting mismatch”, dessen Konkretisierungen nach IAS 39.AG4D-39.AG4G ebenso wenig beschränkende Wirkung entfalten. Die Fair-Value-Option nach IAS 39.9 eröffnet insofern einen weiten Spielraum, finanzielle Schulden gelöst vom vermeintlich restriktiven (vgl. Naumann (2004), S. 201) Hedge Accounting erfolgswirksam zum Fair Value zu bewerten.

### 2.1.3.2.2 Ausprägungen des Fair Value von finanziellen Schulden

*Der Fair Value als Marktpreis.* Die Fair-Value-Definition nach IAS 39.9 ist mit dem in allen Einzelstandards verwendeten Wortlaut identisch, für finanzielle Schulden entspricht der Wert demnach dem Betrag, zu dem eine Unternehmung an einem (offenbar idealen, vgl. Hitz (2005), S. 83) Markt die Schuld begleichen, mithin sich der damit verbundenen Verpflichtung entledigen kann: Es handelt sich um einen “exit value”. Liegen für gehaltene Schulden Preisnotierungen an “aktiven Märkten” (IAS 39.AG71) vor, kommt der Briefkurs diesem Wertmaßstab gleich (IAS 39.AG72). Da ein aktiver Markt aktuelle Preisnotierungen voraussetzt, ist bei der Beurteilung der Aktivität auf das Alter verfügbarer Preisnotierungen abzustellen (vgl. IDW (2005), S. 437). Ein aktiver Markt wird typischerweise für als börsenfähige Wertpapiere verbrieft Anleihen existieren.

*Der Fair Value beim Fehlen geeigneter Marktpreise.* Für bei Banken aufgenommene Kredite oder Schuldscheindarlehen kann die Existenz eines aktiven Marktes regelmäßig nicht unterstellt werden (vgl. Hachmeister (2005), S. 35; IDW (2005), S. 439). Die Preise auf nicht aktiven Märkten gelten als ungeeigneter Wertmaßstab<sup>3</sup>. Der (in diesem Fall fiktive) Marktpreis muss daher (auf der zweiten Stufe einer Fair-Value-Hierarchie) durch Anwendung einer Bewertungsmethode angenähert werden. Damit die Annäherung überhaupt gelingen kann, muss die Bewertungsmethode den Prozess der Marktpreisbildung nachgestalten und entsprechend genau die Faktoren berücksichtigen, die in die Preisbildung einfließen (IAS 39.AG76). Dies gelingt, wenn Preise ähnlicher Finanzinstrumente an aktiven Märkten ablesbar sind, durch einen Rückgriff auf diese (IAS 39.AG74). Andernfalls ist ein Barwertkalkül heranzuziehen. Der Preis, den der Käufer eines Schuldinstruments entrichtet, ist insbesondere abhängig von Höhe und Risiko des damit erworbenen Zahlungsstroms; der Zahlungsstrom ist daher mit einem risikoäquivalenten Diskontierungsfaktor zu bewerten. Ein wesentlicher Risikofaktor ist die Bonität des Schuldners, die die Wahrscheinlichkeit des Ausfalls der erworbenen Zahlungen ausdrückt. Bewertet eine Unternehmung ihre eigenen Schulden marktgerecht, muss sie konsequenterweise ihre eigene Bonität in die Bewertung einbeziehen: Je schlechter die eigene Bonität, je

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<sup>3</sup> Die fehlende Eignung lässt sich damit begründen, dass Preise auf nicht aktiven Märkten auf Grund fehlenden Handels nicht die aktuellen Informationen über Zahlungsstrom und Risiko des Wertpapiers widerspiegeln oder aus einzelnen Transaktionen stammen, in die verzerrte Informationen eingeflossen sind, es dem Markt mithin an semi-strenger Informationseffizienz mangelt (vgl. z. B. Hommel (2000), S. 52; Weber (2004), S. 298 jeweils m. w. N.).

wahrscheinlicher mithin die künftige vollkommene wirtschaftliche Unfähigkeit zur Erfüllung einer Zahlungsverpflichtung ist, desto geringer ist der Betrag, der für eine vorzeitige Ablösung von dieser Verpflichtung zu entrichten wäre (vgl. Barth and Landsman (1995), S. 103). IAS 39 verlangt mit dieser Begründung eine Berücksichtigung der eigenen Bonität bei der Fair-Value-Bewertung finanzieller Schulden explizit (vgl. IAS 39.BC87-39.BC92).

### **2.1.3.3 Grenzen der Fair-Value-Bewertung von finanziellen Schulden**

#### **2.1.3.3.1 Grenzen auf Grund asymmetrischer Erfassung von Bonitätseffekten**

Nach dem skizzierten Fair-Value-Verständnis des IAS 39, das sich wesentlich durch die Replikation der Preisbildung an idealen Märkten auszeichnet, ist es folgerichtig, die Veränderung aller Komponenten des Diskontierungsfaktors bei der Ermittlung des Fair Value künftiger Zahlungsverpflichtungen zu berücksichtigen, würde doch genau dies auch bei der Veräußerung der Schuld an einem Kapitalmarkt im Kalkül der Marktteilnehmer geschehen. Ein derart durch einen Zinsanstieg bedingter Gewinn repräsentiert freilich keine gestiegenen Ausschüttungserwartungen: Die Ablösung der Schuld an einem Markt würde zwar zu einem geringeren Preis als vor dem Zinsanstieg möglich; muss der für die Ablösung erforderliche Betrag indes neu aufgenommen werden, gelten darauf die nachteiligeren Konditionen, deren Vermeidung allein die Abschreibung der unterverzinslichen Schuld ausgelöst hat (vgl. Knobloch (2005), S. 99). So ist auch die Bezeichnung als "Scheingewinn" (Moxter (1982), S. 56; ähnlich Barth (2006), S. 280) zu verstehen, deren Erfassung den Gegensatz des die Fair-Value-Definition des IAS 39 offensichtlich prägenden Assets-Liabilities-Ansatzes zu einem an der Prognose eines künftigen Ausschüttungsniveaus ausgerichteten Revenues-Expenses-Ansatz kennzeichnet (vgl. Wüstemann and Kierzek (2005a), S. 76).

Vor diesem Hintergrund ist es, isoliert betrachtet, sachgerecht, in die zinsinduzierte Einzelbewertung von Schulden auch die von der Bonität der Unternehmung abhängige Komponente des Diskontierungsfaktors einzubeziehen (vgl. JWG (1999), BC4.50-BC4.62; IAS 39.BC87-39.BC92; Baetge and Lienau (2005), S. 316; Bieker (2006), S. 214; Kuhner and Hitz (2000), S. 901; Kümmel (2002), S. 194). Um ein symmetrisches Gesamtbild der Unternehmung zu erhalten, ist es freilich genauso sachgerecht, den Einfluss einer Bonitätsveränderung auf der Aktivseite zu erfassen. Als bonitätsabhängig gilt insbeson-

dere der originäre Goodwill (vgl. Barckow and Glaum (2004), S. 202; Europäische Zentralbank (2004), S. 85; Schmidt (2005), S. 272; Schruoff (2005), S. 129; Sprißler and Hacker (2005), S. 404; Thiele (2004), S. 2165), dessen Ansatz indes (aus guten, anderen Gründen zu Recht<sup>4</sup>) untersagt ist (IAS 38.48). Die mithin asymmetrische Erfassung von Bonitätseffekten führt dazu, dass eine Bonitätsverschlechterung grundsätzlich zu einem Bilanzgewinn führt. Dies mag die Entwicklung des Effektivvermögens widerspiegeln, wenn sich die Verschlechterung nicht aus realwirtschaftlichen Gründen, sondern aus Kapitalstrukturmaßnahmen ergibt und dabei die aus Unternehmenssicht positiven Effekte die negativen Effekte überwiegen; doch monoton ist der Zusammenhang zwischen Bonität und Unternehmenswert in diesem Fall nicht<sup>5</sup>. Die von der JWG vertretene und vom IASB im Wesentlichen befolgte Auffassung, nach der eine als unsachgerecht erkannte Bilanzierung immaterieller Vermögenswerte (“shortcoming in accounting for intangibles”) nicht durch eine in diesem Sinne gleichermaßen unsachgerechte Bilanzierung finanzieller Schulden zu heilen sei (vgl. JWG (1999), BC4.57), weist darauf hin, dass der Ausgleich der asymmetrischen Effekte der bonitätsinduzierten Schuldenbewertung zumindest langfristig auf der Aktivseite versucht werden soll - dies kann demnach nur einhergehen mit einer Bilanzierung des originären Goodwill (was aus vielen guten Gründen abzulehnen ist).

Selbst in einer informationsökonomischen Argumentation der Rechnungslegungstheorie kann die Erfassung von Bonitätseffekten bei der Schuldenbewertung nur begründet werden, wenn mit den daraus resultierenden erfolgswirksamen Buchungen ein hinreichend verlässliches Signal verbunden ist, anhand dessen die Bonitätsveränderung als zugrunde liegende Ursache erkannt werden kann. Das aus bilanztheoretischer Sicht als widersprüchlich kritisierte Vorzeichen des Periodenerfolges ist dabei unerheblich, sofern ein Adressat dieses Signal in die gesuchte Information invertieren kann. Die faktische Existenz eines derartigen Signals, das zwischen marktbezogenen und unternehmenseigenen Faktoren der Schuldenbewertung differenziert, ist angesichts der fehlenden Märkte, an denen sich die marktbezogenen Faktoren objektiv ablesen und in der Differenz die unternehmenseigenen

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<sup>4</sup> Diese Position wird in der Diskussion über die (Folge-)Bewertung derivativen Goodwills etwa geteilt von Busse von Colbe (2004), S. 314, Duhr (2006), S. 232, Kam (1990), S. 405, Reichelt and Schmidt (2005), S. 57, oder Siegel (2004), S. 314.

<sup>5</sup> Koziol and Thabe (2005), S. 928, zeigen, dass bei der Kapitalstruktur- und Insolvenzpolitik einer Unternehmung das Streben nach höchster Bonität ausgedrückt durch ein bestmögliches Rating im Hinblick auf die Maximierung des Unternehmenswertes “im Normalfall gerade nicht optimal ist”. Aufbauend auf dem Modell von Leland (1994) kann ein bestmögliches Rating eine vollständige Eigenfinanzierung erfordern und führt in diesem Fall zu einer Reduktion von Steuervorteilen aus der Fremdfinanzierung.

Faktoren bestimmen ließen, für den weit überwiegenden Anteil der Passivseite indes zu verneinen.

### **2.1.3.3.2 Grenzen auf Grund des Einzelbewertungsgrundsatzes**

Die anhand des Bonitätseffektes skizzierten Widersprüche bei der Bewertung finanzieller Schulden lassen erkennen, dass die zugrunde liegenden asymmetrischen Effekte einer nicht durchgängigen Fair-Value-Bewertung auf Aktiv- und Passivseite dem IASB bewusst sind. Im “theoretischen Idealfall von vollkommenen und vollständigen Güter- und Kapitalmärkten im Gleichgewicht” (vgl. Ballwieser et al. (2004), S. 530) ließen sie sich kompensieren, und sei es durch (den abzulehnenden) Ansatz des originären Goodwills.

Die Beurteilung der Grenzen einer Fair-Value-Bewertung finanzieller Schulden muss daher differenzieren: Soll durch sie im Ergebnis die Entwicklung der effektiven Vermögenslage repräsentiert werden, ist dies nur in jenem nicht existenten theoretischen Idealfall möglich, eine an diesem Zweck ausgerichtete Fair-Value-Bewertung in unserer - auch hier - unvollkommenen Welt mithin grundsätzlich verfehlt (vgl. Moxter (1982), S. 109; Wüstemann (2002), S. 64). Da diese effektive Vermögenslage hingegen lediglich “postenbezogen” repräsentiert werden soll (vgl. Wüstemann and Duhr (2005), S. 121), kann ein im Sinne des IAS 39 als Marktwert verstandener Fair Value tatsächlich den Effektivvermögensbeitrag des einzelnen Posten verkörpern. Es stellt sich in diesem Fall stattdessen die Frage nach der Art der Schulden, die ihrer Natur nach einer diesem Verständnis folgenden Bewertung zugänglich sein können.

Ausgehend von einer grundsätzlich schwer objektivierbaren, in der Diktion des Rahmenkonzepts nicht “verlässlichen” (RK.31) Replikation eines Preisbildungsprozesses durch Bewertungsverfahren wird die Antwort regelmäßig nur in auf aktiven Märkten gehandelten Instrumenten gesehen, die auch unter finanziellen Schulden eine Minderheit darstellen werden (vgl. Ballwieser et al. (2004), S. 535; Böcking et al. (2005), S. 101; Kemmer and Naumann (2003), S. 568; Schildbach (1999b), S. 182). Theoretisch mag ein finanzmathematisch ermittelter Marktpreis mit einem realen übereinstimmen, praktisch bestehen bei der Wahl von Parametern so viele Gestaltungsfreiheiten (vgl. stellvertretend Ballwieser et al. (2004), S. 535-541), dass nicht mehr zutrifft, was den Fair Value gerade auszeichnen soll: “it results in consistent measurement across entities” (IAS 39.BC97) - eine Forderung,

die selbst ein an “faithful representation” anstelle von Verlässlichkeit ausgerichtetes Rahmenkonzept beibehält (vgl. International Accounting Standards Board (2006b), QC35). Mit ihrer Einzelbewertung zum Fair Value werden überdies asymmetrische Ergebnisse verbunden sein, die sich nicht auf den Bonitätseffekt reduzieren lassen (vgl. Bromwich (2004), S. 50). Auch der Rückgang eines risikofreien Zinssatzes etwa wird eine Zuschreibung der marktgängigen Schuld auslösen, der gleichzeitige Wertanstieg der mit der Aufnahme der Schuld finanzierten Investition in eine Sachanlage darf diesen Verlustausweis nicht kompensieren (IAS 16.39).

#### **2.1.3.3.3 Grenzen auf Grund von Sonderregelungen außerhalb des Anwendungsbereiches von IAS 39**

Für finanzielle Schulden, die vom Anwendungsbereich des IAS 39 ausgeschlossen sind, gilt die Vorrangigkeit des Bewertungsmaßstabes eines spezielleren Standards, der sich im Einzelnen nach Art der Schuld unterscheidet, dabei aber grundsätzlich nicht mit dem Fair Value im Sinne des IAS 39 übereinstimmt.

Dies gilt zunächst für die aus der Verpflichtung zur Leistung künftiger Leasingraten erwachsende Schuld des Leasingnehmers in einem Vertragsverhältnis, das sich nach IAS 17 als Finanzierungsleasing qualifiziert (zu Details vgl. Engel-Ciric (2008), Rn. 10-16; Lorenz (2005), S. 695-698). Bei Vertragsabschluss ist diese Schuld zwar zum Barwert der Mindestleasingzahlungen zu bewerten (IAS 17.20), der dem für die Ablösung von dieser Verpflichtung zu zahlenden Preis bei korrekt gewählten Bewertungsparametern entsprechen mag. Liegt allerdings der Fair Value des gemieteten Vermögenswertes unterhalb dieses Barwertes, ist auch die Schuld nur zu diesem Wert und mit weniger als ihrem Ablösepreis anzusetzen. In der Folge ist die Bewertung an einer planmäßigen Verteilung von Zins- und Tilgungsanteil über die Vertragslaufzeit auszurichten. Der Zinsanteil entspricht analog zur Effektivzinsmethode des IAS 39 in jeder Periode einem konstanten Zinssatz auf die verbleibende Schuld (IAS 17.25; vgl. Engel-Ciric (2008), Rn. 45). Nach IAS 39 ist diese Methode auf zu fortgeführten Anschaffungskosten bewertete finanzielle Schulden anzuwenden, einer Fair-Value-Bewertung widerspricht sie.

Auch die Bewertung von Pensionsverpflichtungen ist nicht von einer streng stichtagsbezogenen Zeitwertbewertung, sondern von der Minimierung der Ergebnisvolatilität im

Zeitablauf geprägt (vgl. IAS 19.BC39; Müller (2005), S. 769; Pellens et al. (2004), S. 149). Für Verpflichtungen zur Erbringung einer bestimmten Pensionsleistung, die nach IAS 19 als leistungsorientierte Pensionsverpflichtungen gelten, gilt zwar grundsätzlich der Barwert der zum Stichtag von den Arbeitnehmern verdienten Pensionsansprüche, der versicherungsmathematisch zu ermitteln ist, und damit ein einem Fair Value ähnlicher Betrag (vgl. Feld (2003), S. 651) als Wertmaßstab. Verändert sich aber in Folge der Anpassung von versicherungsmathematischen Annahmen der Barwert dieser Schuld und mit ihm ihr marktgerechter Ablösepreis, muss diese Veränderung, wenn ein nach IAS 19.92 bestimmter Wertkorridor nicht verlassen wird, überhaupt nicht in die Bewertung der Schuld einfließen, und außerhalb dieses Wertkorridors nur zu einem Bruchteil, der sich aus der durchschnittlichen Restlebensarbeitszeit der Arbeitnehmer ergibt (IAS 19.93). Selbst wenn das Wahlrecht zur unmittelbaren bilanziellen Erfassung von versicherungsmathematischen Zeitwertänderungen ausgeübt wird, kann dies zur Glättung der Periodenerfolge erfolgsneutral geschehen (IAS 19.93A). Neben einem weiteren Bruch mit dem Kongruenzprinzip<sup>6</sup> stellt dies in erster Linie einen Beleg für das inkonsistente Nebeneinander vermögens- und gewinnorientierter Regelungen dar (vgl. Küting and Kessler (2006), S. 203): Während IAS 19.93 die bilanzielle Bewertung von Leistungsverpflichtungen und Planvermögen zu einem (vermögensorientiert) korrekten Zeitwert wahlrechtsweise erlaubt, soll IAS 19.93A ermöglichen, dass die Periodengerechtigkeit der Gewinngröße nicht von der Ausrichtung an der Vermögensgröße dominiert wird.

Der so ermittelte Wert der Pensionsverpflichtung wird anschließend mit dem Fair Value eines rechtlich vom Unternehmen unabhängigen Fondsvermögens saldiert, sofern dieses eigens der Finanzierung der Leistungsverpflichtungen gegenüber den Arbeitnehmern dient. Einem Ablösepreis kann der Buchwert der Pensionsverpflichtung daher nur gleich kommen, wenn bei Ablösung grundsätzlich das saldierte Fondsvermögen gemeinsam zu veräußern ist. Auch in diesem Fall aber wird eine Bezeichnung des Wertmaßstabes als Fair Value an den Bilanzierungsfreiheiten scheitern, die IAS 19 bei Bestimmung der Formel zur Zuordnung des Rentenanspruches auf die einzelnen Dienstjahre der Arbeitnehmer gewährt (vgl. Hommel and Wüstemann (2006), S. 170 f.; Schildbach (1999a), S. 968).

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<sup>6</sup> Einen vergleichbaren Bruch mit dem Kongruenzprinzip stellen insbesondere die Regelungen zur Bilanzierung des Sachanlagevermögens bei Anwendung der Neubewertungsmethode dar, vgl. Hommel (2005), S. 67-71; Ordelheide (1998), S. 527 f.

## 2.1.4 Bedeutung des Fair-Value-Grundsatzes für die Bewertung nicht finanzieller Schulden

### 2.1.4.1 Begriff der nicht finanziellen Schuld: Maßgeblichkeit der gegenwärtigen, unentziehbaren Verpflichtung

In neuer Diktion würden Schulden, deren Bilanzierung nicht in den Anwendungsbereich des IAS 39 fällt, als nicht finanzielle Verbindlichkeiten bezeichnet (ED IAS 37.10). Ihr Ansatz erfordert ebenfalls eine Schuldendefinition, die sich nach geltendem IAS 37 als zukünftiger Ressourcenabfluss auf Grund einer gegenwärtigen Verpflichtung ausdrückt, der aber im Unterschied zu finanziellen Schulden nicht aus einer vertraglichen Verpflichtung zu einer festen oder bestimmbareren Geldleistung resultiert, sondern hinsichtlich Höhe oder Fälligkeit unsicher ist und zudem aus gesetzlichen oder faktischen Verpflichtungen erwachsen kann; konstituierendes Element dieser Definition ist die Unvermeidbarkeit einer Begleichung der (ungewissen) Verpflichtung (vgl. Moxter (1999), S. 521 f.; Moxter (2004), S. 1059). Die unpräzise Konkretisierung der Unvermeidbarkeit als Unentziehbarkeit führt dazu, dass dieses Kriterium streng vermögensorientiert als objektivierendes Greifbarkeitsprinzip verstanden werden kann (vgl. Hommel (2002), Rn. 530; Hommel (2003), S. 747), gleichzeitig aber in vielen Fällen mit dem Ergebnis einer ausschüttungsstatistischen Zuordnung von Aufwendungen zu bereits vereinnahmten Erträgen übereinstimmt (vgl. Euler and Engel-Ciric (2004), S. S152; Förchle et al. (1999), S. 47).

Zu bilanzieren ist die nicht finanzielle Schuld nur, wenn die Wahrscheinlichkeit des Ressourcenabflusses eine Schwelle von 50% überschreitet (IAS 37.23). Finanziellen Schulden ist dieses Kriterium unbekannt: Die Wahrscheinlichkeit von Ressourcenabflüssen in verschiedenen Umweltzuständen spiegelt sich im Marktpreis der Schuld wider, bilanziell wird sie mithin allein bei der Bewertung zum Fair Value berücksichtigt; der nach IAS 39.14 ausschließlich durch den Vertragsabschluss bestimmte Ansatz der finanziellen Schuld aber bleibt von ihr unberührt.



## **2.1.4.2 Der Fair Value als (impliziter) Wertmaßstab von nicht finanziellen Schulden gemäß IAS 37**

### **2.1.4.2.1 Der Entpflichtungsbetrag als Fair Value einer nicht finanziellen Schuld**

Bei Erfüllung der Ansatzkriterien sind nicht finanzielle Schulden mit dem Betrag zu bewerten, zu dem sich das Unternehmen am Bilanzstichtag von einer zukünftigen Begleichung verpflichten könnte. Zwar wird dieser Betrag nicht als Fair Value bezeichnet, der Rückgriff auf den "exit value" als Bewertungsmaßstab kommt implizit gleichwohl einer Bewertung zum Fair Value im Verständnis des IAS 39 gleich. Der Unterschied der Wertmaßstäbe von Schulden nach IAS 37 und IAS 39 liegt in der Ermittlungsmethode: Die Typisierung, die gegenwärtige Begleichung einer nicht finanziellen Schuld sei "prohibitively expensive" (IAS 37.37), unterstellt das Fehlen eines funktionierenden Marktes, dessen Preisbildung erst einen Fair Value im Sinne des IAS 39 bestimmt. Der Begriff des Fair Value soll offenbar Werten vorbehalten bleiben, deren Ermittlung primär anhand von Marktpreisen erfolgt. IAS 37 aber greift auf die bestmögliche Schätzung als Methode zur Ermittlung des Entpflichtungsbetrages zurück. Diese unterliegt der Beurteilung durch die Unternehmensleitung (IAS 37.38) und gerade keiner unmittelbaren Marktorientierung: Der sich ergebende Wert ist lediglich "similar to fair value" (ED IAS 37.BC78; vgl. auch Zeimes (2003), S. 2080).

Ungeachtet der Unterschiede in der Begrifflichkeit wird im Ergebnis die Bewertung aus Massentransaktionen resultierender nicht finanzieller Schulden mit dem Fair Value nicht marktgängiger finanzieller Schulden grundsätzlich übereinstimmen können: Die Erwartungswerte zukünftiger Auszahlungen werden diskontiert (IAS 37.39 i. V. m. 37.45) und über ein den Marktteilnehmern allgemein unterstelltes Barwertkalkül entsprechend Preise nachgebildet, die potenzielle "Unternehmenserwerber am Bilanzstichtag als Belastung" (Moxter (1999), S. 523; vgl. auch Moxter (2003), S. 165 f.; Metz (2007)) berücksichtigen würden. Dies setzt voraus, dass der Diskontierungszins einerseits als Basiszins den der Restlaufzeit entsprechenden Zinsfuß risikoloser Titel (äquivalent zu den Auszahlungen als reale bzw. nominale Größe) und andererseits als Risikozuschlag die am Markt für die Übernahme entsprechender Risiken gezahlte Prämie beinhaltet (IAS 37.47; vgl. Hoffmann (2008a), Rn. 150; von Keitz et al. (2003), Rn. 92). Diesen Äquivalenzgrundsätzen kann die Ermittlung des Barwertes ebenfalls dadurch gerecht werden,

dass der Erwartungswert der künftigen Auszahlung durch ein Sicherheitsäquivalent ersetzt wird. Bei korrekter Anwendung führen beide Methoden freilich zu übereinstimmendem Ergebnis (vgl. Moxter (1983), S. 155 f.).

Dieses Barwertkalkül bei der Bewertung nicht finanzieller Schulden ist zunächst streng vermögensorientiert: Schulden werden als Effektivvermögensträger begriffen (vgl. Moxter (1982), S. 91; Rüdinger (2004), S. 98) und der für ihre Begleichung erforderliche Betrag als negativer Anteil am Gesamtzahlungsstrom der Unternehmung stichtagsbezogen bewertet. Der bei zeitlichem Näherrücken der Auszahlung erfolgende Anstieg des Barwertes spiegelt als Aufwand den Beitrag der Rückstellung zum vermögensorientierten Periodengewinn wider. Der als Verzinsung des Eigenkapitals zu verstehende Periodengewinn ergibt sich in dieser Betrachtung als Differenz aus dem Zins auf das Bruttovermögen und dem Zins auf das Fremdkapital, letzterer ist gleich der Barwertveränderung der Schulden.

#### **2.1.4.2.2 Zurückdrängung der Fair-Value-Bewertung durch die Bewertung zum wahrscheinlichsten Betrag**

Auf Wahrscheinlichkeitsmaße, anhand derer die Erwartungswerte zukünftiger Auszahlungen berechnet werden, lässt sich bei hinreichend großer Anzahl an Beobachtungen mit Hilfe des Gesetzes der großen Zahlen aus den in der Vergangenheit realisierten relativen Häufigkeiten der mit den Auszahlungen verbundenen Umweltzustände schließen (vgl. Hoffmann (2008a), Rn. 140; von Keitz et al. (2003), Rn. 84 f.). Dieser frequentistischen Art der Ermittlung sind Wahrscheinlichkeiten von einmaligen oder neuartigen Umweltzuständen nicht zugänglich. Diese Zustände zeichnen sich dadurch aus, dass es keinen “zugrunde liegenden Häufigkeitsfall” (Ballwieser (2001), Rn. 141) gibt. Erwachsen nicht finanzielle Schulden aus einer einmaligen oder neuartigen Verpflichtung, können im Rahmen der bestmöglichen Schätzung des Entpflichtungsbetrages zukünftigen Umweltzuständen nur Wahrscheinlichkeiten zugeordnet werden, die Ausdruck rein subjektiver Vermutungen sind. Die Quantifizierung subjektiver Wahrscheinlichkeiten ist grundsätzlich möglich; regelmäßig indes führt sie einerseits nicht zu punktgenauen Ergebnissen (vgl. Eisenführ and Weber (2003), S. 159) und andererseits zu einer unter Kaufleuten höchst unterschiedlichen Beurteilung identischer Zustände (vgl. Rüdinger (2004), S. 103). Ein auf dieser Basis ermittelter Erwartungswert mag fragwürdig sein, nach IAS 37 zumindest ist er nicht als Bewertungsmaßstab von Einzelverpflichtungen vorge-

sehen. Der stattdessen als Ergebnis der bestmöglichen Schätzung verlangte Betrag mit der höchsten Eintrittswahrscheinlichkeit vermeidet zumindest zwei Probleme einer Bewertung zum “punktuell zusammengefassten” (Maucher (2008), S. 94) Erwartungswert: Erstens ist die Ermittlung punktgenauer Wahrscheinlichkeiten für alle möglichen Ausprägungen des Auszahlungsbetrages nicht notwendig. Ausreichend wird ein Betrag sein, dessen Realisierung in einer ggf. auch qualitativen Gegenüberstellung von Für- und Wider-Argumenten, die entscheidungstheoretisch bei jeglicher Quantifizierung subjektiver Wahrscheinlichkeiten geboten ist (vgl. Eisenführ and Weber (2003), S. 156), am Überzeugendsten erscheint. Der angesetzte Wert hat zweitens eine eigene Eintrittswahrscheinlichkeit größer Null. Letztere Eigenschaft fehlt einem Erwartungswert bei (üblicher) diskreter Verteilung des unsicheren Auszahlungsbetrages nur zufällig nicht (vgl. Ballwieser (1981), S. 101).

Problematisch ist die Verwendung des wahrscheinlichsten Betrages, wenn dieser unter den möglichen Auszahlungsbeträgen den minimalen oder maximalen Betrag darstellt. Ist jeder andere mögliche Auszahlungsbetrag kleiner, entscheidet sich kein rationaler Kaufmann am Bilanzstichtag für eine Ablösung der Schuld zum wahrscheinlichsten Betrag: Das Risiko einer noch höheren Auszahlung besteht nicht, wohl aber verzichtet er auf die Möglichkeit einer geringeren Auszahlung zu einem späteren Zeitpunkt (vgl. ED IAS 37.BC81). Umgekehrt würde kein rationaler Erwerber der Schuld den wahrscheinlichsten Betrag als Ablösesumme akzeptieren, wenn jeder andere mögliche Auszahlungsbetrag größer wäre: Durch den Erwerb kann er sich wirtschaftlich nur schlechter, in keinem Fall aber besser stellen. IAS 37 erkennt in diesem Fall eine Abweichung vom wahrscheinlichsten Betrag an (IAS 37.40).

### **2.1.4.3 Grenzen der Fair-Value-Bewertung von nicht finanziellen Schulden**

#### **2.1.4.3.1 Grenzen einer Barwertannäherung**

*Ermittlung des Entpflichtungsbetrages.* Trotz der gezeigten Übereinstimmungen mit dem Bewertungsmaßstab finanzieller Schulden nach IAS 39 ist die Reichweite des Fair-Value-Grundsatzes auf die Bewertung nicht finanzieller Schulden nach IAS 37 begrenzt. Dies resultiert zunächst aus der Konkurrenz von wahrscheinlichstem Betrag und Erwartungswert als zugrunde zu legende Entpflichtungsbeträge. Eindeutig erscheint zwar, dass der wahr-

scheinlichste Betrag bei individuellen Geschäften heranzuziehen ist, solange nicht die anderen möglichen Auszahlungen “größtenteils” entweder größer oder kleiner sind (IAS 37.40). Unschärf verbleibt sowohl, welcher alternative Betrag in jenem Fall Vorrang hat (mithin ob ein beliebig modifizierter wahrscheinlichster Wert oder doch der Erwartungswert heranzuziehen ist), als auch ab welcher Schwelle die “große Anzahl von Positionen” (IAS 37.39) erreicht ist, die erst den generellen Vorrang des Erwartungswertes begründet (vgl. Moxter (1999), S. 523; Pisoke (2004), S. 141 f.; Rüdinger (2004), S. 103 f.; Kayser (2002), S. 174).

Neben der Schätzung künftiger Auszahlungen entfaltet die Ermittlung des Diskontierungsfaktors begrenzende Wirkung. Ob eine exakt marktgerechte Kalkulation des Risikozuschlages einzelner Schulden, wie nach IAS 39, eine griffweise Schätzung ersetzen muss, ist angesichts der Begründung des wahrscheinlichsten Wertes bei einzelnen Transaktionen zumindest zu hinterfragen (vgl. aber von Keitz et al. (2003), Rn. 92). Die Berücksichtigung schuldspezifischer und daher schwer identifizierbarer (vgl. Rüdinger (2004), S. 118; Wüstemann (2004), S. 297) Risiken bei der Ermittlung der Risikoprämie erforderte nämlich eine vollständige Einschätzung von Umweltzuständen und deren jeweiligen Wahrscheinlichkeiten; die damit verbundenen Schwierigkeiten sollen durch die Begründung eines wahrscheinlichsten Wertes aber gerade vermieden werden. Eine Risikoprämie oder ein Sicherheitsäquivalent, die in Unkenntnis der vollständigen Wahrscheinlichkeitsfunktion ermittelt werden, können nur griffweise geschätzt werden. Schließlich irritiert die explizite Betonung des nach IAS 1.31 ohnehin geltenden Wesentlichkeitsgrundsatzes, demzufolge die Abzinsung der Auszahlungen bei unwesentlicher Wirkung unterbleiben kann (IAS 37.46), dessen unscharfe Abgrenzung im Ergebnis aber zumindest für Schulden mit einer Laufzeit von weniger als zwölf Monaten zu einem faktischen Abzinsungswahlrecht führt (vgl. Pisoke (2004), S. 149; Rüdinger (2004), S. 115).

Die Ermessensspielräume hinsichtlich der Ermittlung des Entpflichtungsbetrages sind mit der Nachgestaltung eines Preisbildungsprozesses unvereinbar, in Folge der dafür aber unverzichtbaren subjektiven Quantifizierungen von Wahrscheinlichkeiten unvermeidbar: Ein finanzwirtschaftlicher Bewertungsansatz, den ein Fair Value bedingt, führt für nicht finanzielle Schulden regelmäßig zu einem entobjektivierten Wertansatz, der noch einer (beliebigen) “faithful representation” folgen mag, keinesfalls aber einer verlässlichen Darstellung genügt.

*Durchbrechungen der Erwartungswertlogik.* Die Einschätzung der Wahrscheinlichkeiten einzelner Auszahlungsbeträge im Rahmen der Bewertung nicht finanzieller Schulden wird flankiert von den Ansatzkriterien des hinreichend wahrscheinlichen Ressourcenabflusses und des hinreichend wahrscheinlichen Bestehens einer gegenwärtigen Verpflichtung. Nach IAS 37 muss jeweils “mehr dafür als dagegen” sprechen, dass die gegenwärtige Verpflichtung besteht und dass sie zu einer Auszahlung führen wird (IAS 37.15 und 37.23). Die Prüfung dieser Kriterien verlangt mithin eine gesonderte Einschätzung der Wahrscheinlichkeit derjenigen Umweltzustände, in denen sich ein Auszahlungsbetrag von Null realisieren wird. Dieser kann sich eben zunächst als Ergebnis einer fehlenden gegenwärtigen Verpflichtung einstellen. Da Zweifel darüber typischerweise Gegenstand von Gerichtsprozessen werden, ist in diesen Fällen die Wahrscheinlichkeit eines erfolgreichen Prozessausgangs zu beurteilen. Fällt diese Beurteilung größer oder gleich einer Wahrscheinlichkeit von 50% aus, darf die Schuld nicht passiviert werden. “In fast allen Fällen” (IAS 37.16) aber besteht die Unsicherheit über das Bestehen der Verpflichtung nicht, ein Auszahlungsbetrag von Null realisiert sich dann bei fehlender Inanspruchnahme der Verpflichtung. Nur wenn auch die Wahrscheinlichkeit der Inanspruchnahme quantifiziert und größer als 50% eingeschätzt wird, darf überhaupt eine Schuld angesetzt werden (vgl. Förschle et al. (1999), S. 48).

Die Erwartungswertlogik in einer Bewertung zum Barwert wird durch diese Ansatzkriterien durchbrochen. Überschreitet die Wahrscheinlichkeit entweder des Bestehens oder der Inanspruchnahme einer Verpflichtung nicht 50%, erscheint in der Bilanz als Ergebnis der “Ganz-oder-Gar-nicht-Entscheidung” (Hommel (2003), S. 748; vgl. Botosan et al. (2005), S. 163) kein Wertansatz. Der Erwartungswert der künftigen Auszahlungen, der zur Barwertermittlung risikoäquivalent zu diskontieren wäre, wird gleichwohl regelmäßig einen Wert größer Null annehmen (vgl. Haaker (2005), S. 11): Auf eine Barwertannäherung wird objektivierungsbedingt verzichtet. Dies ist ein entscheidender Unterschied zur Bilanzierung finanzieller Schulden, deren Ansatz unberührt von Wahrscheinlichkeitskriterien ist, deren Fair Value aber grundsätzlich die Wahrscheinlichkeit fehlender Auszahlungen (sei es, weil eine Verpflichtung nicht besteht oder weil diese nicht in Anspruch genommen werden wird) reflektiert. Von diesem Bewertungsunterschied ausgenommen sind erneut nicht finanzielle Schulden aus einer Vielzahl ähnlicher Verpflichtungen, die in Folge der zulässigen Gruppenbildung die Wahrscheinlichkeitskriterien des IAS 37 regelmäßig erfüllen.

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*Durchbrechungen der Vollerfassung von Leistungsverpflichtungen.* Eine umfassende Bilanzierung von Schuldtiteln wird nach IFRS bereits dadurch begrenzt, dass die Titel, die einer Fair-Value-Bewertung zugänglich wären, gar nicht vollständig passiviert werden. Den nach IFRS anzusetzenden Schulden ist gemein, dass ihr Schuldcharakter aus einem rechtlichen Verständnis der Leistungsverpflichtung erwächst. Unterschiedlich ist nur die Ausprägung des Leistungsbegriffes: IAS 39 verlangt von einzeln zu bewertenden Schulden eine zugrunde liegende vertragliche Verpflichtung, während für die Einzelbewertung nicht finanzieller Schulden eine allgemeine Außenverpflichtung, gleich ob vertraglicher, gesetzlicher oder faktischer (und damit im Verständnis des Standardsetzers ebenfalls rechtlicher, vgl. ED IAS 37.14) Natur, ausreicht. Für vertragliche Verpflichtungen gilt die vollständige Erfassung ausschließlich, sofern die Leistung in finanziellen Mitteln zu erbringen ist und infolgedessen als finanzielle Schuld nach IAS 39 zu passivieren ist. Besteht ein Vertrag über die Erbringung einer Sach- oder Dienstleistung, ist eine Schuld daraus als Bestandteil des schwebendes Geschäftes zunächst nicht zu bilanzieren.

Dieser Einzelbewertungsgrundsatz ist eng verknüpft mit dem Verständnis des Fair Value als Ablösepreis: Typisierend werden offenbar nur rechtliche Leistungsverpflichtungen als handelbar und damit als übertragbar angesehen, denn nur für übertragbare Verpflichtungen kann überhaupt ein Ablösepreis Wertmaßstab sein. Fehlende Übertragbarkeit muss im Umkehrschluss Innenverpflichtungen zugestanden werden, wenn ihnen ein interner, rein wirtschaftlicher Zwang zur Erfüllung zugrunde liegt, obgleich eine Unternehmung sich durchaus von ihnen entpflichten kann; dies geschieht aber naturgemäß nicht gegenüber einer externen Partei. Sie sind daher nach diesem Verständnis von einer Passivierung ausgeschlossen, wenn nicht die sehr spezifischen Kriterien des IAS 37 zur Bildung von Restrukturierungsrückstellungen erfüllt sind (vgl. Wüstemann (2007), S. 149-155; Moxter (1999), S. 519 f.; Wesner (2002), Sp. 154 f.; Schildbach (2002), S. 791). Andernfalls wird die zukünftige Belastung bilanziell nicht erfasst, obwohl sie in das Wertadditivitätskalkül, das betriebswirtschaftlich eben den Fair-Value-Grundsatz begründet, entweder bei der Bewertung des Investitionsprogramms, dessen Barwert sie mindert, oder durch den Ansatz eines eigenen Schuldpostens Eingang finden müsste.

### 2.1.4.3.2 Fragliche Barwertannäherung durch ED IAS 37

Mittlerweile haben die bei Verabschiedung des IAS 37 noch überwiegenden Bedenken gegen die Ermittlung eines Erwartungswertes aus rein subjektiven Wahrscheinlichkeiten augenscheinlich im IASB an Gewicht verloren. Die Bewertung nicht finanzieller Schulden, die durch Unternehmenszusammenschluss zugehen, greift bereits auf die Erwartungswertmethode zurück (IFRS 3.B16 (1)), eine Erweiterung dieses Ansatzes auf alle nicht finanziellen Schulden ist vorgeschlagen (ED IAS 37.31; vgl. Andrejewski and Mielke (2005), S. 585). Die den Fair-Value-Grundsatz begrenzende Konkurrenz von wahrscheinlichstem Betrag und Erwartungswert ist damit zu Gunsten des Erwartungswertes vollständig aufgelöst. Ob dieser Bewertungsmaßstab eher einem Fair Value gleichkommt als der wahrscheinlichste Betrag, ist unklar: In IFRS 3 wird diese Bezeichnung gewählt, in ED IAS 37 auf sie verzichtet. Sofern sich ein Fair Value durch die Marktnähe seiner Ermittlung auszeichnen soll, trifft der Begriff auf den Bewertungsmaßstab nicht finanzieller Schulden nicht zu, eine (vorrangige) Ableitung aus Marktpreisen ist unverändert nicht vorgesehen. Faktisch freilich erfolgt eine Fair-Value-Ermittlung aus Marktpreisen auch bei finanziellen Schulden selten, stellt für sie doch das Fehlen eines aktiven Marktes den Regelfall dar. Insbesondere bei nicht finanziellen Schulden, die aus einer Vielzahl ähnlicher Verpflichtungen entstehen, wird eine Übereinstimmung im Ergebnis die Bezeichnung des Entpflichtungsbetrages als Fair Value zulassen (vgl. Baetge and Lienau (2005), S. 320; Baetge and Zülch (2001), S. 552). Dass aber auch die Bewertung einzelner nicht finanzieller Verpflichtungen dem Wertmaßstab finanzieller Schulden angenähert wird, unterstreicht die Aufhebung der Ansatzkriterien im ED IAS 37, die sich auf die hinreichende Wahrscheinlichkeit einer Auszahlung beziehen (vgl. ED IAS 37.BC48). Insofern werden bei Umsetzung der Vorschläge des ED IAS 37 die Bewertungsmaßstäbe finanzieller und nicht finanzieller Schulden theoretisch übereinstimmen. Die bestehenden Unterschiede resultierten aber aus der (unverändert geltenden) Erkenntnis, dass fehlende Märkte "unabsehbare(.) Bilanzierungsfreiheiten" (Wüstemann (2005), S. I) schaffen, die wiederum eine praktische Übereinstimmung verhindern werden.

### 2.1.4.3.3 Grenzen auf Grund von Sonderregelungen außerhalb des Anwendungsbereiches von IAS 37

Hinsichtlich der Bilanzierung von Schulden aus Leasingverhältnissen oder Pensionsverpflichtungen ist deren Charakterisierung als finanzielle oder nicht finanzielle Schuld unerheblich<sup>7</sup>. Schulden, die aus gesetzlichen Verpflichtungen erwachsen, sind grundsätzlich nicht finanziell. Handelt es sich dabei um Verpflichtungen zur zukünftigen Steuerzahlung, gilt die Vorrangigkeit der speziellen Regelungen des IAS 12. Latente Steuerschulden entstehen dabei aus Bewertungsunterschieden in Steuerwert und IFRS-Abschluss: Dem im Wertansatz nach IFRS verkörperten Nutzen, der in Form von Erträgen zu einem zukünftigen Zeitpunkt zu versteuern sein wird, steht ein geringerer Wertansatz gegenüber, der steuerlich bei Verbrauch oder Veräußerung als Aufwand angerechnet werden kann<sup>8</sup>. Die Schuld ist anzusetzen, weil dieser gegenwärtige Wertunterschied die künftigen Abflüsse in Form von Steuerzahlungen verursacht und diese regelmäßig als wahrscheinlich zu beurteilen sind (IAS 12.16). Eine Entpflichtung von dieser Schuld würde voraussetzen, dass der zu leistende Betrag die zukünftigen Steuerzahlungen und mithin die zum jeweiligen Zeitpunkt geltenden Steuersätze berücksichtigt. IAS 12.47 erkennt dies bei der Bewertung im Grunde an. Grundsätzlich scheint dem der Anspruch einer Fair-Value-Bewertung latenter Steuerschulden zugrunde zu liegen. Doch wird dieser Anspruch durch die Einzelregelungen weitgehend eingeschränkt: Aus Objektivierungs- und Vereinfachungsgründen wird sowohl auf eine Erwartungsbildung über künftige (noch nicht angekündigte) Steuersätze (IAS 12.48; vgl. Hoffmann (2008b), Rn. 80) als auch auf eine (bei Ermittlung eines stichtagsbezogenen Entpflichtungsbetrages aber unerlässliche) Diskontierung der künftigen Steuerzahlungen verzichtet (IAS 12.53; vgl. Baetge and Lienau (2005), S. 322; Loitz and Rössel (2002), S. 650 f.). Überdies ist mit einem Fair-Value-Grundsatz die zwar restriktiv eingeschränkte, gleichwohl mögliche Saldierung mit Steueransprüchen beim Ausweis latenter Steuerschulden nach IAS 12.74 unvereinbar.

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<sup>7</sup> Für den Fair-Value-Grundsatz bei der Bewertung nicht finanzieller Schulden aus Leasingverhältnissen oder Pensionsverpflichtungen gelten daher die gleichen Grenzen wie im Falle entsprechender finanzieller Schulden.

<sup>8</sup> Dieses von IAS 12 verfolgte Konzept der Steuerabgrenzung wird als Liability-Methode bezeichnet, vgl. Schmundt (2008), S. 86; Karrenbrock (1991), S. 110; Schäffeler (2000), S. 55.



## 2.1.5 Bedeutung des Fair-Value-Grundsatzes für die Bewertung des Eigenkapitals

### 2.1.5.1 Begriff des Eigenkapitals: Maßgeblichkeit der zeitlich unbefristeten Kapitalüberlassung

Eigenkapital wird betriebswirtschaftlich als der Anteil am bilanzierten Bruttovermögen einer Unternehmung verstanden, der den Eignern zuzurechnen ist (vgl. Moxter, 1978, S. 82); dem folgt das Rahmenkonzept mit der Definition als der “nach Abzug aller Schulden verbleibende Restbetrag der Vermögenswerte” (RK.49 (c)). Die Definition des Eigentümer-Begriffes folgt nach IAS 32 nicht diesen betriebswirtschaftlichen Kriterien. Unerheblich sind auch gesellschaftsrechtliche Kriterien, die sich im Wesentlichen an Mitgliedschaftsrecht, Haftungsübernahme sowie erfolgsabhängiger Teilhabe an Jahresüberschuss und Liquidationsvermögen orientieren (vgl. Thiele (1998), S. 34-40). Einziges Kriterium ist stattdessen die Dauer der Kapitalüberlassung: Eigner im Sinne der IFRS ist ausschließlich, wer sein Kapital der Unternehmung unbefristet überlässt. Dies setzt nach IAS 32.16 voraus, dass vorzeitige Rück- oder sonstige Auszahlungsforderungen von der Unternehmung uneingeschränkt zurückgewiesen werden können. Nur wenn ein Finanzierungstitel dieses formalrechtliche Kriterium erfüllt, ist er auf der Passivseite eigenständig als Eigenkapital auszuweisen, ansonsten als Schuld (IAS 1.68; vgl. Hommel and Wüstemann (2006), S. 135-137). Im Konzernabschluss gehören dazu die Anteile, die auf Minderheitsgesellschafter entfallen (IAS 27.33 und IAS 1.68 (o)).

Bei Kapitalgesellschaften führen betriebswirtschaftliches Kriterium und die Legaldefinition des IAS 32 regelmäßig zu übereinstimmendem Ergebnis: Anspruch auf eine Kapitalrückzahlung haben Anteilseigner, wenn dadurch bilanziell das Vermögen erhalten bleibt, das zur Begleichung der Schulden erforderlich ist; der Anspruch hat mithin Residualcharakter. Über Leistungen aus dem Gesellschaftsvermögen in Form von Ausschüttungen, zurückerworbenen Anteilen oder effektiven Kapitalherabsetzungen entscheiden freilich nicht einzelne Kapitalgeber, sondern Unternehmensorgane. Dem Anspruch des Eigners auf Kapitalrückzahlung i. S. d. IAS 32.18 (b) kann sich das Unternehmen entziehen, es liegt keine finanzielle Schuld vor (vgl. Breker et al. (2005b), S. 473).

Auf Anteile an Personengesellschaften oder Geschäftsguthaben von Genossenschaften trifft die Übereinstimmung beider Kriterien indes nicht zu. Die gesetzliche oder ver-

tragliche Kündbarkeit dieser Anteile soll die den Eignern von Kapitalgesellschaften regelmäßig zustehende Möglichkeit kompensieren, die Anteile an einem Kapitalmarkt direkt an einen Erwerber übertragen zu können; an die Stelle des Kapitalmarktes tritt die Personengesellschaft bzw. die Genossenschaft gewissermaßen selbst. Es handelt sich um unbedingte Kündigungsrechte i. S. d. IAS 32.18(b), die die Anteile als finanzielle Schuld qualifizieren (vgl. IDW (2005), S. 674; Isert and Schaber (2005b), S. 2098; Küting and Dürr (2005), S. 1530; Leuschner and Weller (2005), S. 264; Schubert (2006), S. 1036)<sup>9</sup>. Der entstehende Abfindungsanspruch verkörpert zwar einen Anspruch am residualen Unternehmenswert (vgl. Lüdenbach (2008), Rn. 15a); die daraus abzuleitende Einstufung als Eigenkapital tritt indes hinter das gemäß IAS 32 zentrale Merkmal der zeitlich unbefristeten Kapitalüberlassung zurück. Um auch Personengesellschaften und Genossenschaften unter bestimmten Bedingungen den Ausweis ihres gesellschaftsrechtlich nachrangigsten Kapitals als Eigenkapital anzuerkennen, hat das IASB im Juni 2006 einen entsprechenden Exposure Draft verabschiedet. Die Vorschläge sind so gestaltet, dass dies unabhängig von der endgültig geltenden Formulierung unverändert nicht allen Gesellschaften möglich sein wird (vgl. Schmidt (2006), S. 1565).

#### **2.1.5.2 Verzicht auf den Fair Value als Wertmaßstab des Eigenkapitals**

Zumindest für börsennotierte Unternehmen existiert ein Marktpreis einzelner Eigenkapitaltitel. Andere Unternehmen könnten hinsichtlich der Bewertung (genau wie bei Fremdkapitaltiteln) auf adäquate Bewertungsmodelle zurückgreifen, anhand derer der Preisbildungsprozess nachgestaltet wird. Ausgeschlossen ist eine das Eigenkapital umfassende Reichweite des Fair-Value-Grundsatzes nicht. Gleichwohl wird (auf der Grundlage bester bilanztheoretischer und bilanzierungspraktischer Argumente) auf dessen Einzelbewertung verzichtet: Es unterliegt dem allgemeinen (nicht jedoch in den Definitionskriterien des IAS 32 befolgten) Verständnis als Restgröße folgend nach IFRS keiner selbstständigen Bewertung. Sein Wert ist vielmehr abhängig von Ansatz und Bewertung der einzelnen Vermögenswerte und Schulden (vgl. Scheffler (2006), S. 15). Der Fair Value des Eigenkapitals würde in der Zeitwertinterpretation der IFRS dem Ablösebetrag, mithin

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<sup>9</sup> Eine Auslegung des IAS 32, nach der Anteile an Personengesellschaften als Eigenkapital zu bilanzieren sind, begründen dezidiert Lüdenbach and Hoffmann (2004), S. 1042, die diese Auslegung selbst - zutreffend - als "Mindermeinung" charakterisieren (vgl. auch Hoffmann and Lüdenbach (2005), S. 404; Lüdenbach (2008), Rn. 14a-20).

dem aktuellen Abfindungsanspruch der Gesellschafter, entsprechen. Da sich dieser bei Unternehmensfortführung aus dem Ertragswert ergibt, wäre eine implizite Fair-Value-Bewertung gewährleistet, wenn die Unabhängigkeit des Unternehmenswertes von der Kapitalstruktur gilt und alle Fremdkapitaltitel zum Zeitwert ihres Anteils am vollständig aktivierten Zahlungsstrom des Investitionsprogramms bewertet sind; auch eine nicht selbstständig bewertete Restgröße stellte in diesem Fall trotz des Verzichts auf die Einzelbewertung im Residual aus Aktiva und Schulden den Fair Value des Eigenkapitals, ein Nettoeffektivvermögen, dar. Beide Voraussetzungen sind wie dargelegt nicht erfüllt: In der realen Welt ergibt sich der Unternehmenswert nicht nur aus dem Investitionsprogramm und es werden weder auf der Aktivseite die Effektivvermögensträger vollständig erfasst, noch entfaltet bei der Schuldenbewertung der Fair-Value-Grundsatz uneingeschränkt Geltung. Zu den Effektivvermögensträgern zählt insbesondere der originäre Geschäftswert, für den nun das (völlig berechnete) explizite Ansatzverbot des IAS 38.48 greift. Allein schon aus diesem Grund wird das Residual aus nach IFRS bilanzierten Vermögenswerten und Schulden nicht mit dem Fair Value des Eigenkapitals übereinstimmen. Auch implizit und perspektivisch ist der Fair-Value-Grundsatz daher auf der Passivseite auf die Bewertung bestimmter Schuldtitel begrenzt.

### **2.1.5.3 Der Fair Value des gesellschaftsrechtlichen Eigenkapitals von Personengesellschaften**

Zurückgedrängt wird der Umfang des nicht zum Fair Value bewerteten Anteils der Passivseite durch die weite Fremdkapitaldefinition des IAS 32. Für Unternehmen, die auf Grund ihrer Rechtsform kein Eigenkapital im Sinne des IAS 32 besitzen können, ist die fehlende selbstständige Bewertung des Eigenkapitals zu Gunsten einer Fair-Value-Bewertung der als Fremdkapital definierten Finanzierungstitel aufgehoben (vgl. Breker et al. (2005b), S. 473; IDW (2005), S. 675; Isert and Schaber (2005a), S. 362): Die grundsätzlich anzuwendende Bewertung zu fortgeführten Anschaffungskosten und die damit einhergehende Ermittlung des Effektivzinssatzes sind an der Bewertung von zwar möglicherweise variablen, gleichwohl vertraglich geregelten Rückzahlungsansprüchen ausgerichtet, die Anteile an Personengesellschaften ihrer Natur nach nicht aufweisen. Eine Bewertung darf überdies nicht unterhalb des Betrages erfolgen, der bei Ausübung des Kündigungsrechts ausbezahlt ist (IAS 39.49). In IAS 32.IE32 dient die aus nachrangigen Ansprüchen der Eigner auf Rückzahlung ihrer Einlagen entstehende Schuld demgegenüber lediglich als

(gerade nicht erfolgswirksam bewertete) Saldogröße. Dies ist insofern konsequent, als eine Unternehmung, der der Ausweis von Eigenkapital auf Grund ihrer Rechtsform unmöglich ist, andernfalls bei Anwendung doppelter Buchführung nur durch Ansatz technischer, den IFRS indes nicht bekannter Korrekturposten die (wohl auch von IFRS-Abschlüssen verlangte) Gleichheit der Bilanzsummen von Aktiv- und Passivseite herstellen kann (vgl. Hoffmann and Lüdenbach (2005), S. 408). Faktisch enthält dieser Posten zumindest Anteile des originären Geschäftswertes (vgl. Küting et al. (2006a), S. 73-76).

Als problematisch muss es hingegen erscheinen, eine unterlassene Fair-Value-Bewertung von gesellschaftsrechtlichem Eigenkapital bei Personengesellschaften mit einer Klausel im Gesellschaftsvertrag zu begründen, die nur eine Abfindung in Höhe des aktuellen Buchwerts des Eigenkapitals zugesteht (vgl. Handelsblatt, 30.12.2005, S. 11). Diesbezüglich hat der BGH keinen Zweifel gelassen, dass die Buchwertklausel zwar im Grunde rechtmäßig sei, dies aber nur, wenn die daraus folgende Abfindung im Ergebnis nicht im groben Missverhältnis zum "wirklichen Anteilswert" steht (BGH (1993), S. 281; vgl. dazu Ulmer and Schäfer (1995), S. 134; Hopt (2006), Rn. 64). Dies unterstreicht die Anforderung, den Fair Value solcher Finanzierungstitel nur in einer ordnungsmäßigen Unternehmensbewertung ermitteln zu können. Auf die Grundsätze des IDW S 1 kann bei der dafür notwendigen Unternehmensbewertung nicht uneingeschränkt zurückgegriffen werden, zumindest nur solange als ein direkt aus Marktgrößen (etwa anhand des CAPM) abgeleiteter Risikozuschlag Anwendung findet.

Die Berücksichtigung der eigenen Bonität bei der Fair-Value-Ermittlung einer finanziellen Schuld gilt auch in diesen Fällen, in denen sie keinen vertraglich fixierten und vorrangig zu bedienenden, sondern einen nachrangigen Anspruch am residualen Unternehmenswert verkörpert, gleichzeitig aber nach IAS 32 als Schuld zu bilanzieren ist: Als ihr Fair Value wurde der bei Rückgabe fällige anteilige Anspruch am Ertragswert identifiziert, dessen Ermittlung eine regelmäßige Gesamtbewertung des Unternehmens voraussetzt. Der Wert eines solchen Anspruches ergibt sich über die risikoäquivalente Diskontierung der zukünftigen Nettoerträge des Unternehmens. Höhe und Unsicherheit der (gerade nicht vertraglich fixierten) zu erwartenden Nettoerträge und damit der bei einer Fair-Value-Bewertung als Schuld zu passivierende Ertragswert wiederum ergeben sich erst aus der eigenen Bonität. Deren Veränderungen bilden sich (bei konstantem Wertansatz aller anderen Vermögenswerte und Schulden) nun exakt gegenläufig im Periodenergebnis ab: Eine Verbesserung bedingt eine aufwandswirksame Zuschreibung, eine Verschlechterung eine

ertragswirksame Abschreibung auf die Schuld, die beide in Folge des geltenden Ansatzverbotes für originären Goodwill auf der Aktivseite nicht kompensiert werden dürfen. Das beschriebene Beispiel in IAS 32.IE32 zeigt, dass in diesem Fall eine doch vermeintlich unsachgerechte, weil erfolgsneutrale Bilanzierung des als finanzielle Schuld definierten Instruments unversehens ein “shortcoming in accounting for intangibles” heilen kann.

### 2.1.6 Ergebnisse

Es scheint als verfolge der IASB in seiner Normierung der Rechnungslegung nach IFRS derzeit eine “hidden agenda”, die sich kennzeichnen lässt mit der Hinwendung zu einem statischen Assets-Liabilities-Ansatz bei breitester Anwendung einer Zeitwertbewertung (Fair Value). Gegenstand des Kapitels war es, Zweck, Inhalt und Grenzen beider Elemente dieser Agenda auf Ansatz und Bewertung von Schulden und Eigenkapital einer kritischen Würdigung zu unterziehen.

Nur in einer idealen Welt ohne Steuern, Transaktionskosten und Informationsasymmetrien ist der Wert einer Unternehmung unabhängig von der Ausgestaltung der Finanzierungstitel. Tatsächlich sind deren Zeitwert, der sich aus einem betriebswirtschaftlichen Barwertkalkül ergibt, und in der Summe mithin der Unternehmenswert maßgeblich von der Struktur der Passivseite beeinflusst. Das die IFRS prägende bilanztheoretische Verständnis des Zeitwertes als objektiver und marktgerechter Ablösepreis einer Schuld drängt diese unternehmensspezifischen Charakteristika (im Gegensatz etwa zu dem von Simon vertretenen statischen individuellen Wert) zurück; die Idee einer Schuldenbewertung zu dem bei “fingierter Realisierung” objektiv aufzubringenden Betrag beherrschte bereits die Auslegung des ADHGB im 19. Jahrhundert. Nicht durchgesetzt hat sich im IASB die Verwendung von Wiederbeschaffungspreisen.

Die IFRS unterscheiden finanzielle und nicht finanzielle Schulden danach, ob diese zu einer Begleichung durch Übertragung finanzieller Mittel oder durch Erbringung einer Sach- bzw. Dienstleistung verpflichtet. Finanzielle Schulden sind an aktiven Märkten handelbar, sofern sie als börsenfähige Wertpapiere verbrieft sind. Andernfalls (und dies ist der Regelfall) ist ein Ablösepreis marktgerecht nachzubilden, mithin unter Einschluss aller Faktoren, die in die Marktpreisbildung Eingang finden. Dazu gehört auch die Bonität des Schuldners. Sofern die Bewertung anderer Bilanzposten von einer Bonitätsverschlechterung nicht berührt wird, führt diese durch entsprechende Schuldenbewertung

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zu einem Bilanzgewinn des Schuldners. Dieser repräsentiert unter bestimmten Bedingungen einen effektiven Vermögenszuwachs, wenn die Verschlechterung (im Sinne eines schlechteren Ratings) aus Kapitalstrukturmaßnahmen resultiert. Resultiert sie aber aus realwirtschaftlichen Misserfolgen, entwickeln sich effektive und bilanzielle Vermögenslage genau entgegengesetzt. Dies kann auch aus rechnungslegungstheoretischer Perspektive nicht gerechtfertigt werden, da verlässliche Signale zur eindeutigen Invertierbarkeit einer bilanziellen Wertänderung in die gesuchte Information über die Bonitätsveränderung faktisch nicht existieren.

Unter die Definition von finanziellen Schulden nach IAS 32 ist das gesellschaftsrechtliche Eigenkapital von Personengesellschaften zu subsumieren, da eine Kündbarkeit dieser Anteile gesetzlich (oder vertraglich) vorgesehen ist. Umstritten muss sein, ob eine Folgebewertung dieser Schulden (wie vom IDW als sachgerecht empfunden) zum Fair Value zu erfolgen hat, der dem aktuellen Abfindungsanspruch der Eigner und mithin dem Ertragswertanteil entspricht, damit aber den Ansatz technischer, einen originären Geschäftswert verkörpernder Ausgleichsposten erforderte. Im (nicht in europäisches Recht übernommenen) Illustrative Example zu IAS 32 wird eine gesellschaftsrechtlich als Eigenkapital qualifizierte finanzielle Schuld zwar als solche ausgewiesen, unterliegt aber unverändert wie Eigenkapital keiner selbstständigen Bewertung und ergibt sich stattdessen als Residualgröße. Gleichmaßen wird das Eigenkapital von Kapitalgesellschaften bilanziert, für dessen Bewertung der Fair-Value-Grundsatz keine Gültigkeit entfaltet.

Ein Wahrscheinlichkeitskriterium, wie es etwa das IFRS-Rahmenkonzept vorsieht, wird dem Ansatz finanzieller Schulden nach IAS 39 nicht zugrunde gelegt. Die Wahrscheinlichkeit eines Ressourcenabflusses spiegelt sich im Marktpreis wider und wird bilanziell insofern bei der Bewertung zum Fair Value berücksichtigt. Dies ist ein entscheidender Unterschied zur Bilanzierung nicht finanzieller Schulden, die bei einer weniger als 50% betragenden Wahrscheinlichkeit des zukünftigen Ressourcenabflusses überhaupt nicht bilanziert werden, obwohl ein marktgerechter Entpflichtungsbetrag auch in diesem Fall mehr als Null betragen würde. Dieser Konflikt mit dem Fair-Value-Grundsatz soll im Entwurf eines neuen IAS 37 aufgelöst werden, indem auf die Wahrscheinlichkeit als Ansatzkriterium verzichtet und deren Berücksichtigung analog zu IAS 39 in die Bewertung verlagert wird. Theoretisch führt dies zu einer Annäherung der Bewertung finanzieller und nicht finanzieller Schulden. Da sich nicht finanzielle Schulden gerade dadurch auszeichnen, dass zukünftigen Auszahlungen nur individuell erwartete und keinem aggregierten Kalkül von

Marktteilnehmern entspringende Wahrscheinlichkeiten zugeordnet werden können, werden die derart ermöglichten Bilanzierungsfreiheiten faktisch zu keiner Übereinstimmung führen.

IAS 37 bezeichnet den Wertmaßstab nicht finanzieller Schulden ausdrücklich nicht als Fair Value und verwendet stattdessen den Begriff der bestmöglichen Schätzung. Die bestmögliche Schätzung einzelner Verpflichtungen stellt der wahrscheinlichste Wert dar, der nur bei Wesentlichkeit des Zinseffektes zu diskontieren ist. Mit dem Verzicht auf den Erwartungswert wird zwar ein Wertansatz verhindert, der nur zufällig eine eigene Eintrittswahrscheinlichkeit größer Null hat und sich noch schwerer objektiviert begründen lässt. Mit einer finanzwirtschaftlichen Marktpreisermittlung stimmt eine so verstandene bestmögliche Schätzung indes nicht überein. Da eine solche aber offenbar einen Fair Value innerhalb der IFRS auszeichnen soll, ist auch materiell der Verzicht des IAS 37 auf diesen Begriff gerechtfertigt.

Zusätzlich ist der Fair-Value-Grundsatz von Sonderregelungen eingeschränkt, die außerhalb der Anwendungsbereiche von IAS 39 und IAS 37, die nicht alle finanziellen bzw. nicht finanziellen Schulden umfassen, gelten. Derartige finanzielle oder nicht finanzielle Schulden können insbesondere aus Leasingverhältnissen, Pensionsverpflichtungen oder künftigen Steuerbelastungen entstehen. Auch implizit ist der Fair Value weder nach IAS 12 noch nach IAS 17 oder IAS 19 Wertmaßstab für Schulden. An der Vielzahl verschiedener, für eng bestimmte Sachverhalte als am sachgerechtesten empfundener Ausprägungen des Fair-Value-Grundsatzes lässt sich das Spannungsfeld erkennen, in dem der zugrunde liegende Einzelbewertungsgrundsatz zu einer Effektivvermögensermittlung steht, die sich in der Bilanzierung eines anteiligen originären Geschäftswertes nach IFRS 3 und IAS 32 erkennen lässt. Durchgängig liegt dem Einzelbewertungsgrundsatz von Schulden nach IFRS ein rechtlicher Leistungsbegriff zugrunde: Ihr Ansatz setzt nach IAS 39 einen Vertrag, ansonsten (mit Ausnahme der Restrukturierungsrückstellungen gemäß IAS 37) zumindest eine Außenverpflichtung voraus. Allein dies ist mit einer Effektivvermögensermittlung unvereinbar. Denn selbst wenn sich der Zeitwert einzelner Finanzierungstitel einfach aus dem Investitionsprogramm ergäbe, wären Innenverpflichtungen in eine Addition zum Zwecke der Effektivvermögensermittlung zwingend einzubeziehen, sind sie doch Ausfluss eines künftigen Negativerfolges aus dem Investitionsprogramm.

Die aufgezeigten Bilanzierungsfreiheiten bei der Fair-Value-Bewertung nicht finanzieller

Schulden legen eine Einschränkung des Grundsatzes auf die Bilanzierung finanzieller Schulden sehr nahe. Sind stichtagsbezogene Marktpreise finanzieller Schulden aus der Bilanz ablesbar, mag dies tatsächlich die Entscheidungsverbundenheit des Jahresabschlusses erhöhen. Dem liegt freilich die (realitätsferne) Annahme zugrunde, einen stichtagsbezogenen Marktpreis gebe es überhaupt für alle finanziellen Schulden, er bilde sich mithin regelmäßig. Finden aber als Konsequenz nicht durchgängig objektivierbarer Fair-Value-Ermittlung zwei verschiedene Bewertungsmaßstäbe gleichzeitig Anwendung, werden immer Bewertungsinkonsistenzen resultieren, denen sich auch die IFRS nur mit gleichermaßen komplexen wie unscharfen Sonderregelungen für ein sog. Hedge Accounting zu wehren wissen, die wiederum den Fair-Value-Grundsatz beschränken. Die IFRS werden nur dann den Auflagen der Europäischen Union gerecht, wenn ihre bilanztheoretische Fundierung und eine prinzipienorientierte Anlage der Einzelnormen gelingen; eine "hidden agenda" der Vollbilanzierung von Aktiva und Passiva nach dem Grundsatz des Fair Value würde dabei in die falsche Richtung weisen.



## 2.2 The Principle of Fair Value Accounting for Debt and Equity: The International Perspective<sup>1</sup>

### 2.2.1 Problem

Accounting thought has it that consistency of accounting standards is widely regarded as a crucial qualitative characteristic of superior accounting systems (Moxter (2003)). In this respect, it is noticeable that the hopes of the international accounting community are today centred on the asset and liability approach (e.g., International Accounting Standards Board (2006b)) and on fair value as a uniform measurement attribute (e.g., FASB, CON7). Some even view these two paradigms as the ‘hidden agenda’ of international standard setters.

With regard to debt and equity according to extant IFRS, the wording of IAS 37 and IAS 39 alone shows the inconsistency of the measurement bases intended for liabilities within the currently existing IFRS. While provisions are measured at an amount called the best estimate, a fair value measurement is explicitly introduced for certain financial liabilities. This introduction is due to a theoretical foundation of fair value measurement - at first glance appealing - that was first developed from a strict measurement perspective (in the tradition of Canning (1929), MacNeal (1939) and Sprouse and Moonitz (1962)) and later justified from an information content perspective (in the tradition of Beaver and Demski (1979)). These foundations have in common that the grounds from which the logical cohesion of fair value measurement is derived are characterized by the existence of verifiable market prices. Some, but not all, financial markets come very close to this condition. But as entities do not solely consist of liabilities traded thereon, there is only a minor portion of liabilities to which fair value measurement can reliably be applied. Drawing the line between liabilities accessible to reliable fair value measurement and liabilities that are not accessible to it certainly is a political question since IFRS are by now an integral part of European Community law (Walton (2004), p. 14, Wüstemann and Kierzek (2006)). From a theoretical standpoint, however, it seems more insightful

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<sup>1</sup> I wish to thank Peter Walton as well as participants of the 2006 Accounting Research Seminar at ESSEC Business School (Paris, France) and the 2006 Spring Meeting of the VHB Accounting Section (VHB Kommission Rechnungswesen) at the University of Würzburg, Germany, for helpful comments on earlier drafts of this chapter.

to ask whether a conceptual model that justifies fair value measurement of debt (and when correctly done of equity as a residual) can be applied consistently under realistic conditions at all.

The remainder of this chapter is organized as follows: first, we sketch ‘classical’ theoretical foundations of a fair value measurement of debt and equity - both from a measurement and from an information content perspective. After having identified on which foundation existing IFRS are based we develop a consistent conceptual model (‘full fair value model’) as a reference point for discussion. We then analyse the measurement of debt and equity according to IAS 32, IAS 37 and IAS 39 in the light of and with regard to consistency with the conceptual model. As indicated above, consistency will, according to our analyses, never be achieved for very fundamental reasons. We conclude therefore by questioning the general justification of fair value measurement as such.

## **2.2.2 Contributions of Accounting Theory to the Measurement Problem for Debt and Equity**

### **2.2.2.1 The underlying contradiction of a measurement and an information content perspective**

In the main, two opposing perspectives can be identified in the development of modern accounting theory: the measurement perspective is based on the intention to present accounting figures with absolute amounts approximating the (relevant) economic figures. Accounting profit for instance should approximate economic performance and accounting wealth should approximate economic wealth under that approach. Beaver and Demski (1979), however, suggest that accounting measurement has no theoretical foundation under (realistic) conditions of an uncertain world with incomplete markets since unanimity about individual preferences as regards the outcome of investments and hence a collective ranking of the outcomes (achieved by measurement) cannot be obtained among any group of stakeholders. Instead, a strict information content perspective is proposed which regards the absolute amount of accounting figures as negligible. The relevance of accounting figures is rather judged by its ability to alter the expectations about future states, i.e. its ability to refine the underlying probability assessment (the partition of the states). The recognition of a liability for instance can be explained as a signal indicating higher

probabilities of outcomes under which an outflow of resources will occur. However, the absolute amount the liability is measured at is not important because a straight approximation of economic figures is not intended. The information content perspective itself does not therefore form the basis of an accounting measurement tradition of its own. It is, rather, compatible with a wide range of possible measurement bases: with a present value regime as well as with an imparity principle (Demski and Sappington (1990), p. 381; Liang (2001), p. 234).

### **2.2.2.2 International traditions of replacement cost accounting: The entry price of debt**

Entry prices are traditionally understood as being the current cost of replacing or reproducing an asset (Staubus (1977), p. 148). Entry prices of liabilities on the other hand do not correspond with current cost (i.e. the amount payable when satisfying the liability at the balance sheet date, see Revsine (1973), p. 68). The entry price of a liability is instead equal to the amount that would be received in an issuance at the balance sheet date which equals the present value of future cash flows discounted by the current factor (Financial Accounting Standards Board (1976), no. 551; Joint Working Group of Standard Setters (1999), BC4.1). From a measurement perspective, the concept of entry prices was proposed both by advocates of a revenue and expense view and by advocates of an asset and liability view.

#### **2.2.2.2.1 The entry price under a revenue and expense view**

Under a revenue and expense view, the purpose of accounting is to measure the ‘continuous flow of business activity’ (Paton and Littleton (1956), p. 11) or, more specifically, an entity’s ‘effectiveness in using its inputs to obtain and sell output at a profit’ (Financial Accounting Standards Board (1976), no. 38) and thereby to control the entity’s ‘conduct’ (i.e. its performance; cf. Schmalenbach (1980), p. 34). In order to fulfil this purpose, the costs incurred in the whole earnings process need to be matched with the realized sales (or service) revenues. Early investigations of an entity’s production process distinguished between holding and operating activities which both result in income. This view was taken as the justification of the so-called ‘organic accounting theory’ that aims at separating

the two sources of income in the financial reports. Thus, replacement cost measurement was demanded. An intertemporal change in the replacement cost of a financial element held is income arising from a holding activity and, as a result of wishing to achieve real capital maintenance, non-distributable. Only the margin between the realized sales price and the current replacement cost matched to the sales revenue is distributable income because it is attributable to an operating activity (the sale of a good or the rendering of a service). This margin is concurrently an indicator for the entity's future profitability because it can be regarded as representative for future sales margins of elements acquired at the changed price level (Schmidt (1931), pp. 289 et seq.).

With regard to debt, Schmidt took a so-called 'static' view, not considering an individual revaluation of liabilities when the nominal amount repayable to the lender is not changing. The asset measurement at replacement cost then allows a lender the observation whether the nominal amount can be repaid by the entity in spite of changes in the general price level of assets (Schmidt (1930b): 237).

Edwards and Bell later acknowledged on an identical theoretical basis, but under more explicit consideration of changes in relative price levels (see Clarke and Dean (1986), pp. 74 et seq., Coenenberg and Macharzina (1976), p. 57), that holding gains could also arise from holding debt and made the case for measuring liabilities at entry prices (Edwards and Bell (1961), pp. 203-207; Edwards (1975), p. 236). As interest rates on debt financing vary just like the sales prices of assets, a change in interest rates affects the future margin between sales revenues and interest expenses. An increase in interest rates results in a decreasing margin. The high current margin contains savings in interest expense realized by holding a liability with a fixed coupon that is lower than current market rates. The accentuation of realized cost savings in the income statement aims again at providing an indicator representative of the future profit margin. The saving of interest expense is also reflected by a decrease in the entry price as only a smaller amount could be borrowed given the current terms. However, recognition of this gain in the operating profit figure would contradict the revenue and expense view and is thus prohibited. The gain is instead reflected in an additional balance sheet item.

Another argument in favour of entry prices based on a revenue and expense view can be derived from accounting for (non-financial) liabilities to provide goods or services. In those cases, an entity regularly receives a consideration in advance that is higher than

the sum of the expected expenditures needed to settle the obligation (i.e. the exit price). As exit price measurement of liabilities would result in immediate income recognition at the time the cash inflow occurs (Foster and Upton (2001), p. 3, Paterson (2001), p. 108, Samuelson (1993), p. 44), entry price measurement allows the deferral of the income and its recognition following the matching principle, simultaneously with the expenses, when the performance occurs, i.e. when according to the realization principle the goods are delivered or the services are rendered (Lennard (2002), no. 25(ii); see Wüstemann and Kierzek (2005a), p. 77, for the realization and matching principles under a revenue and expense view).

#### **2.2.2.2.2 The entry price under an asset and liability view**

Under an asset and liability view, the purpose of accounting is to measure the enterprise's wealth (Johnson (2004), p. 1). Since profit is deemed to reflect the enterprise's increase in wealth (Financial Accounting Standards Board (1976), no. 34), all changes in assets and liabilities should immediately be taken to income irrespective of whether the related gains or losses have been realized<sup>2</sup>. If debt is measured at entry prices and profit is defined according to an asset and liability view (see Sprouse and Moonitz (1962), p. 9), a change in entry prices of debt will be income: the stockholder's financial position is not only determined by the value of assets but also by the value of liabilities. There are several factors influencing the entry prices of debt with two of them having been prominently assessed: (i) inflation and (ii) credit standing.

Inflation is an important factor in an entry price regime since the theory of replacement cost accounting itself is heavily influenced by the notion of persistently changing price levels. A changing price level, however, does also affect the nominal market interest rate and hence the amount received in the current issue of a debt instrument with given characteristics (Fisher (1930), p. 493; Kaplan (1977), p. 370). In the event of an unexpected increase in the general price level, the previously arranged conditions become advantageous compared with the current conditions. Wealth is thus transferred from the lenders to the stockholders (Knutson (1981), p. 14). The transfer is needed to maintain the

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<sup>2</sup> We acknowledge, however, that under an asset and liability view the realization principle may be used in order to determine when changes in assets and liabilities should be recognized in profit or loss. Cf., e.g., Financial Accounting Standards Board (1976), no. 46.

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physical capacity of the entity under a higher general price level (Revsine (1981), p. 27; a similar argument as regards the measurement of assets has already been given by Rorem (1929), p. 173, and Schmidt (1930a), p. 261). Such a transfer can only be recognized in income when taking an asset and liability view. That is the reason for the introduction of additional balance sheet items impeding the profit effectiveness of changing entry prices in the replacement cost theory based on the revenue and expense view.

The same holds for an adjusted credit standing. The amount received in the issue also depends on the lender's expectation about the issuing entity's ability to repay the loan, i.e. the issuer's creditworthiness. The amount decreases in case of a credit deterioration. This decrease can be regarded as income because shareholders benefit from the bankruptcy option to pass the low-valued assets to the lenders instead of fully repaying the loan (Barth and Landsman (1995), p. 103; Crooch and Upton (2001), p. 2). If all changes in the entry prices of assets (especially of intangible goodwill) were recognized as well, this decrease in debt value would be more than offset by the decrease in asset value that triggered the credit deterioration.

Altogether, measurement at entry prices in conformity with an asset and liability view could present the stockholders' financial position, if this position can be defined as an entity's net reproduction value. The latter hypothesis only holds under perfect market conditions when a net equity value higher than the total reproduction cost of the entity results in increasing competition until net equity value and reproduction cost are alike for market entries of further competitors not being advantageous any more (Moxter (1982), p. 104; Schmidt (1930b), p. 241; Zeff (1962), p. 624). In reality, however, markets are neither perfect nor totally balanced and attempts to measure the financial position by using entry prices will fail in most circumstances.

### **2.2.2.3 International traditions of market-selling price accounting: The exit price of debt**

Exit price measurement is generally based on the notional idea that an increase in future sales prices needs to be immediately recognized in income. As a revenue and expense view demands a matching of these revenues with the expenses incurred in the production of the goods, and this matching is bound to the date of performance, immediate recognition

would counteract a revenue and expense view<sup>3</sup>. Exit price measurement can thus only be in conformity with an asset and liability view. Such an exit price is the current reward for a financial element divested from an entity. The exit price of a liability is thus the payment to be made when currently settling the obligation (Financial Accounting Standards Board (1976), no. 555).

#### **2.2.2.3.1 The exit price under an asset and liability view**

Exit price measurement results in an accounting measure of wealth that is meant to represent an entity's economic wealth. The quality of the approximation depends on the availability of current prices in the selling market and on the scope of recognized financial elements. The concept arose explicitly to distinguish it from replacement cost accounting. On the one hand, replacement prices were seen to be irrelevant if replacement is not considered as an option (Chambers (1966), p. 249) and therefore better substituted by exit prices of goods to be sold in an entity-specific normal course of business (Sterling (1970), p. 328; Chambers (1971), p. 93-95; a similar demand had already been formulated by the German accounting theorist Simon (1910), p. 303). On the other hand, the attempts (under a revenue and expense view) to reflect a representative accounting profit (namely distinguishing between realizable and realized cost saving) were regarded as impracticable and costly (Chambers (1965), p. 737; Prakash and Sunder (1979), p. 17). Replacement cost is nevertheless incorporated into early exit price regimes, for instance in the valuation of inventories if resale prices are unavailable (Chambers (1965), p. 736). That inconsistency is a central argument of the critics (Baxter (1967), p. 212).

The valuation of liabilities was not taken into account by the early theorists (Friedman (1978), p. 897). It was instead argued that debt instruments generally lack a redemption option with exit therefore not being an option for the individual entity. On these grounds the case is made for measurement of liabilities at the contractual (i.e. the nominal and not the fictitious current) exit price (Chambers (1982), no. 57-64). This perception significantly changed when international standard setters presented a concept for the accounting measurement of financial instruments in the late 1990s (International Accounting Stan-

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<sup>3</sup> An exception may be made in the case of physical growth of biological assets. See Paton and Littleton (1956), pp. 52 et seq.

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dards Committee (1997); Joint Working Group of Standard Setters (1999)). The focus is now on objective (instead of entity-specific) exit prices both for financial assets and liabilities.

The fair value of financial liabilities is defined as an estimate of the price an enterprise would have paid ‘if it had been relieved of a liability on the measurement date’ (Joint Working Group of Standard Setters (1999), para. 28). Therefore, it corresponds with the ‘classical’ exit price definition. Entity-specific selling values are rejected because of their high dependence on internal discretion and hence their lack of comparability among enterprises (Joint Working Group of Standard Setters (1999), BC4.9). However, the objective exit price of a liability depends on the credit standing which has to be reflected in the fair value calculation in a similar way as described above for entry prices (International Accounting Standards Committee (1997), para. 6.11; Joint Working Group of Standard Setters (1999), BC4.50). Under the asset and liability view expressly adopted by the Joint Working Group of Standard Setters (see Joint Working Group of Standard Setters (1999), BC1.29) a change in exit price induced by a change in credit standing is income.

#### **2.2.2.3.2 The primacy of the exit price under existing IFRS**

The objective of IFRS accounting is postulated in IASB’s Framework and IAS 1: Financial statements shall present an entity’s financial position and performance (IAS 1.7, FW.12). The first objective suggests an asset and liability view and the latter suggests a revenue and expense view (Wüstemann and Kierzek (2005a), p. 78; Benston et al. (2006b), p. 175). According to these very general norms, both views seem to be of equal importance though actually they are mutually exclusive. Anyhow, recent standard setting indicates the primacy of asset and liability valuation over the realization principle and the matching principle, which are already suspended by the application of IAS 39 or IAS 41. In addition, IFRS 3 prescribes a fair value measurement of a broad range of intangible assets and contingent liabilities. The remaining goodwill is not amortized except for impairment losses that result in internally generated goodwill being recognized in subsequent periods (Duhr (2004), p. 31). The IASB’s Discussion Paper on ‘the objective of financial reporting and qualitative characteristics of decision-useful financial reporting information’ confirms this trend: according to the IASB’s propositions, the sole objective of financial reporting



should be to ‘provide information about the economic resources of the entity (its assets) and the claims on those resources (its liabilities and equity). Information about the effects of transactions and other events and circumstances that change resources and claims to them is also [viewed as] essential’ (International Accounting Standards Board (2006b), OB18).

Providing information on an entity’s performance should no longer be a separate objective of IFRS financial statements; an entity’s (financial) performance should rather be measured as direct changes in the entity’s assets and liabilities (International Accounting Standards Board (2006b), OB23). Taken together, these norms provide evidence for the intrinsic objective of IFRS reports to approximate economic wealth. This objective is only compatible with a performance definition accepting the asset and liability view and resulting in a profit figure that reflects the increase in wealth during the period.

Wealth measurement is thus dominant (measurement perspective) and concurrently a rigid information content perspective not using the ‘language of valuation’ (Christensen and Demski (2003), p. 138) is virtually rejected because the absolute amount of the accounting figures (and not a relative amount invertible into the relevant figure) is strongly affected by the accounting objectives identified above. Such a measurement perspective demands a fair value application consistent with the asset and liability view. A consistent fair value definition has already been found in the exit price concept developed by the JWG. There is indeed a lack of a general fair value definition under existing IFRS but very similar definitions are adopted by several individual norms. An analysis on the overall consistency of this definition’s integration with a conceptual model based on an asset and liability view is provided below.

#### **2.2.2.4 Economic foundations of fair value measurement**

The asset and liability view could be identified as the theoretical basis for a conceptual accounting model and it has furthermore been shown that the attempts to approximate an entity’s economic wealth by applying an asset and liability view are founded on a measurement perspective. It is thus indispensable to discuss the economic foundations of wealth measurement when assessing the approximation quality of the accounting figures. The recourse to the information content perspective is yet closely related to this discussion in order to allow an analysis whether shortcomings of a strict wealth measurement could

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be at least partly remedied when they are accompanied by relevant signals.

#### **2.2.2.4.1 Investment valuation and financing in an ideal economy**

It is a rather old economic insight that the value of an investment can only be determined by discounting future cash flows at a rate of interest directly varying with the associated risk (Williams (1938), p. 56). An entity consists of individual investments that are jointly managed for the sake of creating synergies. It thus seems obvious that the value of the entity is equal to the jointly generated cash flows discounted at an interest rate reflecting the risk of the entity as a whole. Modigliani and Miller (1958) indeed suggested that the value of an entity solely depends on its investments. This suggestion is, however, based on quite rigid assumptions of an ideal world with competitive markets, no bankruptcy and no taxes (Stiglitz (1969), p. 784). In such a world, there is no need for taking its financing into account when measuring the wealth of an entity. Net wealth can be derived from the total investment value less the value of the liabilities, which in turn corresponds with the discounted part of the cash flows from the investments that could be apportioned to the lenders. As the same holds for equity instruments, a fair valuation of each debt and equity instrument used in an entity's financing just results in an entity's total investment value.

#### **2.2.2.4.2 The relevance of the fair value of debt from a measurement perspective**

In contrast to the net economic wealth of an entity that is open to an individual measurement, net accounting wealth is a residual. It is determined by what is left after deducting total liabilities from total assets. Wealth measurement by means of accounting is thus only possible if both assets and liabilities are measured correctly. This holds even more when the close interdependency between the total value of assets and the total value of liabilities is taken into account. The value of liabilities measured as described above heavily depends on a risk evaluation. The most important risk associated with a liability is the risk of a credit default. Therefore, the risk-adjusted discount rate reflects an entity's credit standing.

There are two possible causes of a shift in credit standing resulting in a non-unidirect-

ional relationship between credit standing and economic wealth: credit standing can change as a result of the outcome of an investment or of financing decisions by management which alter the capital structure. The former cause lies in the value of assets. The success or the failure of an investment has impact on the resources available to satisfy the obligations of an entity, i.e. for the repayment of liabilities. The implication of the altered probability of a credit default is evident: the value of liabilities decreases in the case of an ineffective investment and it increases in the case of a successful outcome. As the success of an investment affects the value of assets and the outcome thus results in an asset revaluation, it is adequate from a strict economic perspective to revalue the liabilities as well, since it is not only the equity-holders that participate in the entity value (Gray (2003), p. 258). From this perspective, debt-holders are in a short position of a put option on the total investment value of an entity with an exercise price equal to the claims of all creditors. If the total investment value falls below this exercise price, the option will be exercised by means of bankruptcy (Merton (1974), p. 453 et seq.). That is the justification for measuring liabilities at fair value: a change in investment value alters the option value and thereby the value of the cash flows apportioned to the debt-holders.

However, in accounting for internally generated assets, goodwill is considered to be non-identifiable and therefore neither recognized nor individually measured. In most cases at least a significant part of the outcome of investments does not affect the individual value of identifiable assets but does affect that of internally generated goodwill. In these cases, a credit deterioration may result in a net increase in equity as the (fully) recognized decrease in liabilities succeeds the (only partially) recognized decrease in assets. This observation needs to affect the rationale above: the revaluation of liabilities due to a change in credit standing is not adequate any more from an economic measurement perspective. Holding the put option does not result in net gains of equity-holders when the probability of bankruptcy increases. It rather means that equity-holders have to bear only a part of the total decrease in investment value that is possible and that the value of their stake does not decrease by the same amount as that by which the total investment value decreases, but still it will always decrease (Lipe (2002), p. 177). An isolated reference to the value of the put option is thus just an economically incorrect justification of a liability measurement that depends on credit standing.

### **2.2.2.4.3 The relevance of the fair value of debt from an information content perspective**

It is by now obvious that fair value measurement of liabilities fails to approximate the absolute amount of an entity's economic wealth. As discussed above, the absolute amount is negligible when accounting is viewed from a strict information content perspective. If accounting and economic wealth were always changing in opposite directions when credit standing is changing, it could be possible to invert the accounting signal of decreasing liabilities into the relevant information about the altered probability of the future fulfilment of obligations and a fair value measurement of liabilities would be justified. When considering the second cause of a change in credit standing it becomes apparent that this rather naïve justification falls short of the ideal world of Modigliani and Miller (1958). A management's decision to alter the entity's financing and thereby the capital structure does indeed not directly affect the cash flow from investments. But the assumptions on which Modigliani/Miller based their theory do not reflect realistic conditions of imperfect markets with taxes where the impact is instead indirect and not a monotone function of capital structure. A change in the debt-to-equity-ratio has mainly two opposing effects as both the tax shield and the expected value of bankruptcy costs are struck. The interrelation is quite simple: A redeployment of capital structure may be attained by repurchasing stock when cash is generated through the placement of debt securities. The amount at which the value of outstanding equity is decreasing is regularly not equal to the amount at which the value of outstanding debt is increasing.

The reason for the change in total entity value is twofold. On the one hand, the total return on investment is taxed less due to the tax deductibility of the interest payments, i.e. the cash flow distributable to each individual equity-holder after tax and interest payments are deducted increases (Modigliani and Miller (1963), p. 433; Miller (1977), p. 261). On the other hand, the probability of a future inability to fulfil any legal obligations increases with the debt-to-equity-ratio. The change in the expected value of bankruptcy costs (for instance the loss of intangible assets non-convertible into cash) thus partly offsets the tax effects. The major part of the net effect on the entity value cannot be referred to an identifiable asset but rather to internally generated goodwill.

In conclusion, it is not possible to invert the signal of a liability revaluation due to a change in credit standing into the relevant information, without any additional informa-

tion about the associated change in the value of internally generated goodwill and thus the algebraic sign of the net effect on the entity's cash flow. Without knowledge about the corresponding change in goodwill, it is not possible to judge whether the revaluation of debt was induced by a deterioration in credit quality (i.e. the revaluation provides a negative signal to investors) or by a change in capital structure (i.e. the revaluation could provide either a negative or a positive signal to investors). Both from a measurement and from an information content perspective, a case for a dependency of the accounting value of liabilities on credit standing is thus always a case for the recognition of internally generated goodwill with the severe consequences of the latter not being discussed here.

### **2.2.3 A Conceptual Model of Fair Value Measurement of Debt and Equity as a Reference Point for Discussion ('Full Fair Value Model')**

As modern accounting norms are in general based on an asset and liability view and derived from a measurement perspective, it is now possible to establish a conceptual model as a benchmark for the subsequent discussion of existing IFRS. As a theoretical model, the principles are based on a strict implementation of accounting norms which aim at approximating an entity's net economic wealth. Practical limitations due to an imperfect environment are not yet taken into account. These limitations will be introduced below. This conceptual model thus serves merely for the purpose of illustrating a 'full fair value model' for equity and debt as a reference point for discussion and for the sake of conceptual consistency. We do not plead this cause. Neither do we advocate it for future standards. Due to space restrictions we only sketch the principle-based reference model.

#### **2.2.3.1 General principles of recognition and measurement**

##### **2.2.3.1.1 General recognition principle**

*General Recognition Principle:* 'All presently existing resources (obligations) of an entity are recognized as assets (liabilities) if and only if they represent future economic benefits (sacrifices).'

*Explanation:* If an asset or a liability contributes to the future cash flows of an entity, it

contributes to the entity's wealth regardless of its nature. Other characteristics besides the generation of economic benefits or economic sacrifices - that is of cash flows - are therefore irrelevant as regards recognition. Intangible assets as well as contingent liabilities are therefore recognized even if they are very difficult to identify; no identifiability criterion is required. For the recognition process it is neither critical to assess the respective probability nor necessary to state a specific level of certainty of future cash flows. That is because uncertain events and the associated risks affect an entity's economic wealth even in cases when their impact may be difficult to measure or are small in nature. It is instead presumed that the effects of uncertainty and unreliability can be measured by the use of valuation techniques.

#### **2.2.3.1.2 General measurement principle**

*General Measurement Principle:* 'Assets and liabilities are each measured individually at their fair value to the entity. Fair value is the amount which the respective element contributes to an entity's net economic wealth. For each asset and liability there exists one and only one fair value which can be determined by valuation techniques.'

*Explanation:* Risks associated with future cash flows are not relevant for the recognition of assets and liabilities. But it is necessary to reflect them at the measurement level (in the amount an element is measured at). In the case where a liquid market without information asymmetries exists for a specific element, all the factors determining the current contribution to any entity's wealth are contained in the market price. Those market prices can therefore be taken as the best measure of fair value. For the sake of a consistent measurement base of all assets and liabilities it is indispensable to use a valuation technique that replicates prices on perfect markets in cases where those markets do not exist.

#### **2.2.3.2 Following principles of accounting for debt and equity**

It can be derived from the general recognition principle that a liability should be recognized when an entity has a present obligation requiring a potential future outflow of assets. The date at which a present obligation starts to exist differs among the types of obligations.

### **2.2.3.2.1 Recognition principle for contractual obligations**

*Recognition Principle #1:* ‘An obligation arising from the terms of a contract is recognized as a liability at the date of the contract’s inception and independent of the contract’s executory nature.’

*Example:* An entity enters into a contract for the sale of goods or services. At contract inception, the contractual obligation to deliver the goods or to render the services is recognized as a liability and the contractual right to receive the payment from the customer is recognized as an asset, although the contract is as yet an executory one. As a result, equity increases at the amount the fair value of the contractual asset exceeds the fair value of the contractual liability (Wüstemann and Kierzek (2005a), p. 86). The recognition of part of the consideration as income at contract inception is thereby independent of the entity’s completion of the contractual obligation. The same must hold for long-term construction contracts (Wüstemann/Kierzek 2005: 89).

### **2.2.3.2.2 Recognition principle for statutory obligations**

*Recognition Principle # 2:* ‘An obligation arising from some kind of legislation is recognized as a liability at the date the fulfilment of the constituent elements of the legislative act becomes independent of the entity’s course of business.’

*Example:* An entity is liable by law to clean up specific contamination caused by its plant. The constituent element of the legal requirement that the entity can influence is the contamination. The contamination is caused by the plant. Once the plant is built, its operation is part of the entity’s course of business and a statutory obligation for clean up is recognized as a liability. The value of this liability partly offsets the value of the asset comprising the economic benefits from the operation that is recognized simultaneously when the plant is put into operation.

### **2.2.3.2.3 Recognition principle for constructive obligations**

*Recognition Principle # 3:* ‘An obligation arising from a valid expectation of other parties is recognized as a liability at the date the entity has validly accepted its external

responsibility.’

*Example:* An entity publicly announces via the use of media that it will donate a specific amount to a charitable organization. The expectation of the external public is created by the publication of the announcement at the date of which the external responsibility is accepted by the entity and therefore the constructive obligation to donate the specific amount is recognized as a liability. Sometimes, constructive obligations are closely related to contractual obligations. A sales contract for example may be combined with non-contractual announcements to refund the purchase in case the customer is dissatisfied or to repair damages occurring within a certain period. The valid expectation on the part of the customers might thereby also have been created by past practice. In those cases, both the contractual and the constructive obligations are recognized as liabilities at contract inception.

#### **2.2.3.2.4 Recognition principle for internal obligations**

*Recognition Principle # 4:* ‘An obligation arising from an internal economic necessity is recognized as a liability at the date the entity has validly accepted its internal responsibility.’

*Example:* An entity operates a machine that needs to be maintained at some future date. The necessity to maintain the machine is purely an economic one since the maintenance is not enforceable by external parties and its omission would only be penalized by a lower production level. But the outflow of cash for the maintenance activity is nevertheless an economic sacrifice to be fully recognized according to the general recognition principle. At the date the entity comes to the decision about the action and an internal agreement is thus reached, the internal obligation is thus recognized as a liability.

#### **2.2.3.2.5 Measurement principle for liabilities**

*Measurement Principle # 5:* ‘The fair value of liabilities is determined by the replication of an ideal market price that reflects the cash flow and the risk characteristics of the respective liability.’

The amount is called fair value because risk is reflected in a neutral way. Within this



system there is no justification for prudence.

### **2.2.3.2.6 Equity as residual interest**

*Definition # 6:* ‘Equity is the owner’s residual interest in the entity value (all assets minus all liabilities).’

If both assets and liabilities are accounted for according to an asset and liability fair value approach as it is outlined in the principles above, the usage of double-entry accounting will necessarily result in a residual amount corresponding with the definition of equity.

## **2.2.4 Limitations of Accounting for Debt and Equity under Existing IFRS**

### **2.2.4.1 Financial liabilities at fair value through profit or loss (IAS 39)**

Two classes of liabilities have to be recognized according to IFRS: a distinction is made between financial and non-financial liabilities. The accounting for both classes is covered by different standards. IAS 39 has to be applied in accounting for financial liabilities, IAS 37 in accounting for non-financial liabilities. In addition, there exist some more specific norms for special kinds of financial or non-financial liabilities. Tax liabilities are regulated by IAS 12, liabilities arising from leases by IAS 17 and obligations to employees by IAS 19 regardless of whether they are of financial or of non-financial nature.

#### **2.2.4.1.1 Definition of financial liabilities**

Financial liabilities according to IAS39 can be described by two main characteristics. First, they are contractual obligations and second, they are obligations to deliver financial assets such as cash or receivables (IAS 32.11). The characteristics draw a sharp line between financial and non-financial liabilities. All contractual obligations to deliver anything else but financial assets and all non-contractual obligations are non-financial liabilities.

In contrast, the distinction from equity is less clear. The economic understanding

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of equity is an associated claim on the residual entity value, i.e. the subordination of the equity-holder's claim. This economic feature is accepted by the IASB Framework (FW.49(c)). It is however only a subsidiary criterion in the more specific and therefore more relevant definition of financial liabilities according to IAS 32. In IAS 32, a contractual obligation is defined as an obligation the fulfilment of which cannot be unconditionally avoided by the entity. In conformity with European company law there are partnerships or cooperative associations in several member states of the European Union with a private statute that allows the members to return their equity participations to the entity in exchange for the residual value of the entity attributable to the participation. If the payment cannot be refused by the entity, a classification of these equity participations as financial liabilities is mandatory according to IAS 32 in spite of the claim's residual character (IFRIC 2.7) and regardless if the exercise of the option is probable or not (Ma and Lambert (1998), p. 147).

#### **2.2.4.1.2 Recognition of financial liabilities**

If the definition of a financial liability according to IAS 32.11 is fulfilled, the liability must be recognized at the date the entity becomes a party to the contractual provisions (IAS 39.14). In particular the probability and reliable measurement of the future outflow of resources are not relevant (Bradbury (2003), p. 390). As the IASB Framework actually demands that every liability meets these two recognition criteria (FW.91), the recognition of financial liabilities is only consistent if the existence of a contractual obligation to deliver a financial asset itself results unexceptionally in a sufficiently probable and reliably measurable future outflow of economic resources (Hague (2004), p. 22). But the sufficient probability criterion will at least not hold for many conditional derivative obligations whose exercise is not beneficial and thus remote. The true rationale behind the abdication of a probability criterion is thus another one: all derivatives that are still executory should be recognized (IAS 39.BC177(a)) and the associated uncertainty of the future outflow shall instead be reflected by measurement at fair value.

### **2.2.4.1.3 Measurement of financial liabilities**

Closely related with the recognition of a financial liability is its classification. Two more classes of liabilities exist under IAS 39: liabilities at fair value through profit and loss and other liabilities with only the former being measured at fair value. Only financial liabilities held for trading, i.e. for a sale in the near term or as part of an identifiable trading portfolio, must be measured at fair value through profit and loss. All derivative liabilities are irrefutably supposed to be held for trading. In addition to these commitments, there is a rather broad option to use fair value measurement of liabilities at the entity's own discretion (IAS 39.9). In practice, it will be especially easy to demonstrate an accounting mismatch by identifying an asset that is measured at fair value and hedged by the liability since there is no need to provide objective evidence of an effective hedge relationship (IAS 39.AG4D). With the introduction of the fair value option the more complex and restrictive hedge accounting rules actually become redundant. By opting for the fair value category and thereby forgoing the requirements of hedge accounting (such as the effectiveness test according to IAS 39.AG105), the identical objective can be achieved in a less complex way.

The fair value of financial liabilities is equal to an exit price that is not entity specific. It has thus to be derived from price quotations on active markets (IAS 39.AG71). As only the bond market will meet the definition of an active market but the majority of an entity's debt will not be traded there, IAS 39 demands the replication of a market price by means of an accepted valuation technique (IAS 39.AG74). For an exact replication to be achieved all the factors must be incorporated into valuation that affect the market price of bonds. The credit standing is such a factor and is thus explicitly determining the fair value of financial liabilities (IAS 39.BC87).

### **2.2.4.1.4 Non-conformity of IAS 39 with the conceptual model**

The complete recognition of all future economic sacrifices arising from contracts is permitted by the criteria in IAS 39. Regardless of probability and reliability, any contractual obligation qualifying as a financial instrument is recognized and measured after the conclusion of the contract. But when financial liabilities are classified, accounting following the rules of IAS 39 is no longer in conformity with the conceptual model, as the option

to forgo a fair value measurement is too broad. It will rather be the rule that liabilities are measured at cost not reflecting changes in fair value in profit or loss.

Furthermore, if fair value measurement is applied in accounting for financial liabilities, the measurement is far from the objective of providing verifiable market prices. There will only be a minority of liabilities that is indeed actively traded on perfect markets. The measurement of all the other liabilities demands the application of a valuation technique not well defined in IAS 39 and therefore leaving too much discretion. The own credit standing, for example, has to be incorporated in such a valuation technique as a risk factor. As described above, even if measured correctly, the gross effect of changes in credit standing on liabilities is noisy information without any additional signal about the reasons and therefore the offsetting effect on asset value. This additional information is not provided by IFRS accounts, as internally generated goodwill to which the offsetting effect will regularly be related must not be recognized as an asset (IAS 38.48).

But this is not the only accounting mismatch arising from the inconsistent fair value concept underlying IFRS. The fair value of financial liabilities is also affected by fluctuations in risk-free interest rates (Willis (1998), p. 858) that alter at the same time the fair value of real investments in the opposite direction (Bromwich 2004: 49). This offsetting effect cannot either be recognized in the income statement if the real investment is for instance accounted for under IAS 16. The disclosure of gross effects instead of net effects is not in conformity with either an asset and liability view or an information content perspective: the wealth approximation intended by the asset and liability view is not achieved and, in addition, a noisy accounting signal is produced.

#### **2.2.4.2 Non-financial liabilities (provisions) at best estimate (IAS 37)**

Differentiation between financial and non-financial liabilities was introduced by the exposure draft of proposed amendments on IAS 37 published in 2005 as a result of the joint convergence project of the IASB and the FASB. Non-financial liabilities are simply defined as liabilities other than financial liabilities. The exposure draft forgoes the term provisions - the wording used in the still extant IAS 37 to describe uncertain liabilities that are a major subgroup of non-financial liabilities.

#### **2.2.4.2.1 Definition of provisions**

There are primarily two characteristics of provisions that differ from those of financial liabilities. First, a contractual obligation is not required, an obligation deriving from legislation or other operation of law and a constructive obligation the fulfilment of which can be validly expected by an external party are sufficient. Second, the future outflow of economic resources is of uncertain timing or amount and not the determinable outflow of financial assets. According to IAS 37.19, a liability will arise from the obligation if the uncertain outflow cannot be avoided by an entity's own future actions except for a total cessation of business. It is further emphasized that the involvement of external parties is presumed. The recognition of internal obligations is therefore not permitted even if there is an economic necessity to fulfil those obligations, for instance to maintain the equipment. There are only some exemptions for restructuring provisions. Although non-legal liabilities are thus recognized to a limited extent, IAS 37 obviously acknowledges that the concept of liabilities in financial accounting needs to be narrower than a comprehensive understanding of liabilities as general responsibilities (Financial Accounting Standards Board (1976), no. 172-179).

#### **2.2.4.2.2 Recognition of provisions**

The existence of a present obligation is, however, not enough for a provision to be recognized. IAS 37 translates the recognition criteria of the IASB Framework into the applicable standard: recognition depends on probability and the reliable measurement of the future outflow. The probability criterion in particular prevents the recognition of present obligations as it demands a probability higher than 50%. Quantification is therefore required which results in real economic sacrifices not being recognized at all if the probability of the future outflow is equal to or lower than 50%. The reliability criterion on the other hand is only relevant in an 'extremely rare case' (IAS 37.26) since the ability to determine a broad range of possible outcomes is said to be sufficient.

### 2.2.4.2.3 Measurement of provisions

Fair value is not an explicit measurement base for provisions. Provisions should instead be measured at what is called the best estimate of the expenditure required to settle the present obligation. The best estimate is thus an exit price but it is not determined by the replication of a market price. When discussing the similarity with a fair value it is necessary to distinguish between single obligations and obligations involving a large population of items. In the case of a single obligation, the best estimate is the individual most likely outcome (IAS 37.40). An expected value calculation is not prescribed. Adjustment has only to be done if most of the other outcomes (than the most likely one) are either higher or lower, i.e. if the best estimate is a boundary value. There is, however, no discussion of how the best estimate needs to be adjusted.

The advantages of a measurement at best estimate compared with an expected value approach can be seen from the characteristics of single obligations. Those obligations are regularly the result of non-recurring events not associated with past realizations on which an estimation of probabilities could be based. An expected value measurement would thus require the incorporation of highly subjective values where on the other hand a best estimate could be derived from a rather qualitative assessment of possible future outcomes. At least as regards single and unique obligations, a professional judgment based on arguments seems to be more verifiable and comprehensible than a subjective probability estimation. If the distribution of outcomes were discrete, the application of a best estimate would further avoid the measurement at a value with an individual probability of zero, as it is regularly inherent in an expected value (Ballwieser (1981), p. 101).

The point can be illustrated when thinking of a legal obligation to clean up contaminated land (IAS 37.C2A): the costs of the clean up are estimated for three possible states: costs of 50 CU (Currency Units) will incur with a probability of 40%, 150 CU and 200 CU each with a probability of 30%. The best estimate is 50 CU. The reason for which IAS 37.40 prescribes an adjustment of the value is that the cash outflow will be significantly higher in 60% of the cases. An adjustment to the expected value would however result in a provision of 125 CU though the individual probability of an outflow of 125 CU amounts to zero.

A valuation technique is only required in the case of provisions arising from a large population of similar obligations. The expected value of the future cash outflows has to be discounted at a risk-adjusted interest rate. The option to forgo discounting a provision in not well-defined cases of immaterial time value effects is just an additional inconsistency of IAS 37. The resulting value will anyhow be at least similar to the fair value of financial liabilities (ED IAS 37.BC78). The major difference to a fair value obviously is the lack of market prices that forestalls the incorporation of the first level of fair value estimation (see International Accounting Standards Board (2006a), p. 13) into an accounting standard on non-financial liabilities.

#### **2.2.4.2.4 Non-conformity of IAS 37 with the conceptual model**

In contrast to IAS 39, the recognition criteria of IAS 37 are not in conformity with a consistent model of full fair value measurement. Future economic sacrifices are not recognized at all if the probability of the resulting outflow amounts to less than 50%, the consideration of uncertainty is thus not just left to the measurement rules. But there are further obligations arising from a solely internal but economic necessity that must not be recognized as a consequence of not meeting the criterion of external obligations. Necessary cash outflows resulting from the maintenance of equipment reduces the net value of the investments - thereby an entity's net economic wealth - and should be considered according to the conceptual model either by a net asset measurement or by a separate liability. Neither one is allowed under existing IFRS. The same holds for executory contracts not covered by the definition of a financial instrument. The net value of those transactions may not be accounted for if they do not qualify as an onerous contract.

Nor are the measurement rules in conformity with the conceptual model. The avoidance of calling the measurement base a fair value is justified by the way the value is determined. The best estimate may only be similar to fair value if the obligation results from bulk transactions. In these cases, an expected value of the total outflow of resources needs to be calculated and then discounted at a risk-adjusted rate. Whether the result comes close to a market price establishing a fair value must nonetheless remain doubtful, as provisions are generally highly uncertain, entity specific and difficult to assess (Linsmeier et al. (1998), p. 199).

### 2.2.4.3 Equity at residual value (IAS 32)

The IASB Framework considers equity as one of the three elements of financial statements. The definition follows common company law and distinguishes equity from liabilities by the nature of the capital distributed to the holders. The main feature of equity is the residual interest in the entity's assets after the claims of debt-holders are satisfied (FW.49 (c)), i.e. the lack of a fixed contractual claim to receive a payment. This economic definition is not relevant since the more specific rules of IAS 32 contain the non-consistent definition described above.

#### 2.2.4.3.1 Accounting for equity

The broad definition of financial liabilities results in a narrow scope for equity and in companies that have no contributed equity at all (IAS 32.18 (b)). The consequences are significant as the offsetting of assets and liabilities that are all valued individually is not possible for those entities without the recognition of technical balance sheet items.

Consider the following example: An entity issues equity with a redemption feature and receives 10 CU at  $T_0$ , the total amount is invested in inventories. In the balance sheet, the inventories are recognized at cost (IAS 2.9). The equity is presented as debt due to the redemption feature. Until  $T_1$ , customer relationships have developed in a very satisfying way and thereby goodwill at an amount of 2 CU has been internally generated. The stock of inventories remains unchanged and net earnings are totally distributed. In the balance sheet, the inventories are measured at 10 CU while the book value of debt increases to its fair value of 12 CU. Fair value is determined according to IAS 39.47 and thus equal to the amount payable on demand, i.e. in the event that the redemption option is exercised by its holders. The amount payable is nothing else but the share in the entity value and the total entity value amounts to 12 CU in the example.

Balancing the book values of assets and liabilities without using the equity element of a financial statement requires the additional recognition of a separate line item at 2 CU either purely technical in nature (and thereby a breach of the asset and liability view) or economically reflecting the internally generated goodwill (and thereby a breach of IAS 38). The amendments proposed by the recent ED of amendments to IAS 32 do not solve this general inconsistency with both an asset and liability view and the principles



of IAS 38 since it would yet not be generally prescribed to account for at least the most subordinated class of an entity's capital as equity.

Only the classification as equity allows the entity to forgo individual valuation of an instrument. According to IAS 32, equity is measured as a residual, i.e. by deducting the total of liabilities from the total of assets, though its definition is not primarily determined by its residual character. In the example above, classification of the instrument as equity would thus not result in an individual fair value measurement. The instrument could instead be measured at the residual amount of 10 CU and the inclusion of the separate line item was avoided. But this possibility is only given to entities having issued equity that meets the restrictive definition criteria of IAS 32, the subordination of capital as it can be derived from company law is irrelevant in contrast.

#### **2.2.4.3.2 Non-conformity of IAS 32 with the conceptual model**

The approximation of an entity's net wealth by means of accounting is reflected in equity. This approximation does not require an individual valuation of equity: the traditional accounting technique (acknowledged by IAS 32) of determining equity as a residual amount is instead sufficient. This will however only hold if all future economic benefits and all future economic sacrifices (regardless of the probability of their occurrence) are fully recognized and measured at their contribution to net wealth. Getting back to the example above and assuming that the capital issued could be measured as a residual, the residual amount would equal the entity value of 12 CU at  $T_1$  if the economic benefits arising from the customer relationships were recognized as an asset and measured at their contribution of 2 CU for the total of assets (inventories plus customer relationships) adding up to 12 CU.

We have seen before that the customer relationships form part of internally generated goodwill and must thus not be recognized. Additionally it has been shown from examining the measurement of debt that contribution to an entity's wealth is (for good reasons) not a relevant measurement base at least for the major part of obligations. This result holds even more if liabilities outside the scope of IAS 37 and IAS 39 are included (especially tax liabilities according to IAS 12, lease obligations according to IAS 17 and obligations to employees according to IAS 19). Equity being determined as a residual will thus always

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fail to satisfactorily approximate an entity's wealth under existing IFRS.

## 2.2.5 General Limitations of a Full Fair Value Concept

It has been shown that accounting under existing IFRS is inconsistent with a theoretically appealing and consistent conceptual model of the asset and liability view in combination with fair value measurement. This conceptual model was taken as a reference point for discussion because it seems evident from recent public statements that the IASB aims to use it as the implicit foundation of its principles-based standard-setting (see Benston et al. (2006a), pp. 261 et seq., on what they call 'fair-value, asset/liability' approach). Under the conceptual model, a determination of an entity's net wealth is achieved as a result of full fair value accounting for assets and liabilities. Company valuation is, however, not a reasonable objective of financial accounting because the direct use of valuation techniques such as discounted cash flow methods is superior. It is thus not an inconsistency in itself that accounting under existing IFRS fails to determine wealth. Quite the contrary, there is a bulk of good reasons under realistic conditions not to recognize internally generated goodwill as an asset.

An itemized balance sheet only comprising identifiable assets and liabilities each measured at fair value may instead at least provide a focused and objectified view of the entity's financial position even if not measuring wealth. The precondition is merely that fair values are a verifiable measure of individual elements. That precondition is certainly not fulfilled. A reliable replication of a market price is under realistic conditions impossible especially in accounting for non-financial liabilities. (It is for exactly that reason that ED IAS 37 avoids designating the proposed measurement base as a fair value.) An itemized accounting for liabilities will thus always provide inconsistent measurement bases if fair value is prescribed for the reliably measurable elements.

This inconsistency causes a severe expectation gap as users cannot distinguish between the information supposedly provided by IFRS accounts (i.e. reliable individual market prices) and the information actually contained therein (Ballwieser (2004), p. 65). This gap is in particular created by the comments of standard-setters when justifying fair value measurement. The fair value measurement of assets and liabilities acquired in a business combination, for instance, purports to provide information that enables 'users to better assess the cash-generating abilities' (IFRS 3.BC125). But precisely this information

cannot be provided for all the liabilities recognized. The implementation of a consistent conceptual model of fair valuing debt fails both under existing and under realistically possible IFRS. The expectation gap identified could only be closed by fully forgoing a fair value measurement of liabilities. A consistent alternative might be a historical cost regime (Ijiri (1975), p. 92).

### **2.2.6 Implications and Conclusions**

Fair value accounting in general is based on an itemized understanding of an entity: An entity's financial position can hence be derived from the fair value measurement of all the individual investments the entity can be subdivided into. At first glance, this view seems to be supported by classical economic theory. Modigliani/Miller have shown that the value of an entity is determined solely by summing up the capital values of the individual investments given the absence of taxes and of information asymmetries. However, outside this ideal world, not only the investment structure but also the capital structure significantly influences the value of an entity. It is therefore mandatory that an itemized view of an entity justifying fair value accounting includes the financial contribution of the capital structure, namely of debt and equity.

Replacement cost was first introduced as a measurement base for assets. The concept was motivated for mainly two reasons both developed from the production side of a firm. According to Edwards/Bell and Revsine, by applying replacement costs the income statement indicates a current operating (production) profit representative of future periods' production and the balance sheet indicates a current value representative of the present value of productive assets. The concept of replacement cost accounting was later explicitly rejected by the Joint Working Group of Standard Setters (JWG). In the understanding of the JWG, that was because an exit price came closer to present value than an entry price. The JWG thus focused its standard draft on the exit price of debt which can be interpreted as the current amount necessary to pay for obtaining relief of an obligation. The objectivity of such a measurement is emphasized.

IFRS allow the recognition of two kinds of debt: financial and non-financial liabilities, which differing in terms of the nature of their extinguishment. The main feature of financial liabilities is a contractual obligation that results in a non-redeemable outflow of economic resources. There are problems arising from this definition in the case of certain

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financial instruments which can be classified as equity in a normative view but at the same time contain a non-redeemable obligation. This reveals a conflict with the IASB Framework's definition of equity that emphasizes the residual character of payments, which is undoubtedly fulfilled by stakes in private companies.

The fair value of financial liabilities is determined as an exit price according to IAS 39. It is a market price that can be derived either directly from market quotations or indirectly (in the normal case of missing market quotations) in applying a valuation technique. The factors incorporated in the valuation technique are market interest rates and the entity's own creditworthiness. A change in creditworthiness may reflect changes either in the value of investments or in capital structure. In the event that a failed investment caused a worsening of creditworthiness, the corresponding changes in the accounting values of assets and liabilities would only be balanced if the changes did not affect the internally generated goodwill. Otherwise (and this will be the regular case), deteriorating creditworthiness creates an accounting profit.

The fair value of financial liabilities which qualify as equity according to company law is then the redemption price, i.e. the compensation the owners would currently receive in the entity's termination. This requirement for a fair valuation results in internally generated goodwill (either positive or negative) being recognized as a technical correction. Financial instruments accounted for as equity are on the other hand not valued individually at all. Under existing IFRS, this is a major limitation of a fair value concept for equity and debt.

The recognition of financial liabilities is not dependent on a probability criterion. This is a fundamental difference between financial and non-financial liabilities. Non-financial liabilities according to IAS 37 are only recognized when the probability of a future outflow of resources exceeds 50%. For that reason alone, non-financial liabilities cannot be measured at fair value since the redemption price of existing obligations with an outflow probability less than 50% will not be zero. The IASB has acknowledged this shortcoming and designates the measurement base as a best estimate and not as a fair value. Besides, the best estimate does not refer to an expected value but to the single value with the highest individual probability to incur that is only to be discounted if material. This is not a valuation technique used by market participants.

Further limitations of the fair value concept can be identified when analysing accounting for liabilities outside the scopes of IAS 37 and IAS 39, e. g. deferred tax liabilities (IAS 12),

and obligations arising from leases (IAS 17) or from pension plans (IAS 19). A common characteristic of these standards is the abandonment of fair value. It is thus obvious that the existing IFRS do not follow a strictly itemized company valuation. The reason remains unclear. Certain rules (the accounting for specific financial liabilities) result in goodwill being recognized, other rules (the accounting for liabilities not covered by IAS 39 or IFRS 3) are not even based on a market-based evaluation of current exit prices. Yet it seems like most of the recently issued IFRS are now following a 'hidden agenda', namely a static and wealth oriented accounting approach. The proposals on revenue recognition as well as the exposure draft on accounting for non-financial liabilities (ED IAS 37) are for the most part conformable with that approach and so is the new IASB Draft Conceptual Framework.

Under a conceptual model, a broad scope for the fair value principle for equity and debt would have to result in the mandatory recognition of internally generated goodwill. Taking the economic point of view into account, it remains unclear how a large number of individually valued components can add up to a value approximating the entity's economic wealth: significant outflows (not involving external parties) are not recognized either directly in the measurement of investments (assets) or indirectly in the measurement of liabilities. Recognizing the significant wealth components only reflected in an internally generated goodwill cannot be a solution as it is not reliably measurable. Instead, it provides opportunities for manipulation. A comprehensive application of a fair value concept for debt and equity is thus not reliable.

As a result, significant limitations of a fair value accounting for equity and debt could be identified both under existing IFRS and under a conceptual model: The itemized view on an entity's equity and debt does not qualify as a relevant approximation of an entity's net wealth. This result implies at least some questions about the justification of a fair value accounting for assets.

# Chapter 3

## Fair Value Accounting of Financial Instruments and Risk Perception by Investors: Experimental Evidence<sup>1</sup>

### 3.1 Problem

This chapter examines accounting information on financial instruments presented in accordance with IFRS 7 and IAS 39. As accounting for financial instruments under IFRS leaves management with a substantial degree of discretion in the choice of a reporting format and most managers choose to report the instruments by measurement categories, we seek to identify biases in investors' risk perception that are caused by this discretion. In this context bias means that a specific economic underlying such as a cash flow is perceived to be of different risks if presented in different ways. On the one hand, this chapter is motivated by analytical research on financial statement presentation, which models the effect of the presentation format on risk perception as if investors were either not fully rational (Hirshleifer and Teoh (2003)) or only asymmetrically informed (Dye and Sridhar (2004)), as well as by archival research measuring differences in the effects

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<sup>1</sup> I thank Hermann Jahnke (University of Bielefeld) and Stefan Wielenberg (Leibniz University of Hannover) for the opportunity to conduct the experiments in their graduate accounting courses. Financial support from the DFG Deutsche Forschungsgemeinschaft (German National Science Foundation), the J.P. Stiegler Foundation (Mannheim), the German Academic Association for Business Research (VHB), and the Schmalenbach Society (Cologne) is gratefully acknowledged. I am also grateful for the helpful comments of Christopher Koch, Anette Mikes, Eddie Riedl, Bill Simpson, and seminar participants at the University of Mannheim, the ESSEC Business School, the National Research Center on Concepts of Rationality, Decision Making and Economic Modeling (SFB 504), the 2007 ARA Workshop in Bielefeld, the 2007 and 2008 EAA Annual Congresses in Lisbon and Rotterdam, the 2008 AAA Annual Congress in Anaheim, the 2008 Workshop on Accounting in Europe in Lund, and the 2008 VHB Annual Congress in Berlin. I wish to thank Anne Hannusch and Matthias Nicolmann for their excellent research assistance.

of informationally equivalent forms of disclosure (e.g., Riedl and Srinivasan (2007) and Aboody (1996), see Koonce and Mercer (2005) for an overview). On the other hand, this chapter is motivated by behavioural research on the effects of accounting information on investors' judgments and decisions (e.g., Elliott (2006), Koonce et al. (2005a), and Hopkins (1996), see Kachelmeier and King (2002) for an overview). The chapter shares the use of the experimental method with this latter stream of literature.

A common characteristic of previous literature that dealt with presentation of financial instruments is that it analyses reporting formats that are either not allowed or not applied under IFRS. Weber et al. (2005) find that presentation of financial investments by asset names causes familiarity effects, which bias investors' expected risk assessment. Koonce et al. (2005b) analyse the risk perception of different financial items presented by product types. Their findings suggest that product-specific labels affect risk perception and that the presentation of a specific cash flow as a financial derivative increases the risk investors associate with that cash flow. Product-specific presentation is, however, a reporting format that is not widely applied in Europe. A majority of European banks (51%) rather uses the measurement categories provided by IAS 39 as line items on the balance sheet. In extension of Koonce et al. (2005b), the chapter therefore tests the effect of actual reporting practice on risk perception so that we are able to apply those prior findings to a setting which is close to European accounting practice. We construct a theoretical framework that explains how measurement bases affect risk perception in a way similar to product labels. The chapter is also related to Hirst et al. (2004) since it also analyses the effect of the presentation of the fair value category on risk judgment. Unlike Hirst et al. (2004), however, this chapter refers to the effects of fair value measurement via the presentation format of the financial statement instead of its effects via the income statement.

The first main result of this chapter is that investors infer a different level of risk from financial reports of economically identical investments in financial instruments if different measurement categories are applied and presented. In particular, a company's use of the fair value option (FV) or of the loans & receivables (L&R) category is perceived to be of the highest risk. The presentation of a financial derivative in the held-for-trading (HFT) category also increases perceived risk. This latter effect, however, is partly offset by the off-balance-sheet approach in accounting for certain derivatives and more specifically by the corresponding improvement in the debt-to-equity ratio. When investors receive

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footnotes along with the balance sheets and learn about the actual financial instruments contained in the reported category, they significantly change their risk assessment. A regression analysis reveals that the direction and the extent of this change are associated with behavioural variables describing the familiarity with investment decisions or the ease with which negative or positive outcomes of particular investments are recalled.

Behavioural explanations for individual risk assessment of measurement categories are the second main result of the study. We find that cognitive availability of information about the recent subprime crisis increases the perceived risk through the use of the L&R category and that availability of information about catastrophic derivative losses increases the perceived risk through the use of the trading category, even though in both cases no investor has any information on the financial product actually accounted for in the respective category. This result suggests that investors, in the absence of footnotes, intuitively infer the type of financial products contained in the reported measurement categories and that they base their risk assessment on this inference. The availability effect identified in previous literature on product-specific risk assessment therefore also indirectly explains biases in the risk perception of those two measurement categories. Risk assessment of the fair value option is, however, not affected by the availability of product-specific information. This finding suggests that natural cognitive availability of negative information on fair value measurement directly causes a bias in the risk perception of the use of the fair value option.

We contribute to the literature about behavioural aspects of accounting in several ways. Firstly, we are able to construct a framework based on behavioural theory that explains how the presentation of measurement categories can result in a biased risk perception in a way that is similar to the presentation of product-specific information. Secondly, we find potentially negative effects of actual European accounting practice on risk perception in an experimental setting. More specifically, our findings suggest on the one hand a general upward bias in investors' risk perception of assets measured at fair value. On the other hand they suggest an upward bias in risk judgment of the L&R category if information on the recent subprime crisis is cognitively available.

The results are of academic as well as practical importance. In the case of IAS 39 and IFRS 7, there is an ongoing and controversial debate on the standard (Armstrong et al. (2007) and Spooner (2007)). Accounting for financial instruments is one of the IASB's



core projects that will result in at least one more major revision of the accounting principles (International Accounting Standards Board (2008) and International Accounting Standards Board (2006c)). Experimental findings on the effect of the disclosure format as prescribed by the extant standard on investor's risk perception are therefore of the utmost importance to the improvement of the standard. Since the standard allows the use of accounting procedures that result in ambiguous or misleading information, it is not apt to achieve the theoretical objective of financial reporting because reporting such information is at least contradictory to the IASB's main objectives of comparability and decision-usefulness (IFRS F.12). Generally speaking, the identification of such shortcomings is the first step in improving the information content of financial reports. Furthermore it is a call for standard-setting activity to prohibit the European practice of presenting financial instruments by measurement categories. Besides, both inherently ambiguous and deliberately managed information might induce wrong investment or divestment decisions by individuals and thereby affect market prices wrongfully. Our research therefore also contributes to the understanding of the individual reception of accounting information.

The remainder of the paper is organized in four more sections. In Section 2 we develop our theoretical approach with respect to extant literature on behavioural research in accounting and derive hypotheses from it concerning the effect that measurement categories of financial instruments have on the risk perceived by investors and concerning the factors that drive these risk judgments. Section 3 presents the design of the study and the procedures we applied and in section 4, we present and discuss our results. Conclusions and implications of this chapter are laid out in section 5.

## **3.2 Theoretical Framework and Hypotheses Development**

### **3.2.1 Choices in the Presentation of Financial Instruments under IFRS**

Virtually all balance sheet items of any bank's financial statement set up in accordance with IFRS are affected by the accounting principles underlying IAS 39 and so is a substantial proportion of any industrial company's line items. Thus hardly any other single

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accounting standard has a comparable impact on the way a financial statement is presented to investors. It is widely accepted that IAS 39 provides management with a substantial variety of accounting and reporting choices (Gebhardt et al. (2004); Walton (2004)). One of these is the choice of the classification that is used to present financial instruments on the face of the balance sheet.

In the case of financial institutions such as banks, three general possibilities for presenting financial instruments in a financial statement can be identified. The first possibility, though not widely applied in IFRS financial statements of European banks, is a presentation by investment purpose that distinguishes, e.g., between a hedging and a trading instrument or between a long-term and a short-term investment. The second possibility is a presentation by type that distinguishes, for example, between stocks, bonds, and derivatives. This presentation format was advocated by the Joint Working Group of Standard Setters which aimed particularly at a distinction between derivative and non-derivative instruments. It later recommended the application of this format in the draft standard on accounting for financial instruments (Joint Working Group of Standard Setters, 1999, BC 5.1-5.5). The detail of information about derivatives usage provided by banks indeed seems to have improved in the 1990s – at least in the US (Edwards and Eller (1996, 1995)). There is some convincing evidence that a distinction of financial instruments exclusively by their type will result in a biased risk perception by investors (Koonce et al. (2008, 2005a,b)). This may be one reason why less than one-fourth of European banks apply this format in their IFRS financial statements (see also Chapter 4 of this dissertation) and why disclosure of derivatives usage by banks is still considered to be incomplete (Woods and Marginson (2004)).

The third possible format, used by a majority of European banks, is a presentation by measurement category. IFRS 7 allows a bank to use those measurement categories as line items on the financial statement so that the choice of an instrument's measurement base does not only affect the company's income but also presentation and disclosure. As the choice of a measurement base for non-derivative financial instruments is also left to the management's discretion even virtually identical companies, holding financial instruments of identical economic characteristics, could present financial statements that differ both in the measurement and in the labels of the individual line items. In the financial industry, economic identity can be established by exploiting the replicability characteristic of non-contingent financial derivatives such as interest-rate swaps or forwards. A

company engaged in a derivative financial contract is obliged to categorise this contract as a trading instrument and to measure it at fair value through profit or loss even if it was actually acquired for hedging purposes (IAS 39.9). In order to circumvent this obligation, a company might enter into non-derivative lending and borrowing contracts that exactly replicate the future cash flows of the non-contingent derivative.<sup>2</sup> If a company opts for the use of non-derivative contracts, there is an accounting choice between three different measurement categories. A company can apply the fair value option, it can use the available for sale category (AFS) or it can classify the instruments as loans and receivables.

If the presentation by measurement categories in accordance with IFRS 7 is applied, this setting results in two major differences between the financial statements of economically identical companies. The first difference is the label of the balance sheet item presenting the financial contract. The second difference results from the accounting principle that the notional amount of the derivative is not recognised on the balance sheet since the company has to make only a relatively low (net) upfront payment whereas the lending and borrowing contracts are fully recognised on the balance sheet. This accounting principle is also known as the off-balance-sheet approach in accounting for financial derivatives. A real-world analogon to this setting is the asset & liability management of a commercial bank that is exposed to the risk of changing interest rates on the money market. The economic and accounting choices of such a bank, which we later exploit for our experimental manipulations, are summarised in Figure 3.1.

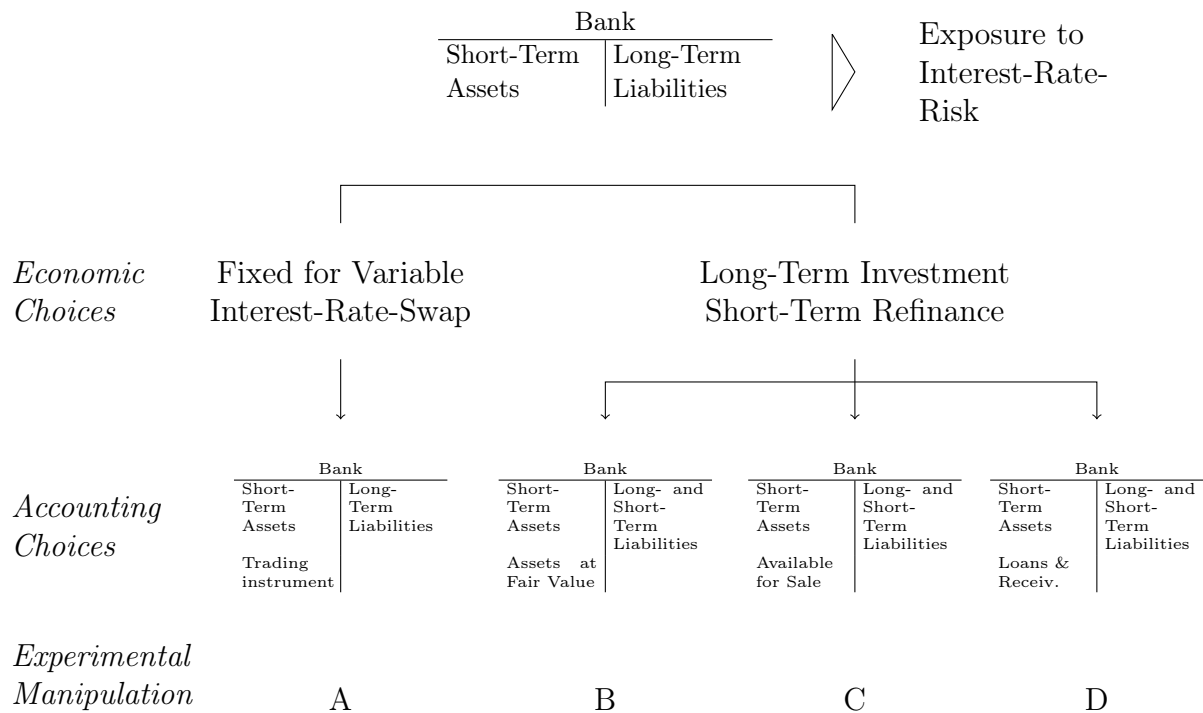
### **3.2.2 Biases in the Risk Perception of Financial Instruments Based on the Balance Sheet**

The disclosure choices identified above would not cause any harm if investors were able to recognise the economic identity of different companies. We do, however, seriously doubt such an assumption and we attempt to falsify it in our experimental analysis. Prior research shows that variation in presentation format and description of financial contracts affect investors' risk judgments by accentuating certain economic characteristics of the reported items. Therefore financial reporting principles have the potential to result in a

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<sup>2</sup> In fact, the economic risk is not exactly identical for the two different positions as the counterparty risk is somewhat lower for a non-contingent derivative than for a lending contract, see Hull (2006); Minton (1997). We do however neglect this finding in the due course of our analysis.

FIGURE 3.1: ECONOMIC AND ACCOUNTING CHOICES



biased risk perception of investors if they do not assure that economically like situations are reported alike (Gramlich et al. (2006); Koonce et al. (2005a); Hodder et al. (2001); Kennedy et al. (1998); Hopkins (1996)). Our analysis refers to a framework of risk perception which is based on behavioural theory and that explains a bias that is caused by the disclosure of measurement categories under IAS 39. Thereby, a bias is defined as a difference in the perceived risk of economically alike companies which only differ in the accounting and disclosure procedures applied.

In our framework, we expect investors to use two heuristics when judging the risk of a company that presents financial instruments by measurement categories. The two heuristics are representativeness and availability. Both heuristics are necessary for explaining risk assessment and potential biases. We expect representativeness to be used when investors translate measurement categories into types of financial instruments and availability to be used when investors judge the risk of these financial instruments. In prior research, availability is found to be employed when an individual evaluates the probability of a certain event by the instances of this event or by outcomes associated with this event that come to mind (Tversky and Kahneman (1973)). Observation of the application of this heuristic is complicated by the fact that individuals tend to rely on their subjective

recall experience only they are sufficiently assertive of their knowledge, i.e. when these instances and associations are recalled easily (Schwarz and Vaughn (2002)). Ease of recall is also more likely to be used as a heuristic if the judgment task is of relatively low personal relevance to an individual (Grayson and Schwarz (1999)).

Our reference to the availability heuristic is motivated by prior accounting research suggesting that the perceived risk of financial instruments does not necessarily correspond to their economic risk alone but also to the labels attached to them. Koonce et al. (2005a) for example show that a portfolio of financial instruments containing a swap is perceived to be riskier than a portfolio without a swap which generates exactly the same cash flows if it is explicitly stated that the first portfolio does contain a swap and that the latter does not. This effect is mitigated when cash flow and fair value exposures are made available. If, however, the swap in the first portfolio is described as being used as a hedge, the perceived risk significantly decreases as compared to an identical swap portfolio without this additional label. This effect is not mitigated after revealing economic exposure. Labels of financial instruments therefore affect perceived risk significantly by making different associations cognitively available.<sup>3</sup> The rather general association of derivatives usage with high risk is said to be due to investors' cognitive availability of substantial losses in derivative transactions as a result of broad and negative media coverage (Koonce et al. (2005a)) and it finds further support in Chalmers and Godfrey (2004), Bodnar and Gebhardt (1999), and Vietze (1997). Still today the use of derivatives in speculative trading strategies is a regular topic of investment magazines. A recent example are the loss announcements by Fannie Mae, a US mortgage bank, that were broadly covered in the news. With respect to the balance sheet classification of hybrid financial instruments, Hopkins (1996) obtains the similar result that a labelling effect exists in the individual perception of financial information.<sup>4</sup>

Besides a replication of those results within the institutional setting of IAS 39, our contribution to this stream of accounting literature is an analysis of the effect of the recent international subprime crisis on the risk associated with consumer loans. Mortgage loans to private consumers are widely regarded as having triggered the international bank

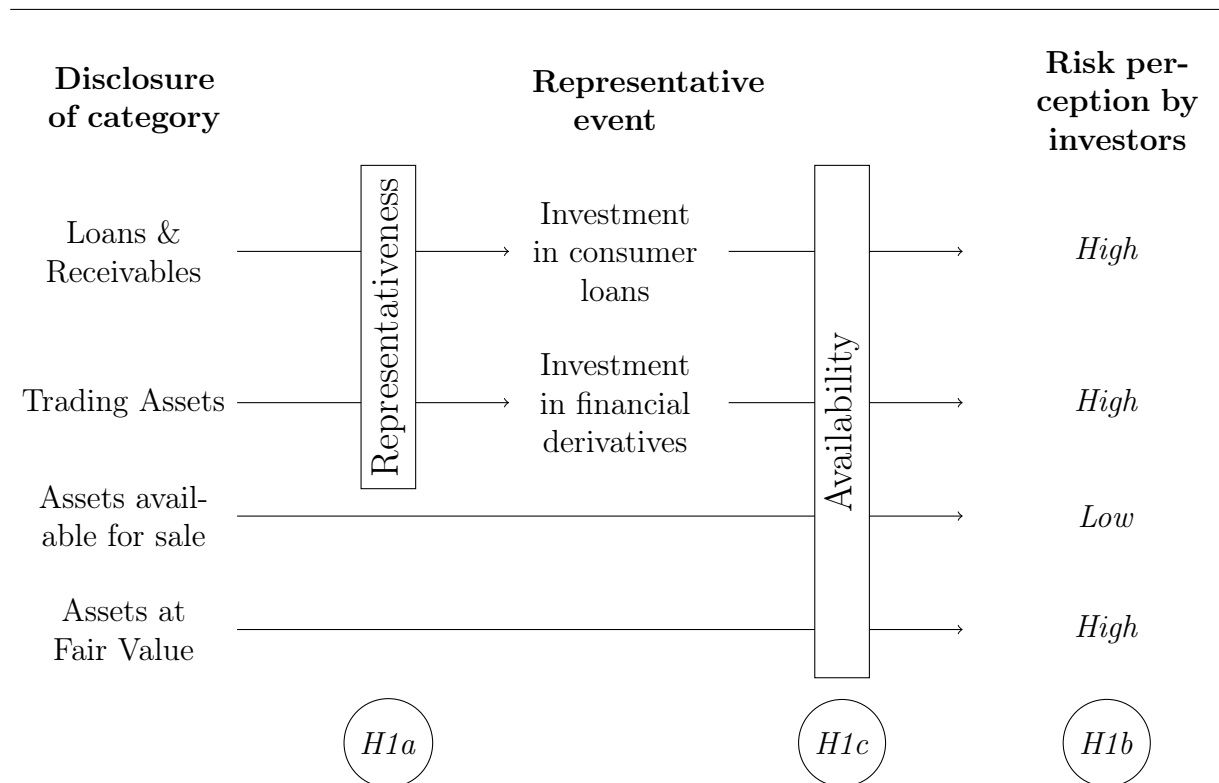
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<sup>3</sup> Koonce et al. (2005a) argue that the label "hedge" emphasises the qualification of swaps as a means of insurance against risk.

<sup>4</sup> Albeit without reference to behavioural explanations, Gramlich et al. (2006) show that balance sheet classification, in their natural setting the choice between "short-term" and "long-term" debt, is used by market participants to infer underlying economic characteristics of the reporting firms.

crisis in 2007 (Greenlaw et al. (2008) and Ryan (2008)). We argue that the extensive negative media coverage on the banks investing in this kind of contracts will result in the same effect which the negative media coverage of miscarried investments in derivatives had on the risk associated with financial derivatives. Cosequently we expect investors to associate a higher risk with investments labelled as consumer loans or derivatives than with other investments because both derivatives and consumer loans, due to extensive media coverage, are likely to be associated with negative outcomes (Figure 3.2). Whether individuals thereby rely on ease of recall or on content of recall, as it is distinguished in psychological theory (Schwarz and Vaughn (2002)), will not affect their judgments in this case since both the ease of recall and the content of recall are more likely to make the negative investment outcomes available than the positive ones.

FIGURE 3.2: DISCLOSURE AND RISK PERCEPTION



The link to the actual disclosure scheme under IFRS, however, is still missing. That link is established by the heuristic of representativeness. This heuristic was first identified by Tversky and Kahneman (1974) and later applied by numerous studies in the field of behavioural finance to model the behaviour of individual investors (see, e. g., Brav and Heaton (2002), Shleifer (2000), Barberis et al. (1998)). The concept refers to the

observation of investors basing their judgment of new information on its representativeness for certain events. If the given information is highly representative for an event, investors might overestimate the probability that this event occurred and, accordingly, underestimate the probability of other events which could produce the same information (Kahneman and Frederick (2002)). Applied to our setting, the concept predicts that, if a measurement category is regarded to be representative for an investment in a certain type of financial instruments, investors infer information about the company's risk exposure from the balance sheet disclosure of this category. Representativeness allows them do so even though they do not associate the category itself with a specific degree of risk.

In particular, we expect the HFT category to be representative for an investment in financial derivatives and the L&R category to be representative for an investment in consumer loans. An investor, for example, upon learning that some company reports trading assets (HFT) assigns a high probability to this company using financial derivatives. He does so even though financial derivatives will in fact regularly constitute only a fairly low proportion of assets categorised as HFT. The reasons why we expect a balance sheet category labeled as "Held for Trading" to be representative for a company's use of financial derivatives are at least twofold. Firstly, although the categorisation of financial instruments is mostly left to the management's discretion, this is not the case for derivatives. Instead all derivatives have to be categorised as trading assets without exception. All other financial assets can be assigned to this category by choice. Investors might, however, tend to neglect that normally the proportion of non-derivative assets a company has invested in exceeds the proportion of derivative assets by far.<sup>5</sup> Therefore investors will overestimate the probability of derivative assets although non-derivative assets are the most probable financial instruments found in the trading category. Secondly, from research in mental accounting individual investors are known to be well aware of specific instruments being used as speculative investments (Shefrin and Statman (2000)). Trading assets are regularly associated with speculative purposes (Young (1996)) and financial derivatives are probably the most prominent financial instrument used for speculative investments (Trombley (2003)). Investors might therefore easily neglect that the financial instruments most widely used for speculative investments are non-derivative in nature so that the overall probability of a company's engagement in derivatives is still relatively

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<sup>5</sup> In other terms, the base rate of non-derivative assets is substantially higher than that of derivative assets.

small if a trading asset is presented.

Likewise we expect the use of the L&R category to be representative for an investment in consumer loans. The label of the L&R category indicates that it is exclusively introduced for loan-like products. This is misleading for at least two reasons. Firstly, consumer loans can generally be classified in any category, i.e. as available for sale, as designated at fair value or as held to maturity.<sup>6</sup> As we argue below, however, we do not expect the available for sale and the fair value category to be representative for any particular financial instrument, because both are intentionally designed as to be applied to a wide range of different financial instruments. Secondly, financial products that are not loan-like can be classified in the L&R category as well. This is true at least for all interest-linked securities and trade receivables that are not traded on any active market. Investors will therefore be likely to neglect the probability of a company that does not present the L&R category to be engaged in consumer loans and, at the same time, to overestimate the probability of a company that does present the L&R category to have invested in consumer loans.

As it is summarised in the left section of Figure 3.2, we further hypothesise that representativeness is not used as a heuristic in the risk assessment of a company opting for the available for sale category or the fair value category. Neither one indicates a particular purpose or is subject to particular restrictions. The fair value option allows companies a broad application of this category for a wide range of different financial instruments, and the available for sale category is applied to those financial instruments which are not put into any other category. It is thus hardly possible to theoretically derive a specific kind of instrument that investors consider to be representative of either category. The fair value category, though, requires more careful attention. Fair value in general was discussed in the context of both the measurement of financial derivatives and the measurement of subprime loans. We can only more generally hypothesise that investors will associate the fair value category itself with certain events covered in the media so that risk assessment does not need to rely on the link via representativeness. Cognitive available current information on fair value measurement is very likely to be negative since over the last years the practice of fair value measurement has continuously

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<sup>6</sup> The held to maturity category is hardly used by financial institution and for reasons of materiality not considered in our analysis, see Nelson et al. (2008) for details.



been facing public criticism from different sides (Sunder (2008); European Central Bank (2004)). Lacking such particular associations with the available for sale category we expect it to be perceived as comparatively low risk.

We are now able to summarise this framework under three hypotheses.

*H1a: Risk perception of economically identical companies varies with the measurement categories used to present financial instruments.*

*H1b: Measurement categories presented on the face of the balance sheet will be perceived to be representative for specific financial instruments. In particular, a category labeled as “Held for Trading” will be viewed as representative for financial derivatives and a category labeled as “Loans & Receivables” as representative for loans to private consumers.*

*H1c: The differences in the risk perception of the companies depend on the cognitive availability of negative events in conjunction with financial derivatives and consumer loans in particular and with fair value measurement in general.*

### **3.2.3 Biases in the Risk Perception of Financial Instruments Based on the Footnotes**

The perception of financial instruments that are presented in accordance with IAS 39 and IFRS 7 does not only rely on the line items on the face of the balance sheet but also on extensive explanation in the footnotes. Corresponding experimental evidence is provided for example by Dietrich et al. (2001) and Bloomfield and Libby (1996) who analyse the effect on market prices of easily accessible information (on the balance sheet) versus less easily accessible information (in the notes) about the same underlying situation. They find a correspondance between footnote information and market prices (albeit a weaker one than between balance sheet information and market prices). When financial instruments are presented by measurement categories, an effect of footnote disclosure might result from the heterogeneity among investors in the association of a balance sheet category with a type of financial instrument. In the absence of notes investors rely on representativeness in the judgment whether a category labeled as “Trading Assets” contains financial derivatives

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or whether the category labeled as “Loans & Receivables” contains consumer loans. This will very likely result in at least some degree of variability in the individual associations of financial instruments with balance sheet categories. Since hypotheses H1a-c suggest that the type of financial instrument which a particular category is viewed to be representative for causally explains the perception of a company’s risk (in lieu of the balance sheet category itself), there will be a corresponding degree of variability in perceived risk.

This indirect link between the availability of negative outcomes of investments in a type of financial instrument to the perceived risk of a measurement category turns into a direct link via the notes. In other words, we expect investors to adjust their individual associations of balance sheet categories with financial instruments upon studying the notes since the types of financial instruments are then directly at their disposal. In consequence, the perception of a company’s risk is likely to change if the instruments actually accounted for in the categories differ from those formerly believed to be in there. The risk perception of a company is now mainly driven by the types of financial instruments listed in the notes and thus directly by the availability of investment outcomes experienced or broadly covered in the media. It is therefore plausible that the risk perception resulting from the indirect link, i.e. from an individual and therefore imperfect association, will be altered when the link between a balance sheet category and the type of financial instrument is directly explained in the footnotes.

Among all investors some will be more prone to adjust their judgment than others. Therefore, we further strive to identify the explanatory factors of the individual adjustment decision. With respect to the risk perception of different types of financial instruments, the findings of Koonce et al. (2005a) and Koonce et al. (2005b) suggest that individual judgment is based on behavioural risk dimensions as identified by Slovic (1987). Those dimensions, *Unknown* and *Dread*, capture notions of familiarity with a risk and possible consequences of this risk, respectively (Hodder et al. (2001)). They translate into behavioural variables such as an investor’s prior knowledge about a risk or controllability, observability and immediacy of potentially catastrophic effects of a risk on one’s own welfare. As Slovic (1987) points out, these variables are regularly intuitively estimated and rely heavily on external factors such as media coverage, personal experience or distance, be it temporal or spatial, to certain events. According to that theory, differences in risk judgement might be caused by differences in personal experience in investment decisions. When analysing the risk perception we capture this factor that is innate to investors via

a personal questionnaire.

In summary, our second research question asks how further explanations of financial instruments in the footnotes alter the perception of a company's risk as opposed to a perception solely based on the balance sheet categories. In order to answer this question, we will test two hypotheses:

*H2a: The perception of the companies' risk alters when companies are not only judged on the basis of their balance sheet items but also on the basis of footnotes explaining which type of financial instrument is accounted for in each category.*

*H2b: This change in risk perception is associated with personal investment experience.*

### **3.3 Experimental Design**

The two experiments conducted to test the hypotheses differ in the manipulation of participants' availability of media coverage of particular financial instruments.

#### **3.3.1 Participants**

Participants were 302 (Experiment 1) and 129 (Experiment 2) graduate students in business. All students voluntarily participated in the experiment. We chose graduate students to proxy for non-professional investors. There is some evidence that this choice is a good proxy at least in experimental settings of relatively low complexity (Elliott et al. (2007), Kadous et al. (2006) and Harper et al. (1987)). This study is of low complexity as participants were asked to judge the risk of companies that only differed in very few line items or footnotes. The quality of the proxy particularly relies on the facts that graduate business students have in general already completed a core curriculum of accounting and finance lectures and that they have some personal experience in capital market investments. We have controlled for these factors and found that all participants had indeed successfully completed at least one course in finance (on average 1.79 in Experiment 1 and 2.16 in Experiment 2) and at least two courses in financial accounting (on average 2.76 in Experiment 1 and 2.93 in Experiment 2). Only 37.97% (42.42%) of the participants however stated that they had some practical experience with financial market investments. The

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relatively low rate is due to the organisation of the graduate business studies in Germany which does not require professional experience or internships per se. This is taken into account when analysing the results at a later point. We conducted the study at three different public universities in order to exclude effects from the particular curriculum of any university and to consider students in different stages of their graduate studies. The necessity of observations from two different experiments is another reason why we considered the use of professional participants to be inappropriate and inefficient (Libby et al. (2002)).

### **3.3.2 Procedure**

#### **3.3.2.1 Experiment 1**

We were able to test H1a, H2a, and H2b in a joint experimental setting in which we used a 4×2 within-participants design. The first independent variable of interest is the balance sheet category under which a financial instrument can be presented. In accordance with IAS 39, we named these categories “Held for Trading”, “Measured at Fair Value through Profit and Loss”, “Available for Sale”, and “Loans & Receivables”. The second independent variable is the extent of the disclosure. It is varied between pure balance sheet disclosure and disclosure of balance sheets with accompanying footnotes. Only the latter option reveals the type of financial instruments accounted for in the reported measurement categories. As dependent variable, we use a measure of a company’s relative risk as perceived by the participants. More precisely, participants were asked to rank the companies according to their risk in descending order (with rank 1 indicating the highest and rank 4 indicating the lowest risk). The study consists of two parts and a final survey on personal characteristics. The three parts were conducted subsequently during a single session of about 25 minutes. In order to ensure the correct sequence we explained the procedure beforehand.

In the first stage of the experiment, each participant was provided with four balance sheets of seemingly different companies and was asked to order the companies with respect to their risk. In fact the four companies are economically identical just as shown in Figure 3.1 and only differ in the manipulation of the first independent variable (balance sheet category). Since ties were explicitly allowed in the ordering procedure, a participant

recognising the economic identity of the four companies could reflect this in his answer.

In the second stage of the experiment, each participant was provided with the same four balance sheets now supplemented by footnotes explaining the type of the financial instrument the company is engaged in as well as the measurement base chosen. Information about the intended use of these instruments within the company (such as hedging or speculation), however, was withheld. Participants were then again asked to order the companies with respect to their risk. The participants did not learn until the second stage that the one company presenting a better debt-to-equity ratio had entered into a derivative contract whereas the other three companies had not. The difference in labels used for the measurement categories on the face of the balance sheet persisted but, in addition, the measurement base (fair value or amortized cost) arising from a category's application under IAS 39 was disclosed.

We opted for a within-participants design for this setting because previous experiments on the evaluation of alternatives have shown that participants might find it difficult to make *absolute* risk judgements of financial instruments since risk is a *relative* measure and therefore difficult to evaluate independently (Koonce et al. (2005a) and Hsee (1996)). A relative risk judgement requires knowledge of several alternatives which can only be provided in a within-subjects design. The internal validity of the within-subjects design depends on how well the effect of external factors on the dependent variable is controlled. By counterbalancing the order of the four conditions in each stage using a Latin square design, we prevent effects based on presentation sequence in the experiment. We did conduct all experiments without previous notice at the beginning of class to ensure high concentration and task focus.

### **3.3.2.2 Experiment 2**

Since participants' natural availability of associations with certain financial instruments, which hypotheses H1b and H1c refer to, cannot be directly observed, a slightly different experimental design was necessary for the second stage of research. Using the same experimental setting and the same task of ranking companies according to their risk, we now manipulated the availability of negative associations with either derivatives or consumer loans in a between-participants design so that overall a  $4 \times 2 \times 2$  design results. We did so by providing the students with excerpts from popular press articles by Warren

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Buffett in the *Fortune* magazine and by Larry Summers in the *Financial Times*. The Buffett article dramatises the dangers and risks for the capital market resulting from derivatives usage in general and hedge funds in particular. We expected this article to enhance the availability of negative associations with derivatives. The Summers article concerns the recent subprime crisis in the US and predicts additional write-offs of housing loans as well as a spread of the crisis to other credit segments. We expected this article to enhance the availability of negative associations with loans. In order to ensure that our manipulations worked we asked participants to answer four questions regarding the content of the respective article received.

## 3.4 Results

### 3.4.1 Risk Perception of Financial Instruments with and without Footnotes (H1a and H2a)

In the first situation where availability is not manipulated and participants judge the risk of the four companies solely based on information from the balance sheets, the results indicate that a presentation by measurement categories does not reveal the economic identity of the four companies but rather causes a bias in individual risk perception. As shown in Table 3.1, Company B, using the fair value category (with a mean of 2.26), and Company D, using the loans category (2.19), are perceived to be of the highest risk. Company C, using the available-for-sale category (2.59), is perceived to be of average risk. Company A, which presents the trading category and which has, due to the off-balance-sheet approach in accounting for financial derivatives, the best debt-to-equity ratio, turns out to cause the lowest risk perception (2.96). All differences except for the one between Companies B and D are significant at the 1% level in a Wilcoxon signed-rank test (Table 3.2, Panel A). We therefore clearly fail to reject hypothesis (H1a) that differently labeled measurement categories are perceived to be of different risk.

The spread between the minimum and the maximum mean decreases in the second situation from .77 to .37 after participants are exposed to the additional disclosure in the footnotes. The order of the ranks, however, remains unchanged (Table 3.1, Panel A). An analysis of variance (ANOVA) indicates that the differences between the mean

TABLE 3.1: JUDGMENT BY MEASUREMENT CATEGORY AND FOOTNOTE DISCLOSURE

Panel A. Descriptive statistics - Mean Rank (Standard Deviation)					
Accounting treatment		Without notes	With notes		Difference (p-Value)
A Held for trading (n=284)		2.96 (1.27)	2.64 (1.32)		< .0001
B Fair value through P&L (n=284)		2.26 (.88)	2.49 (.89)		< .0001
C Available for sale (n=284)		2.59 (.87)	2.6 (.88)		ns
D Loans & Receivables (n=284)		2.19 (1.02)	2.27 (1.07)		ns

Panel B. ANOVA (Interaction)					
Source	df	Sum of squares	Mean square	F-statistic	p-Value
Measurement category	3	109.9	36.63	33.99	< .001
Measurement category $\times$ notes	4	24.16	6.04	5.6	< .001
Error	2331	2512.31	1.08		
Total	2338	2647.75	1.13		

Table 3.1 shows the results of Experiment 1 which investigates how participants rank investment alternatives that differ only in the disclosure of financial instruments (Rank 1  $\hat{=}$  highest risk). Panel A shows summary statistics by category and exposure to additional information in the form of notes plus the results of Wilcoxon signed-rank tests on changes in the distribution of ranks by exposure to the notes. Panel B shows the interaction of measurement category and exposure to the notes. ‘df’ indicates the degrees of freedom, ‘ns’ indicates non-significant results.

ranks are highly significant in both situations ( $p < .001$ ). Since the sum of the ranks assigned to the companies is constant across participants, we are dealing with ipsative data and cannot account for within-subjects variation. Even though we need to interpret those results conservatively (Steenkamp et al. (2001)), we can conclude that the disclosure choices left to management’s discretion by IAS 39 and IFRS 7 do not allow investors to unambiguously recognise economically identical risks if companies apply different disclosure options. Additional disclosure can reduce this bias but it does not disappear. As shown in Table 3.1, Panel B, exposure to the footnotes, i.e. to additional information indicating the type of financial instrument, has an effect on the relative risk assessment of the companies that interacts with the effect of the measurement categories ( $p < .001$ ). Again due to the analysis of ipsative data where the sum of the ranks assigned to the companies does not vary between the situation before and the situation after additional

disclosure, an individual effect of exposure to footnotes cannot be identified.

TABLE 3.2: JUDGMENT BEFORE FOOTNOTE DISCLOSURE

Panel A. Contrasts before footnotes					
Comparison	t-Statistic			p-value	
FV vs. HFT	-8.37			.0000	
AFS vs. HFT	-4.50			.0000	
L&R vs. HFT	-9.30			.0000	
AFS vs. FV	3.88			.0007	
L&R vs. FV	-0.92			ns	
L&R vs. AFS	-4.80			.0000	

Panel B. ANOVA (Measurement category before footnotes)					
Source	df	Sum of squares	Mean square	F-statistic	p-Value
Measurement category	3	112.57	37.52	26.96	< .001
Error	1184	1235.93	1.39		
Total	1187	1348.5	1.14		

Table 3.2 shows the results of our experiment which investigated how participants ranked investment alternatives which differed in reporting treatment of financial instruments (Rank 1  $\hat{=}$  highest risk). Panel A shows the results of multiple comparisons of means (Linear Tukey contrasts) in an ANOVA. Panel B shows the results of an ANOVA on the observed ranks before exposure to the notes. ‘df’ indicates the degrees of freedom, ‘ns’ indicates non-significant results.

Besides this overall analysis, it is insightful to compare the effect of additional disclosure on the perception of the different measurement categories individually. Table 3.1 gives test statistics for this finding in Panel A. In particular, we test for a change in the mean ranks of companies after participants were exposed to the footnote indicating that Company A is party to a derivative contract whereas the other three companies are not. We find these individual differences to be significant for the trading category and for the fair value category ( $p < 0.001$  for both). With notes, participants rank Company A significantly lower, i.e. as being of higher risk, and Company B significantly higher, i.e. as being of lower risk, than without the notes. We therefore also fail to reject hypothesis (H2a) that footnotes have an effect on the risk perception of financial instruments. Given that the notes for Company A only state that the category “Held for trading” does contain derivatives and that the notes for Company B merely state that the fair value category does contain securities measured at fair value, the shift in relative risk could have been caused by either the realisation that Company A unexpectedly has derivatives in its



portfolio or by the realisation that Company B unexpectedly has not. Either way, the shift suggests that the label “derivative” triggers an increase in risk perception. This switching behaviour will be subject to a more detailed analysis in section 4.3.

Our hypotheses are however not only directed towards the perception of derivatives but also towards consumer loans. In this respect, the relative risk-ranking of Company D where the lending contracts replicating the financial derivative are presented as “Loans and Receivables” is of interest. Financial instruments in this category are measured at cost and thus cause little volatility. Participants, however, perceive Company D as the most risky investment opportunity notwithstanding the exposure to footnotes. While exposure to the notes eliminates significant differences between the other companies’ rankings (Table 3.3, Panel A), Company D remains to be ranked significantly lower, i.e. as being of higher risk, than all other companies. One potential explanation is again an availability effect, i.e. that the current crisis in the worldwide credit market and the ensuing negative media coverage has sensitised participants for counterparty risk associated with consumer loans. Due to its recentness, this effect has not been observed in prior research. Verification of this interpretation is left to Experiment 2.

### **3.4.2 Behavioural Explanations for the Risk Assessment of Financial Instruments (H1b and H1c)**

In the analysis of experiment 2, we can concentrate on the differences that are caused by the availability manipulations. In order to ensure that the manipulations work, we only include observations of participants who answered at least three of the four control questions correctly and thereby eliminate 20 observations. With respect to hypothesis (H1c), Table 3.4 reveals that availability of associations with derivatives and with consumer loans alters the risk participants assign to the individual companies when compared with the risk assigned in experiment 1 in which availability is not manipulated. We therefore fail to reject hypothesis (H1c). Specifically, this effect occurs for companies that present trading assets or the L&R category. Since the information by which associations are made available is product-specific and the alteration varies with the type of product-specific information, there seems to be some link between availability of product-specific associations and risk perception of measurement categories. In the development of hypothesis (H1b), we have argued that this link can be established via the representativeness heuristic. The further

TABLE 3.3: JUDGMENT AFTER FOOTNOTE DISCLOSURE

Panel A. Contrasts after footnotes					
Comparison		t-Statistic			p-value
FV vs. HFT		-1.72			ns
AFS vs. HFT		-0.45			ns
L&R vs. HFT		-4.13			<.001
AFS vs. FV		1.27			ns
L&R vs. FV		-2.41			.0757
L&R vs. AFS		-3.67			.0014

Panel B. ANOVA (Measurement category after footnotes)					
Source	df	Sum of squares	Mean square	F-statistic	p-Value
Measurement category	3	22.87	7.62	6.85	< .001
Error	1147	1276.38	1.11		
Total	1150	1299.25	1.13		

Table 3.3 shows the results of our experiment which investigated how participants ranked investment alternatives which differed in reporting treatment of financial instruments (Rank 1  $\hat{=}$  highest risk). Panel A shows the results of multiple comparisons of means (Linear Tukey contrasts) in an ANOVA. Panel B shows the results of an ANOVA on the observed ranks after exposure to the notes. ‘df’ indicates the degrees of freedom, ‘ns’ indicates non-significant results.

results of experiment 2 allow us to test (H1b) to some degree.

### 3.4.2.1 Trading Assets

Participants being confronted with the Buffett article on the potential threats of usage of derivatives and the concrete example of the LTCM breakdown do perceive the L&R category as significantly less risky than participants who are not manipulated accordingly (2.48 vs. 2.19,  $p < .05$ ). Awareness of the risks from loans seems here to be suppressed by the ease of recalling the risks from derivatives. Since risk assessment in the experiment is in relative terms, this is tantamount to a relatively higher risk perception of the trading category. This observation suggests on the one hand that the use of the L&R category is not viewed to be representative for engagement in financial derivatives. On the other hand the finding is in conformity with our hypothesis (H1b) that it is the trading category that is viewed to be representative for derivatives usage.

Those findings also shed some light on the puzzlingly low risk perception of trading

TABLE 3.4: AVAILABILITY EFFECTS

Panel A. Relative Risk Judgment before Exposure to Footnotes			
Accounting treatment	Buffett (n=45)	Summers (n=64)	Difference (p-Value)
Held for trading	2.82 (1.29)	3.19* (1.17)	.0631
Fair value through P&L	2.26 (1.01)	2.19 (.92)	ns
Available for sale	2.44 (.92)	2.44 (1.01)	ns
Loans & Receivables	2.48** (.88)	2.18 (.91)	.0448

Panel B. Relative Risk Judgment after Exposure to Footnotes			
Accounting treatment	Buffett (n=45)	Summers (n=64)	Difference (p-Value)
Held for trading	2.13*** (1.31)	2.76 (1.21)	.0067
Fair value through P&L	2.54 (.86)	2.44 (.99)	ns
Available for sale	2.66 (.73)	2.55 (.97)	ns
Loans & Receivables	2.67** (1.08)	2.43 (1.11)	.0288

Table 3.4 shows the results of Experiment 2 which investigates how participants rank investment alternatives that only differ in disclosure of financial instruments (Rank 1  $\hat{=}$  highest risk) by manipulating the availability of certain events involving corporate engagement in financial instruments. In the ‘Buffett’ situation, participants are confronted with a press article pointing to the potential threats of derivatives usage. In the ‘Summers’ situation, participants are confronted with a press article pointing to the counterparty risk of consumer loans as observed during the latest subprime crisis. Panel A shows summary statistics for both situation before exposure to footnotes. Means are reported with standard deviations in parentheses. Panel B shows summary statistics for both situations after exposure to footnotes. All differences are calculated in one-sided t-tests assuming unequal variances. ‘ns’ indicates non-significant results. \*\*\*, \*\*, and \* indicate a significant difference from the corresponding rank observed in Experiment 1 as summarized in Panel A of Table 1 at the 1%, 5%, and 10% level respectively.

assets in Experiment 1 when availability is not manipulated. Tables 3.2 and 3.3 show that the mean rank of Company A is higher than the average ranks of all other alternatives before additional disclosure ( $p < .01$ ) and that it is still higher than the mean rank of the loans category after additional disclosure ( $p < .01$ ). >From the experimental setting, we can identify two possible explanations since the balance sheet of the four companies vary both in the measurement category used in labeling the financial instruments and (in the specific case of Company A) in face value. Initially, the low risk ranking of Company A observed in Experiment 1 can be attributable to either factor.

The results of Experiment 2 now show that participants, when being easily aware of Buffett's warnings on the use of derivatives, rank this category as the riskiest one after the exposure to footnotes revealed the company's engagement in derivatives (Table 3.4, Panel B). This finding suggests that the observation from Experiment 1 cannot be due to the labeling effect, i.e. to a low risk that investors might associate with derivatives usage and thereby with the trading category the use of which is viewed to be representative for an investment in derivatives. If the labeling effect fails as explanation, only the difference in face value between Company A and the other companies remains as a causal factor. The difference in face value results from the off-balance-sheet approach in accounting for financial derivatives and it finds its expression both in a lower debt-to-equity ratio and in a lower ratio of financial assets to total assets of Company A.<sup>7</sup> If we accept that the counterparty risk of derivatives is indeed lower than the one of non-derivative replications, participants' low risk perception of Company A in Experiment 1 is economically correct. We can thus conclude that negative effects arising from the representativeness of a company's use of the trading category for investments in financial derivatives are offset by the off-balance-sheet accounting of derivatives. This finding can then be regarded as a further justification of the general off-balance-sheet approach in accounting for derivatives.

#### 3.4.2.2 Loans & Receivables

Participants being confronted with the Summers article on the latest subprime crisis that was mainly triggered by investments in consumer loans do perceive the held for trading category containing the derivatives as significantly less risky than participants who are not manipulated accordingly (3.19 vs. 2.96,  $p < .10$ ). Awareness of the risks from derivatives seems here to be suppressed by the ease of recalling the risks from loans. Since risk assessment is again in relative terms, this is tantamount to a relatively higher risk perception of the L&R category. We can thus conclude that a company's use of the trading category is not viewed to be representative for investments in consumer loans whereas the L&R category is. This finding also conforms to our hypothesis (H1b).

Our hypothesis (H1b) is also supported by evidence from the cross-group analysis in the last column of Table 3.4, Panel A. The difference in the mean rank of the L&R category

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<sup>7</sup> The latter does only explain the relative ranking if participants perceive financial assets to be contributing more to a company's risk than other assets.

between the two manipulations is significant in the hypothesised direction and so is the difference in the mean rank of the trading category (albeit at a lower level of significance). It is striking that even after exposure to footnotes only these two categories are affected by the manipulations and that the same two differences remain significant (Table 3.4, Panel B). With respect to the L&R category, this is again in conformity with our hypothesis (H1b) which expects the use of the L&R category to be viewed as representative for an investment in consumer loans. Participants obviously neglect the probability of consumer loans being classified in another category and overestimate the probability that a company that presents the L&R category has invested in consumer loans.

### **3.4.2.3 Fair Value Category**

The interpretation of the findings on the fair value category is more complex since the ranking of Company B is not affected by the manipulations. In all cases, however, company B is perceived to be of relatively high risk. Participants obviously regard fair value measurement as a severe risk factor independent of the kind of financial instrument they are easily aware of. This suggests that fair value measurement is viewed to representative for at least not only financial derivatives. The category can indeed be widely used both for financial innovations and for traditional consumer loans. These findings are in conformity with our hypothesis (H1c) that fair value measurement in general is associated with certain negative events which, however, can not be exactly identified in this chapter. Generally speaking, we can only speculate that this is what investors have learned from the current debate on the economic causes of the subprime crisis which is centering right around fair value measurement (Greenlaw et al. (2008) and Ryan (2008)).

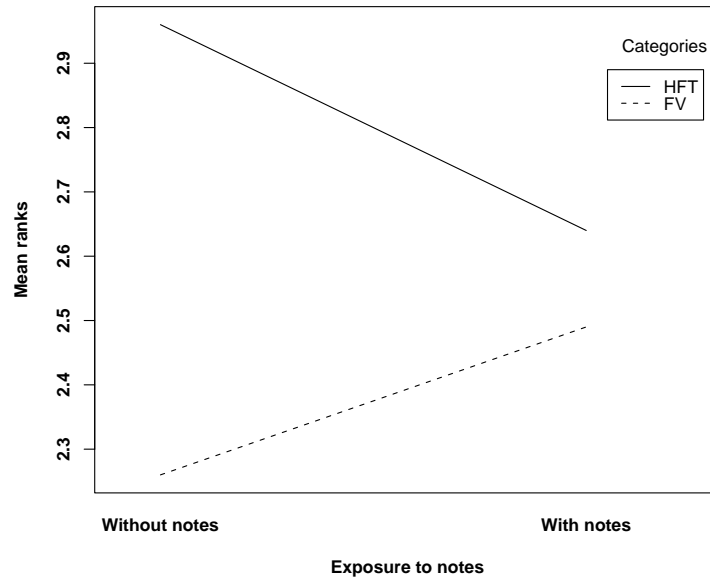
## **3.4.3 The Impact of Investor Characteristics on the Perception of Footnote Disclosure (H2b)**

### **3.4.3.1 Model**

Our findings in Experiment 1 suggest that the disclosure of derivatives usage has an impact on the risk perception of both company A and company B. Whereas company A (HFT) ranks significantly higher in relative risk after exposure to the information that a financial derivative is indeed classified in the trading category, company B (FV) ranks

significantly lower after exposure to the information that the company is not engaged in financial derivatives. These opposite effects are visualised in Figure 3.3.

FIGURE 3.3: INTERACTION OF MEASUREMENT AND FOOTNOTE DISCLOSURE

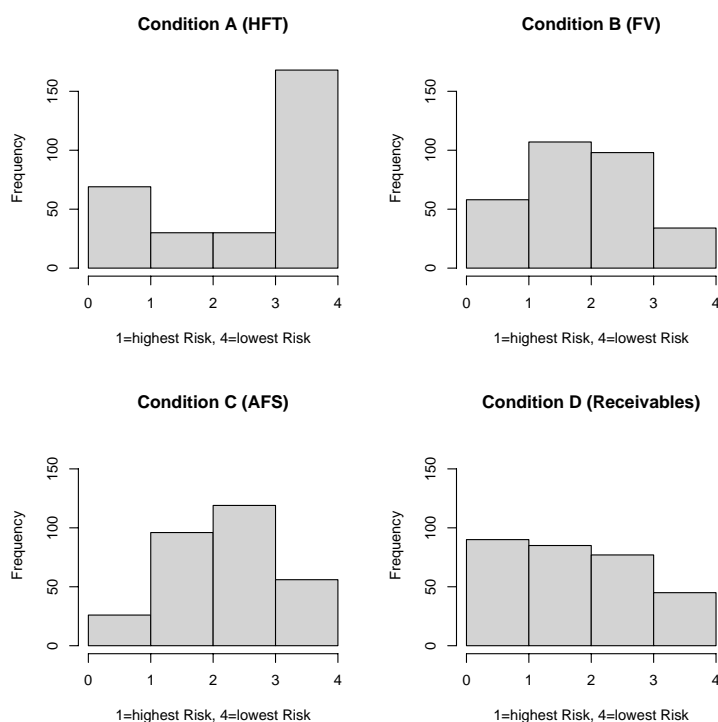


In the analysis of risk perception before exposure to footnotes, it is striking that the distribution of company A's ranks is U-shaped as shown in the first histogram of Figure 3.4. The company is thus considered to be of an extreme (i.e. either of the highest or of the lowest) risk by a vast majority of participants. This U-shape is due to the offsetting effect of the two factors manipulated in the experiment and identified in section 4.2: Company A's use of the trading category has a negative effect on participants' risk perception and off-balance-sheet accounting for the derivative has a positive effect. Rankings for company A remain U-shaped after participants are exposed to the footnote stating that company A has been using financial derivatives (Figure 3.5). The number of participants assigning an extreme rank is almost unchanged (235 before and 221 after footnote disclosure). A more thorough analysis however reveals that the number of participants ranking company A as the one of highest risk increases after exposure to footnotes whereas the number of participants ranking company A as the one of lowest risk decreases.<sup>8</sup>

As pointed out in section 2, some degree of heterogeneity in participants' association of

<sup>8</sup> In  $\chi^2$ -tests both before and after footnote disclosure, we are in fact able to reject the hypotheses that the ranks are uniformly distributed and that the two distributions are identical ( $p < .001$  for all tests).

FIGURE 3.4: RANKINGS BEFORE FOOTNOTE DISCLOSURE

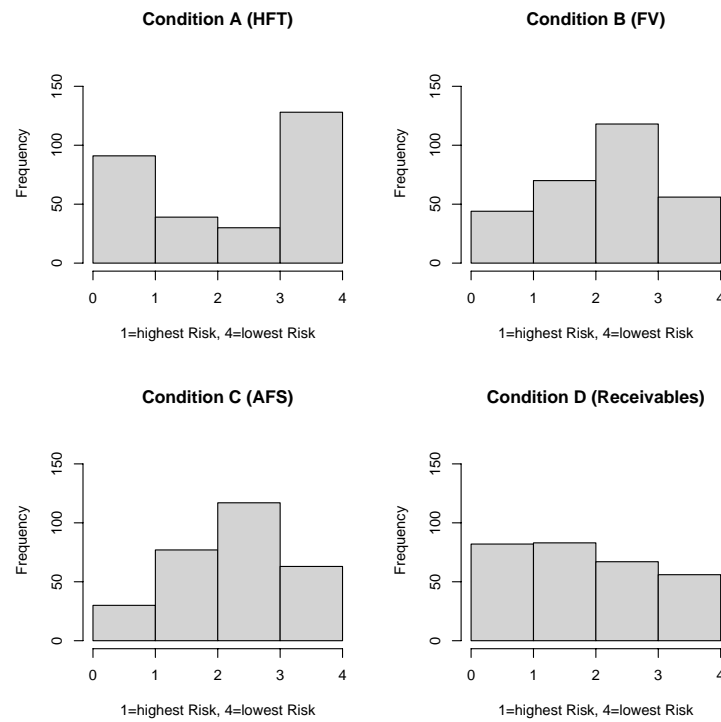


financial derivatives with the trading category will account for this adjustment of individual risk assessment. Those participants who initially have not viewed the trading category as representative for engagement in financial derivatives and have therefore associated a low risk with company A are likely to alter this judgement after unambiguously learning about the company's derivatives usage if they attach a greater weight to the general risk of financial derivatives than to the company's favorable debt-to-equity ratio. The substantial number of participants continuously ranking company A as the one of lowest risk results, as before, from the positive effects on the debt-to-equity ratio of off-balance-sheet accounting for the derivative, which causes participants to merely disregard the risk of derivatives.<sup>9</sup>

The weight that investors attach to these two offsetting factors is a function of their individual risk perception. The literature summarised in section 2 suggests that risk perception is explained by behavioural risk variables and is thus associated with natural characteristics of investors, in particular with personal investment experience. In order to examine these associations we capture the effect of an increasing risk perception for

<sup>9</sup> There will also be individual participants associating financial derivatives with some notions of insurance and thus deliberately assigning a high rank (i.e. a low risk) to company A.

FIGURE 3.5: RANKINGS AFTER FOOTNOTE DISCLOSURE



company A with a binary variable for those individuals that ranked company A as the company of lowest risk in the first stage. We will refer to this dependent variable as ASWITCH. It takes a value of 1 if the ranking of company A decreases by more than two ranks, i.e. the perceived risk increases considerably, and a value of 0 otherwise. In terms of the histograms shown in Figures 5 and 6, ASWITCH captures a switch from the very right to the very left bar for company A.

When assuming normality in the distribution of the error terms, the probability of a participant adjusting the risk assessment can then be described as

$$Pr(Y_i = 1|X_i) = \Phi(X_i'\beta)$$

for participants  $i = 1, 2, \dots, n$  where  $Y_i$  denotes individual  $i$ 's scores on ASWITCH and  $X_i$  denotes a vector of individual-level variables. In this vector, a participant's investment experience (EXPER) is the behavioural risk factor used as explanatory variable. In order to capture only the marginal effect of investment experience on risk judgement, we further include several control variables in the vector  $X$  which varies in scope and content between model I and model II.

To begin with, an adjustment of the risk assessment can be caused by a participant's



TABLE 3.5: DESCRIPTIVE STATISTICS FOR THE PROBIT MODELS

Variable	Mean	SD	Minimum	Maximum
ASWITCH	0.2601	0.4400	0	1
EXPER	0.3797	0.4862	0	1
DERNHFT	0.3311	0.4722	0	1
MEDIANEG	39.9385	40.6076	0	100
MEDIAREL	20.2025	38.4222	-100	100
CONFJUDG	23.5226	20.7310	0	100
TRUSTFR	45.7850	23.3233	0	100

Definition of the variables:

ASWITCH	1 if <i>Rank of Company A with notes</i> - <i>Rank of Company A without notes</i> $\geq 2$ ; 0 otherwise
EXPER	1 if participant has private or professional experience with investment decisions
DERNHFT	1 if participant associates any category other than “Held for Trading” with derivatives; 0 otherwise
MEDIANEG	ease with which participant can recall negative media coverage of derivatives (0 not at all; 100 very easy)
MEDIAREL	difference between ease to recall negative and ease to recall positive media coverage of derivatives
CONFJUDG	participant’s confidence in own risk judgment based on the information provided (0 not confident; 100 completely confident)
TRUSTFR	participant’s trust in financial reports as a tool to assess risk (0 not suitable; 100 completely suitable)

erroneous assumption, before exposure to footnotes, that another company than A is using financial derivatives. DERNHFT indicates whether a participant associated another category than “Held for Trading” with the use of derivatives. This variable is measured at the very beginning of the experiment when participants are asked which types of financial instruments they expect to be contained in the four relevant categories. Secondly, risk judgement is influenced by availability effects as it is demonstrated in experiment 2. Since availability of media coverage on the use of derivatives is not manipulated in experiment 1, we have to control for differences in the participants’ given availability of negative media coverage on derivatives usage. MEDIANEG and MEDIAREL are the variables chosen to proxy for the availability of such media coverage. MEDIANEG, measuring the absolute availability of negative media coverage, is used in model I and MEDIAREL, measuring the relative availability of negative media coverage when compared to the availability of positive media coverage, is used in model II. Both variables are inquired about in a short questionnaire at the very end of the experiment.

In addition, model II includes two other variables that potentially explain risk judgement in general. CONFJUDG reflects a participant's confidence in his own judgement in particular and TRUSTFR reflects individual trust in risk assessments solely based on a company's financial reports. Together they shall control for the noise in the risk judgement that is due to a participant's individual difficulty in risk assessment on the basis of the provided information. These variables are also inquired about in the questionnaire at the end of the experiment.

Descriptive statistics for all variables are summarised in Table 3.5. As a first indicator of the validity of our assumptions regarding the drivers of ASWITCH and to test for multicollinearity, Table 3.6 shows the Spearman correlation coefficients. It shows no collinearity between the independent variables with the exception of MEDIANEG and MEDIAREL, which is hardly surprising since the latter is constructed from the former. Moreover, it gives preliminary support to our hypothesis H2b for it shows statistically significant correlations between ASWITCH and EXPER, MEDIANEG and MEDIAREL respectively.

TABLE 3.6: CORRELATION MATRIX

	ASWITCH	EXPER	DERNHFT	MEDIANEG	MEDIAREL	CONFJUDG
EXPER	0.2527 (0.0362)	1.0000				
DERNHFT	0.1830 (0.1323)	-0.0089 (0.9421)	1.0000			
MEDIANEG	0.2907 (0.0154)	-0.0625 (0.6098)	0.1892 (0.1194)	1.0000		
MEDIAREL	0.2607 (0.0305)	-0.0837 (0.49439)	0.0855 (0.4850)	0.7977 (0.0000)	1.0000	
CONFJUDG	-0.1781 (0.1433)	-0.0759 (0.53559)	0.1604 (0.1880)	0.0426 (0.7282)	-0.1175 (0.3364)	1.0000
TRUSTFR	0.0574 (0.6393)	-0.0934 (0.4452)	-0.1099 (0.3685)	-0.2009 (0.0979)	-0.1228 (0.3147)	0.1440 (0.2377)

Reported are Spearman correlation coefficients, which account for the fact that some variables (ASWITCH, DERNHFT) are by nature not normally distributed. p-values are reported in parentheses. For a description of the variables see Table 3.5.

### 3.4.3.2 Statistical tests

The results of the two probit regressions, i.e. of the regressions of ASWITCH on model I and on model II, are summarised in Table 3.7. Our hypothesis H2b focuses on investment experience as the explanatory behavioural variable. In an individual test for the

ASWITCH regression, the positive coefficient of EXPER differs from zero at a 5% (1%) level of significance in model I (model II). There is thus quite robust evidence that the switch in the risk assessment of company A after exposure to footnotes describing the company's derivatives usage is associated with the behavioural risk variable used in our model and we finally fail to reject hypothesis H2b. The size of the coefficient suggests that professional familiarity with financial investments in derivatives increases the probability of such a switch by approximately 25-30% if all other variables are set to their mean values. A higher familiarity thus comes along with a higher sensitivity to the label "derivative". This is in conformity with behavioural theory since investment experience is tantamount to a higher familiarity with the risks arising from derivatives usage.

With respect to the controls, the coefficients of MEDIANEG and MEDIAREL suggest that a higher natural availability (in absolute or relative terms) of negative media coverage of derivatives is associated with a higher probability of substantially altering the risk judgement. This is also exactly what behavioural theory predicts and it underlines our findings from Experiment 2. Even when availability effects are not manipulated, individual awareness of media coverage is a strong external factor associated with the sensitivity of a participant's reaction to a company's usage of derivatives.

### 3.5 Implications and Conclusions

This chapter demonstrates that the discretion offered by IAS 39 and IFRS 7 with respect to balance sheet classification has the potential to bias non-professional investors' judgements about the risk of the reporting company. By means of an experiment we show that a presentation of financial instruments by measurement categories (as applied by a majority of European banks) causes investors' risk perception to vary with the balance sheet classification of financial instruments. Because it has been shown that information in the footnotes receives considerably less attention than information in the balance sheet or the profit and loss statement (Hodge et al. (2004) and Harper et al. (1987)) we consider this effect to severely impair the decision usefulness of financial reports based on IFRS, although it is partly mitigated when non-professional investors are provided with footnotes about the underlying financial instruments. Thus, distortions in perceived risk induced by balance sheet category are unlikely to be fully corrected by the footnotes and may result in non-optimal investment decisions.

TABLE 3.7: COEFFICIENTS FOR THE PROBIT MODELS

Dependent variable	ASWITCH			
	I		II	
Model				
N	70		69	
	(#)	(+)	(#)	(+)
<i>Test Variable</i>				
EXPER*	.7970 (.3504)	.2592	1.0149 (.3954)	.3236
<i>Control Variables</i>				
DERNHFT*	.4290 (.3532)	.1405	.8647 (.3897)	.2815
MEDIANEG	.0103 (.0042)	.0033	-	-
MEDIAREL	-	-	.0102 (.0047)	.0032
CONFJUDG	-	-	-.0209 (.0119)	-.0064
TRUSTFR	-	-	.0164 (.0094)	.0051
CONSTANT	-1.6233 (.3765)	-	-1.9370 (.6831)	-
ln $L$	-35.39		-32.85	
% correctly predicted	72.86		76.81	
$\chi^2$ (p-value)	12.97 (< .01)		17.37 (< .01)	

(#) The coefficients of the probit regression are reported with the standard errors in parentheses.

(+)  $dy/dx$  is evaluated at the mean of the independent variables. For binary variables marked with an asterisk (\*),  $dy/dx$  is equal to the difference in the probability of  $y=1$  between values of  $x$  of 1 and 0. For a description of the variables see Table 3.5.

In particular, we observe on the one hand that both the “Loans and Receivables” and the “Fair Value Instruments” are perceived to be of particularly high risk regardless of their underlying economics. This holds especially in comparison with instruments “Available for Sale”. A company using derivatives and presenting those as instruments “Held for Trading” is on the other hand considered to be of particularly low risk which is mainly due to the off-balance-sheet approach in accounting for derivatives. If however, derivatives usage is made explicit in the footnotes, the risk of this company as perceived by investors significantly increases.

These results can be explained by both the availability and the representativeness heuristic. When information about losses from corporate engagement in derivatives is easily available to non-professional investors, a company presenting trading assets is judged

to be particularly risky even if investors have no information about the type of financial instruments actually classified as trading assets. When information about the recent sub-prime crisis is easily available, a company presenting “Loans and Receivables” is judged to be particularly risky. In both cases, a company presenting “Fair Value Instruments” is judged to be particularly risky. The presentation of trading assets is obviously seen to be representative for derivatives usage just as the presentation of “Loans and Receivables” is seen to be representative for investment in consumer loans whereas fair value measurement is regarded to be a risk factor regardless of the information that is easily available.

Generally speaking, in the absence of footnotes non-professional investors seem to base their risk judgement on the type of financial instruments a category is regarded to be representative for. As a result, cognitive availability of events related to those types of instruments distorts individual risk judgement that is based on information about a company’s use of measurement categories. The distortion stems from the fact that IAS 39 allows a high degree of discretion in the choice of a measurement category. By discretion, we mean that any reporting category provided by IAS 39 can in fact contain a wide range of different financial instruments not at all similar to the financial instrument typically inferred from the category’s label.

This chapter also contributes to the literature on individual perception of derivatives usage. We identify two opposite effects that influence risk perception of derivatives relative to economically identical non-derivative contracts. The effect of the classification of derivatives as trading assets on risk perception is negative but the effect of the general off-balance-sheet approach in accounting for derivatives is positive. If we accept that financial derivatives are not used as risk-enhancing but as risk-reducing instruments as it was suggested by Guay (1999), this finding is a justification for the extant off-balance-sheet approach that substantially improves a company’s debt-to-equity ratio and thereby reduces the distorting impact of the labeling effect already identified by Koonce et al. (2005a).

Overall, this chapter is a call for standard-setting activity. Just as a presentation by product, a presentation of financial instruments by measurement categories causes significant biases in the risk perception of non-professional investors. Those biases could be reduced either by a reduction of management’s discretion in the choice of measurement

categories or by the introduction of a uniform presentation format that is neither based on measurement categories nor on products but, for instance, on a company's investment purposes. Such an approach would be a further step towards a true management approach in the disclosure of financial instruments.



# Chapter 4

## Fair Value Accounting of Financial Instruments and Disclosure Choices by Banks: Empirical Evidence

### 4.1 Ausweis von Finanzinstrumenten in europäischen Bankbilanzen nach IFRS: Normative Erkenntnisse empirischer Befunde<sup>1</sup>

#### 4.1.1 Problem

Die Bilanzierung von Finanzinstrumenten nach IFRS ist geprägt von Wahlrechten. Dies gilt für die Bewertung, die unmittelbar den Gewinn bestimmt, dies gilt aber auch für die Offenlegung der Berechnungsgrundlagen durch Gliederung und Erläuterung: In das Ermessen eines Kaufmanns ist insofern auch der Begründungszwang seines Gewinns gestellt (Moxter (1982), S. 223). Dies ist zunächst ein ganz normatives Problem, als Art und Zahl der Wahlrechte, wie das IASB selbst konzidiert (International Accounting Standards Board (2006a)), eine konsistente bilanzielle Abbildung von Finanzinstrumenten nicht mehr ergeben (Wüstemann and Kierzek (2007a)). Das Problem ist aber auch empirischer Natur, erwächst beim Fehlen eindeutiger Abbildungsvorschriften der kaufmännischen Praxis doch eine Bedeutung, die induktiver Normsetzung nahe kommt. Nicht anders lässt sich auch die vielfach ausgedrückte Hoffnung nach einer Entwicklung von

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<sup>1</sup> Für die finanzielle Unterstützung durch die J.P. Stiegler-Stiftung (Mannheim) bedanke ich mich. Für hilfreiche Anmerkungen bin ich Prof. Dr. Karsten Lorenz, Prof. Dr. Edgar Löw sowie Seminarteilnehmern an der ESSEC Business School (Paris) verbunden. Für exzellente Unterstützung bei der Datenerhebung habe ich Maximilian Müller, Denis Nguyen und Clemens Romberg zu danken.



“Branchenstandards” für Banken interpretieren (vgl. Beine and Meyer (2007), Rn. 274; Eckes and Sittmann-Haury (2006), S. 428), die derzeit allein in der Lage sind, die bestehenden Regelungslücken zu füllen. Nur mit (deskriptiver) Empirie kann diese Entwicklung nachvollzogen werden.

Die unterschiedliche Anwendung der Ansatz- und Bewertungsvorschriften gemäß IAS 32 und IAS 39 ist Gegenstand umfangreicher Untersuchungen (vgl. etwa Ernst & Young (2006)). Dieses Kapitel konzentriert sich daher allein auf den Ausweis von Finanzinstrumenten in der Bilanz von europäischen Banken, für die auch das unverbindliche Gliederungsschema des IAS 1 nicht gilt. Das IASB hat für sie (einmal mehr) in ganz US-amerikanischer Tradition (vgl. nur Dexheimer (2004), S. 184-190) auf jede Gliederungsvorgabe verzichtet und insofern betrifft das grundsätzliche Problem für Banken (neben der Zuordnung oder Aufteilung von Vermögenswerten in Bilanzposten) bereits die Auswahl eines Gliederungsformats als solches.

Das Kapitel bietet damit für die Praxis und den Standardsetzer wichtige Erkenntnisse, beschreibt er doch die Ausgangssituation in der Bankenbranche genau in dem Jahr, in dem spätestens mit der verpflichtenden Anwendung von IFRS 7 der Bilanzausweis von Finanzinstrumenten ein nicht mehr vernachlässigbares Thema geworden ist (Bonin (2004), S. 1570). Die wirtschaftliche Auswirkung dieses Standards wird man genau wie die (noch offene) Entwicklung von Branchenstandards zukünftig nur vor dem Hintergrund dieser Ausgangssituation würdigen können. Ganz unabhängig von dieser rein deskriptiven Fragestellung nach der Ausübung der Ausweiswahlrechte ist schließlich die Untersuchung, ob bestimmte erklärende Variablen identifiziert werden können, von denen die Entscheidung einer europäischen Bank für ein bestimmtes Gliederungsformat abhängt. Dies ist mithin ein Versuch, den Vorgang des “choice (...) rather than the set of accepted procedures” (Watts and Zimmerman (1986), S. 246) zu beschreiben, und damit der betriebswirtschaftliche Erkenntnisgewinn dieses Kapitels.

Das Kapitel gliedert sich wie folgt: In einem ersten Hauptteil werden aus dem Normensystem der IFRS die Ausweiswahlrechte für Banken abgeleitet, deren Ausübung potenziell zu Unterschieden im Bilanzausweis von Finanzinstrumenten führt. Entsprechende empirische Beobachtungen dieser Unterschiede werden in einem zweiten Hauptteil zunächst beschrieben und anschließend auf Erklärungen untersucht. In einem dritten Hauptteil werden diese Erklärungen kritisch gewürdigt.

## 4.1.2 Empirische Fragestellungen aufgrund bestehender Ausweishrechte für Banken nach IFRS

### 4.1.2.1 Branchenübergreifende Regelung der Bilanzierung von Finanzinstrumenten

Mit der Aufhebung des IAS 30 beinhalten die IFRS (auch für Banken) grundsätzlich keine branchenspezifischen Normen mehr (vgl. zu einer Untersuchung der bankspezifischen Gliederungsnormen gemäß IAS 30 Hossfeld (2004)). Die Regelungen des IAS 32, des IAS 39 und des IFRS 7 sind als produktspezifische Normen für die Bilanzierung von Finanzinstrumenten zwar für Banken aufgrund ihres Geschäftsfelds von besonderer Bedeutung, sie gelten aber gleichermaßen für Unternehmen anderer Branchen, die mit Finanzinstrumenten umgehen. Der ausschließliche Produktfokus bei der Bilanzierung von Finanzinstrumenten lässt sich inhaltlich damit erklären, dass die Chancen und die Risiken aus der Investition in ein Finanzinstrument (genauso wie aus der Investition in eine bestimmte Sachanlage) branchenunabhängig sind (Buchheim and Schmidt (2005), S. 397 f.): Der Wert eines Finanzinstruments schwankt für eine Bank in dem gleichen Ausmaß wie für ein Industrie- oder Handelsunternehmen. Die branchenübergreifend vergleichbare Bilanzierung soll erkennen lassen, ob die Bank mit diesen Chancen und Risiken tatsächlich professioneller umgeht. Auch politisch gibt es Gründe, die die Abkehr von bankspezifischen Bilanzierungsnormen ausgelöst haben. Die Definition einer Bank hätte sich nämlich kaum ohne Rückgriff auf nationale und damit von den IFRS unabhängige Normen lösen lassen. Bereits die Definition einer Bank gemäß IAS 30 geriet so, dass sie sich (in Deutschland) nur in Rückgriff auf das nationale Gesetz über das Kreditwesen (KWG) anwenden ließ (vgl. Krumnow and Löw (2003), Rn. 4). Auch in anderen Fragen lässt sich erkennen, dass ein solches Zusammenspiel mit nationalen Rechtsbegriffen vom IASB nicht gewollt ist <sup>2</sup>.

Keine Berücksichtigung in der Bilanzierung nach IFRS findet vor diesem Hintergrund die spezielle Struktur des Bankgeschäfts, die aus dem Geschäft mit der Umwandlung

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<sup>2</sup> Vgl. zuletzt die Diskussion über die Eigenkapitaldefinition gemäß IAS 32, die in Deutschland nicht mit dem gesellschaftsrechtlichen Eigenkapitalbegriff übereinstimmt, stellvertretend Henrichs (2006), S. 1253; Schildbach (2006), S. 325. Unmittelbar auf nationales Gesellschaftsrecht bezieht sich hingegen unverändert der Anwendungsbereich des IAS 34 (“Zwischenberichterstattung”), vgl. Wüstemann et al. (2007), Rn. 69.

des Risikos und der Fristen von Kundeneinlagen in Kundenkredite erwächst (Diamond and Dybvig (1983), S. 401; Ryan (2007), S. 19-22). Eine entsprechende bankspezifische Ausrichtung des Bilanzausweises von Finanzinstrumenten, wie sie etwa die Gliederungsregelungen nach dem Formblatt 1 der RechKredV prägt, hätte in Folge des branchenübergreifenden Ansatzes der IFRS Auswirkungen auf die Bilanzen von Industrie-, Handels- oder Dienstleistungsunternehmen gehabt, die aufgrund von Befürchtungen eines Konflikts mit dem traditionellen Gliederungsformat in diesen Branchen vermieden werden sollten (Löw (2005a), S. 1338). Eine Mustergliederung für den Ausweis von Finanzinstrumenten in einer Bankbilanz geben die IFRS damit nicht vor. Bankspezifisch ist allein, dass die Zulässigkeit einer Abweichung vom ohnehin unverbindlichen Bilanzschema gemäß IAS 1.68 (wie sie mithin branchenübergreifend gilt) für diese Branche in IAS 1.71(b) besonders betont wird und Liquidität in IAS 1.54 als alternatives Gliederungskriterium vorgeschlagen wird. Bestehende Entwürfe von Mustergliederungen, die eine Vergleichbarkeit von Bankbilanzen zum Ziel haben, entspringen allein privaten Initiativen (z.B. CEBS (2007); Ernst & Young (2007)).

#### **4.1.2.2 Bilanzausweis von Finanzinstrumenten**

Die Gliederung einer Bilanz nach IFRS soll sich nach IAS 1 grundsätzlich an der unternehmensindividuellen Nutzungsdauer der Vermögenswerte und Schulden orientieren und insofern zumindest zwischen Anlage- und Umlaufvermögen (vgl. zur Unterscheidung Löw (2006), S. 12) unterscheiden (IAS 1.51). Theoretisch entstammt dies dem Verständnis einer Bilanz als "Finanzplansurrogat": Einwertige Einzahlungserwartungen (als Aktiva) werden tabellarisch solchen einwertigen Auszahlungserwartungen (als Passiva) gegenüber gestellt, die einen vergleichbaren "Geldwertungsabstand" aufweisen (Moxter (2003), S. 247f.). Die "generalnormartige Formulierung" (Duhr (2006), S. 246) des IAS 1 erlaubt es, diese Gliederung unternehmensindividuell an den Vermögensbestandteilen von besonderer Bedeutung für Vermögens-, Finanz- und Ertragslage auszurichten, im Fall von Banken mithin an Finanzinstrumenten.

Auch Finanzinstrumente lassen sich (gewissermaßen "betriebswirtschaftlich", Löw (2006), S. 13f.) nach ihrem internen Verwendungszweck Anlage- und Umlaufvermögen zuordnen. Zum Umlaufvermögen zählen in einer solchen mit IAS 1 konformen Bilanzgliederung dann kurzfristige Forderungen gegenüber Kunden oder Kreditinstituten

sowie das Eigenhandelsportfolio, zum Anlagevermögen Beteiligungen und andere Finanzanlagen. Nun sind Finanzinstrumente aufgrund der Vorschrift des IAS 39.45 bei Vertragsabschluss aber bestimmten Kategorien zuzuordnen, die sich nicht nach dem betriebswirtschaftlichen Verwendungszweck, sondern nach dem für ein bestimmtes Instrument vorgesehenen Bewertungsmaßstab richten. Da jene Zuordnung ohnehin zumindest im Anhang offenlegungspflichtig ist, mag es auch nahe liegen, die Bankbilanz gleich nach den Bewertungskategorien zu gliedern (Bonham et al. (2008)); IFRS 7.8 unterstreicht nur diese Möglichkeit. Dies ist zumindest insofern inkonsistent, als damit die in IAS 1 generalnormartig geforderte Unterscheidung von Anlage- und Umlaufvermögen nicht zwingend gewährleistet ist. Zwar werden im Handelsbestand der Fair-Value-Kategorie (mit Ausnahme der Derivate, die eine Bank eigentlich zu Sicherungszwecken abgeschlossen hat) nur das Umlaufvermögen und in der Held-to-Maturity-Kategorie nur das Anlagevermögen enthalten sein, in den Krediten und Forderungen (Löw (2006), S. 18; Poole and Spooner (2007), S. 471), in der Available-for-Sale-Kategorie und im Designationsbestand der Fair-Value-Kategorie aber ist diese Abgrenzung nicht mehr eindeutig (vgl. zu einer Übersicht KPMG (2007), S. 27 f.). Dem steht der Vorteil gegenüber, dass mit einem separaten Bilanzausweis der Bewertungskategorien die Vergleichbarkeitsprobleme gemildert werden können, die überhaupt erst aus der Existenz der Bewertungskategorien resultieren, nämlich aus dem damit verbundenen sog. "mixed accounting model" (Gebhardt et al. (2004), S. 341; Walton (2004), S. 5), das unterschiedliche Bewertungsmaßstäbe für vergleichbare Instrumente zulässt.

Angesichts dieses weitestgehenden Wahlrechts (Deutsche Bundesbank (2005), S. 81) bezüglich des Bilanzausweises von Finanzinstrumenten gilt eine erste zu untersuchende Frage dem von Banken gewählten Gliederungsformat. Neben der Gliederung nach Bewertungskategorien und nach betriebswirtschaftlichem Verwendungszweck kommt hier eine Gliederung nach Produkttyp in Frage, die sich zwar kaum noch mit der liquiditätsorientierten Generalnorm des IAS 1 deckt, die aber der produkt- statt branchenspezifischen Konzeption des IFRS 7 am nächsten kommen mag und etwa zwischen Krediten, Anleihen und Aktienanteilen unterscheidet. Ein solches Gliederungsformat hat zuletzt die Joint Working Group (JWG) in ihrem einflussreichen Entwurf eines Standards für Finanzinstrumente vorgeschlagen (Joint Working Group of Standard Setters (1999), Abs. 131-135, BC 5.1-5.5). Fraglich ist in diesem Zusammenhang ferner, ob (z. B. durch Untergliederung der einzelnen Posten in ihre kurz- und langfristigen Bestandteile) bei einer

an Bewertungskategorien oder Produkttyp ausgerichteten Bilanzgliederung der erkannte Widerspruch zu IAS 1 gelöst wird (Beine and Meyer (2007), Rn. 275; Kuhn and Scharpf (2006), Rn. 4059 f.; Löw (2006), S. 17; speziell für Nicht-Banken Brücks et al. (2006), S. 434).

Aus dem Ausweis der Bewertungskategorien ergeben sich weitergehende Fragestellungen nach den gewählten Untergliederungen oder Zusammenfassungen einzelner Kategorien. So setzt sich die Fair-Value-Kategorie nicht nur aus dem Handelsbestand, der aufgrund seiner Wesentlichkeit für die Finanzlage von Banken in jedem Gliederungsformat einzeln auszuweisen ist (Löw (2005a), S. 1339), sondern (bei Ausübung der sog. Fair-Value-Option, vgl. zu Einzelheiten Löw and Blaschke (2005), S. 1727) auch aus dem Designationsbestand zusammen. Auch hier gilt, dass ein separater Ausweis beider Bestände zumindest im Anhang spätestens mit IFRS 7.8(a) verpflichtend geworden ist (Kuhn and Paa (2005), S. 1977; Kuhn (2007), S. 281), im “Sinne einer höheren Transparenz” aber bereits für die Bilanz gefordert wird (Eckes and Sittmann-Haury (2006), S. 429). Genauso ist ein separater Ausweis von den Finanzinstrumenten in der Available-for-Sale-Kategorie möglich, die sich nach ihrem Bewertungsmaßstab unterscheiden. In der Bilanz sind diese Instrumente zwar grundsätzlich zum Fair Value, in Einzelfällen aber, in denen für nicht börsennotierte Eigenkapitalanteile kein Fair Value modellierbar ist, zu Anschaffungskosten zu bewerten. Sind die Einzelfälle wesentlich, kann nur eine weitere Untergliederung der Available-for-Sale-Kategorie konsistent mit dem gewählten Gliederungsformat der Bewertungskategorien sein, das gerade mit dem Vorliegen unterschiedlicher Bewertungsmaßstäbe für Finanzinstrumente begründet wird (Eckes and Sittmann-Haury (2004), S. 1196; zur technischen Umsetzung Erdmann et al. (2007), S. 295). Die Möglichkeit zur Untergliederung ergibt sich schließlich für die Kredite und Forderungen, deren Risiko sich maßgeblich nach dem Kreditnehmer unterscheidet; relevante Gruppen von Kreditnehmern können staatliche Einrichtungen, privatwirtschaftliche Unternehmen, Privatpersonen oder andere Banken sein (Bonham et al. (2008)).

### 4.1.3 Ausweispraxis in europäischen Bankbilanzen

#### 4.1.3.1 Umfang und Eigenschaften des Datensatzes

Die Daten, die dieser Untersuchung zugrunde liegen, wurden aus Geschäftsberichten von Banken für das Geschäftsjahr 2006 erhoben. Berücksichtigung fanden dabei nur Banken, deren Bilanz nach IFRS aufgestellt war und deren Sitz sich in einem europäischen Staat befindet. Für jede Bank wurden die Bilanzposten (in englischer Sprache) erfasst, die zu einem wesentlichen Teil Finanzinstrumente im Sinne der Legaldefinition des IAS 32 enthalten. Vernachlässigt wurden dabei wegen ihres unproblematischen und weitgehend einheitlichen Ausweises die Bestände an Barreserven oder geldnahen Mitteln (vgl. Eckes and Sittmann-Haury (2006), S. 428; Löw (2006), S. 13) sowie wegen ihrer geringen Anzahl an möglichen Bewertungskategorien die Passivpositionen. Explizit nicht zum Anwendungsbereich von IAS 32 und IAS 39 gehören Unternehmensanteile, die gemäß IAS 28 im Konzernabschluss nach der Equity-Methode bewertet werden (IAS 32.4 (a) bzw. IAS 39.2 (a)). Zusammenfassungen von Bilanzposten wurden in Einzelfällen bei nahezu gleichlautenden Bezeichnungen vorgenommen, da nicht die Gliederungstiefe, sondern das Gliederungsformat der jeweiligen Bilanz Gegenstand dieser Untersuchung ist.

Ein Ziel dieser Untersuchung besteht in einer europaweiten Bestandsaufnahme des gewählten Bilanzausweises von Finanzinstrumenten. Eine Mindestgröße (gemessen an der Bilanzsumme) war daher nicht Voraussetzung für die Berücksichtigung einer Bank. Aus diesem Grund sind die im Datensatz enthaltenen Banken im Ergebnis von sehr heterogener Größe. Verhältnismäßig vielen Banken mit geringer Bilanzsumme (vorrangig Banken aus kleineren Ländern) stehen verhältnismäßig wenige Banken mit hoher Bilanzsumme (vorrangig die prominenten europaweit tätigen Banken) gegenüber. Einerseits könnte dies die Vergleichbarkeit der Bilanzen einschränken. Andererseits erlaubt erst die Heterogenität eine Untersuchung, ob der gewählte Bilanzausweis mit Größeneffekten erklärt werden kann.

Homogener ist der Datensatz im Hinblick auf die Anzahl der erfassten Bilanzposten. Der Median von fünf Bilanzposten wurde in 38%, zwischen vier und sechs Bilanzposten wurden in immerhin 85% der untersuchten Bankbilanzen erfasst. Einzelne Bilanzen mit nur zwei oder bis zu acht Posten können so tatsächlich als Ausreißer verstanden werden.

### 4.1.3.2 Empirischer Befund

#### 4.1.3.2.1 Ausweis nach Bewertungskategorien als vorherrschendes Gliederungsformat

Unter den 555 erfassten Bilanzposten konnten 92 unterschiedliche Bezeichnungen identifiziert werden, die in einem zweiten Schritt in 33 Gruppen zusammengefasst werden konnten. Insgesamt 15 dieser Bezeichnungen werden in mehr als zehn der untersuchten Bankbilanzen verwendet. Diese Liste wird angeführt von Bezeichnungen wie “available for sale” (60.0% der Banken) oder “held to maturity” (46.4% der Banken), die den Bewertungskategorien gemäß IAS 39 entsprechen. Weniger als halb so häufig finden Bezeichnungen wie “financial investments” (20.9% Banken) bzw. “equity shares” (20.0% der Banken) Verwendung, die sich einer Bilanzgliederung anhand des betriebswirtschaftlichen Verwendungszwecks bzw. des Produkttyps zuordnen lassen. Dies ist ein erster Hinweis, dass sich die europäischen Banken bei der Bilanzgliederung mehrheitlich an den Bewertungskategorien orientieren. Dieser Eindruck bestätigt sich in einer Klassifizierung der untersuchten Bilanzen nach dem gewählten Gliederungsformat (Tabelle 4.13, Panel A): Aus 51.6% der untersuchten Bankbilanzen gehen demnach alle verwendeten Bewertungskategorien jeweils gesondert hervor<sup>3</sup>. Eine Gliederung nach Produkttypen bestimmt 19.6%, eine betriebswirtschaftliche Gliederung sogar lediglich 13.7% der Bilanzen. In immerhin 15.0% der Bilanzen wurden sonstige Formate gewählt, die meist Mischformen darstellen und sich gleichzeitig (bspw. durch separaten Ausweis der Fair-Value-Kategorie) an den Bewertungskategorien sowie (bspw. durch separaten Ausweis von Finanzanlagevermögen) an dem betriebswirtschaftlichen Verwendungszweck ausrichten. Das normativ überzeugende Paradigma, dass in einer betriebswirtschaftlichen Bankbilanzgliederung “kein Raum” für die Angabe von Bewertungskategorien sei (Löw (2006), S. 15), hat sich demnach in der europäischen Praxis nicht durchgesetzt.

Die Existenz von in diesem Sinne inkonsistenten Gliederungsformaten resultiert auch in einer unterschiedlichen Verbreitung der einzelnen Bewertungskategorien als gesondert ausgewiesene Bilanzposten. Sowohl die Fair-Value- als auch die Available-for-Sale-Kategorie erscheinen in rund 60% aller europäischen Bankbilanzen als Bilanzposten, obwohl sich wie gesehen nur für 52% der Bankbilanzen eine konsistente Gliederung an-

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<sup>3</sup> Eine Untergliederung der Fair-Value-Kategorie war dabei nicht Bedingung für diese Klassifizierung.

hand der Bewertungskategorien feststellen ließ. “Loans and receivables” (häufiger mit “loans and advances” umschrieben) ist hingegen auch deshalb die am häufigsten separat ausgewiesene Bewertungskategorie, weil sie sich (zumindest mit gewissen Einschränkungen) mit einem betriebswirtschaftlichen Gliederungsformat vereinbaren lässt. Der seltenere separate Ausweis der Held-to-Maturity-Kategorie lässt sich damit erklären, dass verschiedene Banken, deren Bilanzgliederung im Datensatz enthalten ist, auf die Verwendung dieser Kategorie aufgrund der damit verbundenen restriktiven sog. Tainting Rule (vgl. Löw and Lorenz (2005), S. 480-483) ganz verzichten (vgl. zu entsprechenden Daten Ernst & Young (2006)).

Aufgrund dieser Daten lässt sich auch feststellen, dass die aufgeworfene Frage nach der Notwendigkeit einer weiteren Untergliederung der in einer Bewertungskategorie zusammengefassten Finanzinstrumente zu verneinen ist. Eine grundsätzliche Untergliederung aller Kategorien nach der Fristigkeit der Instrumente ließ sich durchgängig genauso wenig feststellen wie ein separater Ausweis der nicht zum Fair Value bewerteten Instrumente in der Available-for-Sale-Kategorie. Wesentliche Unterschiede in den Bilanzposten von Banken, die die Bewertungskategorien des IAS 39 als Bilanzgliederungsformat wählen, sind nur in der Fair-Value-Kategorie und in den Krediten und Forderungen zu erkennen.

#### **4.1.3.2.2 Untergliederung bei Ausweis der Fair-Value-Kategorie**

Auf die Frage, ob die Fair-Value-Kategorie (sofern sie denn gesondert ausgewiesen ist) bereits in der Bilanz weiter untergliedert wird, hat sich in der Bankenpraxis keine einheitliche Antwort gefunden. Knapp über die Hälfte der untersuchten Banken, die die Finanzinstrumente in ihrer Bilanz anhand der Bewertungskategorien ausweisen, nimmt keine weitere Untergliederung dieses Postens vor. Als Bezeichnung wird in diesen Fällen ein Oberbegriff gewählt, der nur ausnahmsweise offenlegt, dass ein zusammengefasster Posten vorliegt, zu dem das Eigenhandelsportfolio und der Designationsbestand, der nur wahlrechtsweise in die Fair-Value-Kategorie eingestuft ist, gehören. Gesondert ausgewiesen werden diese beiden Bestände in immerhin noch 30.0% der anhand von Bewertungskategorien gegliederten Bankbilanzen. Nur für eine vernachlässigbare Anzahl an Banken, die die Fair-Value-Option nicht ausüben, stellt sich dieses Problem gar nicht.

Eine besondere Stellung innerhalb der Fair-Value-Kategorie nehmen derivative Fi-



nanzinstrumente ein, da sie nach der Legaldefinition des IAS 39 unwiderlegbar zum Handelsbestand einer Bank zu zählen sind, insbesondere auch dann wenn sie gar nicht mit spekulativer Absicht abgeschlossen wurden. Eine bedeutende Anzahl an Derivaten, die in der Fair-Value-Kategorie eingestuft sind, dient daher der Absicherung der Bank gegen Wertschwankungen anderer Finanzinstrumente. Diese besondere Stellung von Finanzderivaten nehmen über die Hälfte der untersuchten Banken zum Anlass, die entsprechenden Instrumente in einem eigenen Bilanzposten auszuweisen. Dies gilt sogar in noch stärkerem Umfang, wenn die Bilanzgliederung gar nicht an Bewertungskategorien ausgerichtet ist. Hier wird auch erkennbar, dass der gesonderte Ausweis bei der Gliederung nach Bewertungskategorien in vielen Fällen nur solche Instrumente betrifft, die nicht zu Zwecken des Eigenhandels abgeschlossen wurden, sondern Bestandteil einer Sicherungsbeziehung sind. Europäische Banken scheinen die Zugehörigkeit dieser Derivate zur Fair-Value-Kategorie offenbar tatsächlich als nicht sachgerecht zu empfinden, denn umgekehrt ist für die Derivate des Eigenhandels fast ausnahmslos kein zusätzlicher Bilanzposten zur Fair-Value-Kategorie eingerichtet worden. Dies heißt hingegen nicht, dass in der Bilanz der Umfang von Sicherungsbeziehungen hinreichend offengelegt wird: Grundsätzlich nicht erkennbar sind nämlich (mit Ausnahme von zwei Einzelfällen) die Buchwerte von Grundgeschäften, zu deren Absicherung die Derivate abgeschlossen werden; auch im Anhang sind entsprechende gesonderte Angaben nicht verpflichtend (KPMG (2007), S. 97).

#### **4.1.3.2.3 Untergliederung bei Ausweis der Kredite und Forderungen**

Verhältnismäßig deutlich bestätigen die Ergebnisse, dass sich die Bewertungskategorie der Kredite und Forderungen wesentlich nach der Gruppe der entsprechenden Kreditnehmer unterscheidet. Unter den Krediten und Forderungen gesondert ausgewiesen werden von 73.6% der Banken die Forderungen gegenüber Kreditinstituten, 63.6% der Banken die Forderungen gegenüber Privatkunden und 6.4% der Banken die Forderungen gegenüber öffentlichen Einrichtungen. Damit sehen es fast drei Viertel aller untersuchten Banken als erforderlich an, die Forderungen gegenüber anderen Kreditinstituten in einem gesonderten Bilanzposten auszuweisen. Fast ebenso viele Banken weisen die Forderungen gegenüber Privatkunden gesondert aus. Weitere Aufschlüsselungen der Kreditnehmer, etwa nach der Gruppe öffentlicher Einrichtungen, haben sich bislang hingegen in Europa nicht durchgesetzt.

#### 4.1.3.2.4 Erklärungen für die Ausübung der Ausweishwahlrechte

*Bilanzsumme.* Eine erste Erklärung für die in Europa sehr heterogene Ausübung der Ausweishwahlrechte von Finanzinstrumenten könnte in der Größe der jeweiligen Bank liegen. Wird die Größe anhand der Bilanzsumme gemessen, finden sich jedoch bereits inhaltlich Argumente, die bei hoher Bilanzsumme sowohl für als auch gegen den Ausweis anhand der Bewertungskategorien sprechen. Einerseits werden große Banken in besonders viele Finanzinstrumente investiert haben; von der Komplexitätsreduktion durch den Verzicht auf Bilanzposten, die sich von den Bewertungskategorien unterschieden, profitierten sie dann besonders. Andererseits werden großen Banken die technischen Kapazitäten zur Einführung individueller Bilanzposten auch besonders leicht zugänglich sein. Der Befund zeigt, dass die Bilanzsumme tatsächlich keine Erklärung für die Wahl eines Gliederungsformats bietet. Werden die untersuchten Banken anhand der Quartile ihrer Bilanzsummen in vier gleich große Gruppen aufgeteilt, ist der Anteil der Banken, die die Bilanzgliederung an den Bewertungskategorien orientieren, in jeder Gruppe nahezu identisch.

*Anteil der Fair-Value-Kategorie.* Als besonders heterogen hat sich unter den Bewertungskategorien der Ausweis der Fair-Value-Kategorie herausgestellt. Die Erklärung für die Unterschiede im Ausweis dieser Kategorie könnten daher in dem Anteil der Finanzinstrumente liegen, die eine Bank zum Fair Value bewertet. Da dieser Anteil auch von der Ausübung der Fair-Value-Option und damit einem Bilanzierungswahlrecht abhängt, variiert er zwischen den untersuchten Banken. Es bieten sich mehrere Vergleiche an; einerseits danach, ob eine Bank die Kategorie überhaupt gesondert ausweist, und andererseits innerhalb der Gruppe der Banken mit entsprechender Ausweispraxis danach, ob die Kategorie in den Handels- und Designationsbestand untergliedert wird.

Als Vergleichsgrößen dient die relative Bedeutung der Fair-Value-Kategorie gemessen an ihrem Anteil an der Bilanzsumme<sup>4</sup>. Interessant sind die verhältnismäßig eindeutigen Ergebnisse. Bei Banken ohne gesonderten Ausweis hat die Fair-Value-Kategorie an der Bilanzsumme einen statistisch signifikant größeren Anteil als bei Banken mit gesondertem Ausweis<sup>5</sup>. Europäische Banken scheinen die Fair-Value-Bewertung von Finanzinstru-

<sup>4</sup> Der Vergleich der Ausweispraxis mit der absoluten Bedeutung der Fair-Value-Kategorie für eine Bank führt ausschließlich zu statistisch insignifikanten Ergebnissen und ist daher als Erklärung ungeeignet.

<sup>5</sup> Zu Einzelheiten der Testergebnisse vgl. Kapitel 4.2 dieser Dissertation, insbesondere Tabelle 4.7.

menten nur eingeschränkt in der Bilanz zu kommunizieren, wenn diese einen bestimmten Umfang erreicht. Dies ist zumindest ein Hinweis darauf, dass Investoren eine negative Wahrnehmung der Fair-Value-Bewertung von Finanzinstrumenten unterstellt wird.

*Länderspezifika.* Auffällig ist die Einheitlichkeit des Bilanzausweises von Finanzinstrumenten in einzelnen Ländern. In den großen südwesteuropäischen Ländern (Frankreich, Italien, Spanien und Portugal) weisen die untersuchten Banken die Instrumente durchgängig anhand der Bewertungskategorien aus, auch unterscheiden sich die gewählten Bezeichnungen der einzelnen Posten nur unwesentlich. Diese Ausweispraxis ist unterdessen dadurch institutionalisiert worden, dass für bankaufsichtsrechtliche Meldungen explizit dieses Format verlangt wird (für Frankreich etwa gemäß Commission Bancaire de la Banque de France (2006), Art. 3). Diese Institutionalisierung setzt Banken in diesen Ländern einen unverkennbaren Anreiz, die aufsichtsrechtliche Bilanzgliederung nach Bewertungskategorien auch für die Berichterstattung am Kapitalmarkt beizubehalten. Man wird die Ergebnisse zur vorherrschenden Verbreitung dieses Gliederungsmaßstabs daher zumindest soweit relativieren müssen, als sich nicht verlässlich klären lassen wird, ob bei Wirkung eines reinen Marktmechanismus dieser Maßstab eine vergleichbare Verbreitung gefunden hätte. Wenn nämlich gesagt wird, dass 51.9% der europäischen Banken diesen Gliederungsmaßstab verwenden, so tun dies immerhin 23% aus aufsichtsrechtlichem Anreiz. Einheitlichkeit lässt sich schließlich auch für die nordeuropäischen Länder Finnland, Norwegen und Schweden feststellen, in denen die Gliederung nach Produkttypen das verbreitete Format darstellt.

Dies weist auf zwei Aspekte hin, die gleichzeitig weiteren Forschungsbedarf darstellen. Erstens gilt die fehlende Vergleichbarkeit von Bankbilanzen nach IFRS zwar, wie in dieser Untersuchung nur unterstrichen, unbestritten in einem europaweiten Vergleich, innerhalb einzelner Länder und insbesondere innerhalb der angesprochenen kann fehlende Vergleichbarkeit indes nicht beklagt werden. Die Entwicklung nationaler Branchenstandards kann daher offenbar zweitens, ganz wie das nationale Gesellschaftsrecht (Arbeitsgruppe Europäisches Gesellschaftsrecht (2003), S. 872), einer Pfadabhängigkeit unterliegen. Unklar ist noch, ob sich einer dieser Pfade europaweit durchsetzen wird; wenn, dann wird dies nach gegenwärtiger Lage der südwesteuropäische sein.

## 4.1.4 Normative Würdigung des empirischen Befunds

### 4.1.4.1 Bilanzierungspraktische Relevanz

Die Wahlrechte in der Rechnungslegung von Finanzinstrumenten gemäß IFRS haben zu einem heterogenen Bild europäischer Bankbilanzen geführt. Branchenstandards für den bilanziellen Ausweis haben sich in wenigen Ländern, europaweit indes bislang nicht herausgebildet. Da mit der nunmehr verpflichtenden Anwendung von IFRS 7 die Anzahl der Wahlrechte nicht eingeschränkt wird (vgl. zu einer ähnlichen Einschätzung für den Risikobericht nach IFRS 7 Beiersdorf et al. (2006), S. 1331), ist gegenwärtig auch offen, ob eine solche Entwicklung eintritt. Wenn sich auch keine Branchenstandards etabliert haben, so muss aber von einer gefestigten Mehrheitsübung gesprochen werden, die in der Bankenpraxis festzustellen ist. Diese Mehrheitsübung gibt einen fundierten Hinweis, wie zukünftig europäische Branchenstandards für den Bilanzausweis von Finanzinstrumenten aussehen können.

Die Frage, ob eine Ausrichtung der Bilanzgliederung an den Bewertungskategorien des IAS 39 konform mit IAS 1 ist, wird das normative Schrifttum aus guten Gründen weiter beschäftigen (befürwortend Kuhn and Scharpf (2006), Rn. 4060; ablehnend Löw (2006), S. 17-19). Unabhängig davon haben europäische Banken die Frage praktisch für sich beantwortet. Dieses Format entspricht heute mehrheitlicher Übung in Europa und hat in bestimmten Ländern, in Teilen motiviert durch korrespondierende aufsichtsrechtliche Vorgaben, andere Gliederungsformate vollständig verdrängt. Eine Prognose, wie ein möglicher Branchenstandard zukünftig aussehen wird, lässt sich (noch) nicht hinreichend fundiert abgeben. Befürworter eines Branchenstandards werden gleichwohl nicht umhin kommen, diese Mehrheitsübung, nach der die Bewertungskategorien des IAS 39 die wesentlichen Bilanzposten darstellen, zur Kenntnis zu nehmen.

Unterschiede in der Untergliederung und der Zusammenfassung dieser Posten werden sich in Einzelfällen auch künftig aus Wesentlichkeitserwägungen ergeben, grundsätzlich werden sie aber für die Fair-Value-Kategorie bestehen bleiben: Je stärker eine Bank diese Kategorie verwendet, desto eher neigt sie dazu, eine explizite Offenlegung in der Bilanz zu vermeiden. Da mit IFRS 7 eine explizite Offenlegung im Anhang unvermeidbar ist (Flintrop (2006), Rn. 8; Löw (2005b), S. 2175 f.), wird dieser für die Beurteilung der Fair-Value-Bewertung durch Investoren an Bedeutung gewinnen (Hommel and Rammert

(2006), S. 201). Die Vergleichbarkeit der Bilanzen indes kann in dieser Frage ausschließlich durch Aktivität des Standardsetzers hergestellt werden.

#### 4.1.4.2 Bilanztheoretische Relevanz

Betriebswirtschaftlich wirft der vorliegende Befund vor allem die Frage auf, welche Anreize für Banken bestehen, eine verhältnismäßig umfangreiche Verwendung der Fair-Value-Kategorie bilanziell nicht offenzulegen, sondern letztere mit anders bezeichneten Posten zusammenzufassen oder zumindest nicht in den Handelsbestand zu untergliedern. Banken handeln offenbar in der Erkenntnis, dass die unterschiedliche Benennung eines identischen Sachverhalts zu Unterschieden in der Wahrnehmung des damit verbundenen Risikos führt (vgl. allgemein Weber et al. (2005), S. 597; und zu Beispielen aus der Bilanzierung Hopkins (1996), S. 33; Maines and McDaniel (2000), S. 179). Im Schrifttum werden maßgeblich Availability- oder (allgemeiner) Labelling-Effekte angeführt (vgl. zum Begriff Tversky and Kahneman (1973), S. 207; und zur bilanztheoretischen Bedeutung Koch and Wüstemann (2008)), um diese als Verzerrung ("bias") bezeichneten Unterschiede zu erklären. Übertragen auf die Bankbilanz bedeutet dies, dass die unterschiedliche Bezeichnung eines bestimmten Bilanzpostens, der in zwei verschiedenen Banken den gleichen Umfang an gleichartigen Finanzinstrumenten enthält, in einer unterschiedlichen Wahrnehmung des Risikos resultieren kann, dem die beiden Banken ausgesetzt sind.

Nun führen Availability- und Labelling-Effekte dann zu besonders ausgeprägten Wahrnehmungsverzerrungen, wenn für einen bestimmten Begriff ein vergangenes (negatives oder positives) Ereignis z. B. aufgrund von Medienberichterstattung gedanklich besonders gut verfügbar ("available") ist. Gesichert scheint dies für den Ausweis eines Finanzinstruments als Derivat, der mit dem Risiko hoher Verluste assoziiert wird (Koonce et al. (2005a), S. 871; Koonce et al. (2005b), S. 221; mit anekdotischen Beispielen Trombley (2003), S. 5-9). Selbst Manager erkennen diese negative Assoziation auf Seiten der Investoren an und reagieren mit entsprechender Anpassung ihres Risikomanagements (Bodnar and Gebhardt (1999), S. 160). Interessant ist vor diesem Hintergrund, dass Derivate in über der Hälfte der untersuchten Bankbilanzen in einem eigenen Bilanzposten erscheinen und entsprechende Möglichkeiten zur Zusammenfassung mit anderen Posten und damit zur Vermeidung der Begriffsverwendung hier nicht genutzt werden. Ob dies Verzerrungen in der Risikowahrnehmung verursacht, wird davon abhängen, ob es der jeweiligen

Bank gelingt, die risikobegrenzende Wirkung der Derivate in Sicherungsbeziehungen zu verdeutlichen; in vielen Banken geschieht auch dies wie gesehen unmittelbar in der Bilanz mit der ergänzenden Beschreibung der Instrumente als “hedging derivatives”. Sofern Investoren nämlich (bspw. aufgrund eines erfolgreichen Risikomanagements in der Vergangenheit) der ausschließlichen Verwendung von Derivaten in Hedge-Strategien vertrauen, wird dies sogar mit Abschlägen in der Risikowahrnehmung honoriert (Koonce et al. (2008)). Die durch hinreichende Evidenz aus experimenteller Forschung belegte Verzerrung in der Risikowahrnehmung einer Bank, die dem JWG-Vorschlag einer produktspezifischen Bilanzgliederung folgt, ist mithin eine gute Rechtfertigung dafür, dass IFRS 7 in seinen Gliederungsvorgaben nicht dem JWG-Standard folgt.

Offen ist, inwiefern diese Erkenntnisse auf die Risikowahrnehmung der Bewertungskategorien und vorrangig der Fair-Value-Kategorie, die besonderer europaweiter Medienberichterstattung ausgesetzt ist (vgl. nur Europäische Zentralbank (2004), S. 77), übertragen werden können. Nur wenn ihre Wahrnehmung (analog zu der Wahrnehmung von Derivaten) besonders von verzerrenden Availability-Effekten beeinflusst ist, wird sich das Offenlegungsverhalten von Banken erklären können. Entsprechende experimentelle Studien haben einen ersten Nachweis für diese Hypothese erbringen können (vgl. insbesondere Kapitel 3 dieser Dissertation). Zusammen genommen bieten diese Ergebnisse damit ein gewichtiges Argument für die Meinung (insbesondere Löw (2006), S. 19), dass eine Bankbilanzgliederung unmittelbar anhand des betriebswirtschaftlichen Verwendungszwecks wirtschaftlich vorteilhaft gegenüber einem am Produkttyp oder am Bewertungsmaßstab orientierten Format sei: Die Verwendung der letzteren beiden Formate führt zu einer mittelbaren Erwartungsbildung von Investoren über den zugrunde liegenden Verwendungszweck, die nachweislich regelmäßig verzerrt ist. Die in unserer Studie festgestellte Verbreitung der beiden Formate verlangt daher auch aus bilanztheoretischer Sicht eine Aktivität des Standardsetzers.

#### 4.1.5 Ergebnisse

Die IFRS eröffnen Banken viel Spielraum hinsichtlich des Ausweises von Finanzinstrumenten. Dies beginnt bei dem grundsätzlichen Gliederungsformat und setzt sich noch verstärkt bei Zusammenfassungen und Untergliederungen einzelner Bilanzposten fort. Die meisten Darstellungsmöglichkeiten bestehen für Finanzinstrumente in der Fair-Value-

Kategorie, die bereits ganz unterschiedlicher Natur sein können: Entweder sind sie als Handelsbestand, zu dem alle Derivate gehören, verpflichtend in dieser Kategorie vertreten oder als Designationsbestand wahlrechtsweise zum Fair Value bewertet. Herrschender Übung in der Praxis von europäischen Banken entspricht es, dass sich das Bilanzgliederungsformat nach den Kategorien von Finanzinstrumenten richtet, wie sie nach IAS 39 (eigentlich) zu Bewertungs- und nicht zu Ausweiszwecken vorgeschrieben sind. Etabliert sich dieses Format als Branchenpraxis (und auf anderem Wege wird gegenwärtig mangels Initiative des Standardsetzers eine Vergleichbarkeit von Bankbilanzen nicht erreicht werden), werden bei gegebener Wesentlichkeit der Position die Kredite und Forderungen nach den bankspezifischen Kreditnehmergruppen untergliedert. Untergliederungen anderer Posten finden sich genau wie Angaben zum Hedge Accounting lediglich im Anhang.

Zu bezweifeln ist, dass sich eine einheitliche Praxis bei der Untergliederung der Fair-Value-Kategorie in Handelsbestand, Designationsbestand sowie derivative Finanzinstrumente durchsetzt. Der Befund weist darauf hin, dass Banken insbesondere über den Bilanzausweis dieser Kategorie interessengeleitet entscheiden: In einer Bank, die die Fair-Value-Kategorie in der Bilanz gar nicht gesondert offenlegt oder sie zumindest nicht untergliedert, ist der relative Anteil der Finanzinstrumente, die zum Fair Value bewertet werden, im Durchschnitt signifikant höher als in Banken, die diese Informationen in der Bilanz offenlegen. Dieser Befund lässt sich nur betriebswirtschaftlich würdigen, indem an der Wahrnehmung der Fair-Value-Kategorien durch Investoren angesetzt wird. Offenbar erwarten Banken, dass die Fair-Value-Bewertung von Finanzinstrumenten negative Assoziationen bei individuellen Kapitalmarktteilnehmern hervorruft. Für Investoren ist daher der Bilanzanhang dieser Banken, in dem mit Inkrafttreten des IFRS 7 detaillierte Angaben zur Fair-Value-Kategorie nicht mehr fehlen dürfen, von besonderer Erheblichkeit.

## 4.2 Discretionary Disclosures by European Banks<sup>1</sup>

### 4.2.1 Problem

This chapter examines disclosure choices in IFRS financial statements of European banks. Specifically, we ask why some banks report details on fair value measurement and on derivatives usage on the balance sheet whereas others do so in the footnotes. This choice could either be driven by materiality of the respective class of assets or, since recognition and disclosure are non-equivalent sources of information to investors (Frederickson et al. (2006); Barth et al. (2003); Davis-Friday et al. (1999)), by discretionary behavior of managers. A potential explanation for discretionary behavior is provided by behavioral findings that there is a negative bias in investors' risk perception of fair value measurement in general (Hirst et al. (2004)) and of derivatives usage in particular (Koonce et al. (2005a)).

Risk perception by investors (and thus the indirect effect on asset pricing) is however only one motivation for disclosure management. Another important source are third party relations (Fields et al. (2001)). Among the most important players in the institutional environment of a bank are regulatory authorities. Even though regulatory institutions do not have a direct legitimation to interpret the application of IFRS, their recommendations undoubtedly have a de facto effect because the disclosure of financial statements is enforced by national banking supervisors. Thereby, it is important to note that European banking regulation is not as strongly harmonized as is financial reporting. All executive power is located at the national level while guidelines published by the Committee of European Banking Supervisors (CEBS) are not legally binding. Heterogeneity in disclosure choices of European banks might thus also be explained by differences in national bank regulation. Specifically, assets measured at fair value are required to be separately presented as line items on the balance sheet rather than in the footnotes in regulatory

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filings in France, Italy, Portugal, and Spain. This regulatory influence potentially offsets the tendency to conceal fair value measurement that is due to investors' biases in risk perception.

This chapter is motivated by two streams of accounting literature. First, there is a controversial and ongoing debate on fair value measurement of financial instruments. Some European countries, such as Denmark, have a long tradition of measuring banks' financial assets at fair value (Bernard et al. (1995)). In other countries, the implementation of fair value accounting in the course of the adoption of IAS 39 was highly disputed and it was the French government who finally arrived in the carve-out of some passages of the extant IAS 39 (Armstrong et al. (2007); Walton (2004)). While a general value relevance of fair values of financial assets has long been widely accepted (Ahmed et al. (2006); Wang et al. (2005); Barth (1994)), there is a current controversy on the economic effects of the volatility caused by banks' fair value measurement (Greenlaw et al. (2008); Ryan (2008)). The implied volatility might then be one explanation why fair value measurement has been found to be perceived as a risk factor in an experimental study by Hirst et al. (2004). These results suggest that there will likely be some interaction between a bank's disclosure choice and its choice of a measurement base. We strive to measure this interaction empirically.

Second, the chapter is closely related to literature examining management's incentives in accounting choices (see Fields et al. (2001) for an overview). On the one hand, there is a body of descriptive evidence on how companies present and disclose financial assets (Basel Committee on Banking Supervision (2003); Bodnar and Gebhardt (1999); Vietze (1997); Edwards and Eller (1996)). On the other hand, there is explanatory evidence on the factors that drive specific accounting choices. Beatty and Weber (2006) analyze the factors that explain management's choices in fair value measurement of goodwill. With respect to presentation of financial instruments, Gramlich et al. (2006) identify discretionary behavior in the choice of debt classification. This chapter attempts to both describe presentation of financial instruments across Europe and to explain the incentives management is facing in the corresponding disclosure choice.

We capture the disclosure choice by means of a data set that is (for the most part) directly collected from the financial statements of 200 European banks and that is unique in that it comprises the presentation format as well as the measurement bases of financial instruments which are not recorded in standard data bases. In addition, we collect data

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on the banks' extent of derivatives usage. We contribute to the literature as we diligently develop a theoretical explanation for disclosure choice that is based on extant behavioral theory and on prior experimental evidence suggesting that investors tend to associate a higher risk with assets known to be measured at fair value or to be characterized as financial derivatives than with other assets of the same economic characteristics (Koonce et al. (2005a,b)).

The main results of this chapter suggest that management indeed takes those biases into account when presenting financial assets. In particular, we find that the extent of a bank's fair value measurement is negatively associated with the probability of disclosing the measurement basis. This effect is in certain countries offset by the enforcement activities of national banking supervisors. With respect to financial derivatives, we observe that presentation on the balance sheet is also driven by an opportunistic choice rather than by the materiality of a bank's engagement in derivative contracts. However, footnote disclosures about investments in financial derivatives are increasing with materiality. This finding suggests that banks expect only sophisticated investors, for whom the balance sheet is the most important source of information, to have a bias in risk perception but not less-expert investors, who basically rely on footnote information. To sum up, the choices that the IFRS leave with respect to the disclosure of financial instruments are a severe limitation of the comparability of financial statements.

These results are of both practical and academic importance. Accounting for financial instruments is a core project of the IASB that will result in at least one more major revision of the accounting principles (International Accounting Standards Board (2008) and International Accounting Standards Board (2006c)). Empirical findings on the application of extant disclosure choices by European banks are thus of utmost importance to an improvement of the standard. Since management obviously acts discretionary in the presentation of financial assets, the current standard produces accounting information that is not achieving the theoretical objectives of comparability and decision-usefulness (IFRS F.12). Regulatory enforcement resulting in uniform and readily comparable disclosure practice within a few countries suggests that a uniform presentation format for banks would be one way to re-establish the comparability of financial statements of European banks. Besides the direct implications for standard-setting, this chapter provides evidence that management is considering cognitive biases of investors in its disclosure choices. Our research therefore also contributes to the theoretical understanding of accounting choice

in general.

The remainder of the paper is organized as follows: In section 2, we outline the institutional environment with respect to the presentation of financial instruments by European banks. In section 3, we derive our hypotheses from prior research. In section 4, we present and discuss the results of both univariate and multivariate analyses. Conclusions and implications of this chapter are summarized in section 5.

#### **4.2.2 Presentation of Financial Instruments under IFRS: The Institutional Setting**

The banking industry was once on the forefront of European IFRS adoption. One of the industry's major intentions was the accomplishment of greater comparability of financial statements across Europe (Cairns (1996)). The decision to adopt IFRS was then a courageous one since there was no comprehensive standard on accounting for financial instruments, by far the largest class of any bank's assets. Today, the guidance on how to account for financial instruments under IFRS is published in a booklet of some 500 pages. Yet it remains doubtful whether the once aspired comparability has indeed been accomplished. A major obstacle to comparability, and thereby to decision-usefulness, is the non-uniform way in which banks present financial instruments in their financial statements.

The first major difference stems from product-specific information. The Joint Working Group (JWG) of Standard Setters advocated a balance sheet presentation by product types in its draft standard on accounting for financial instruments (Joint Working Group of Standard Setters, 1999, BC 5.1-5.5). This approach aimed particularly at a distinction between derivative and non-derivative instruments and was due to the then ongoing public discussion about risks arising from engagements in financial derivatives (see Trombley (2003) for an overview). As the IFRS have always left banks with a high degree of discretion in the choice of the balance sheet presentation format, a product-specific presentation of financial instruments has never been required. In 2006, approximately 20% of European banks have voluntarily opted for a strict application of this format. In addition, some banks which have used another presentation format nonetheless introduced a separate line item at least for financial derivatives. All banks, however, were obliged to disclose

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detailed information about investments in derivatives (such as the nominal amount of swaps or the exercise date of options) in the risk report or in the footnotes (IAS 32.63 for the financial year 2006). With respect to financial derivatives, the major disclosure option is therefore the choice between separate presentation on the balance sheet and disclosure in the footnotes.

The second major difference is caused by measurement-related information. The categories that IAS 39 has introduced for measurement purposes were also used as primary line items on the 2006 financial statements by approximately 50% of European banks. Since IAS 30 and IAS 32 did not require the disclosure of measurement categories in the footnotes, it was only for these banks that investors were able to fully understand the use of the two measurement bases (fair value and amortized cost) being allowed by IAS 39. A distinction between instruments measured at fair value and those measured at amortized cost can be considered as useful because it allows the identification of earnings management which is a potential result of several options regarding the measurement of financial instruments (the fair value option being the most prominent one). The institutional change which became effective with the IFRS 7 adoption in the financial year 2007 establishes a unique setting for an empirical study of this disclosure choice in that IFRS 7 requires not only the disclosure of measurement categories used in the current financial year but also the disclosure of comparative data for 2006. Therefore, it is now possible to derive information about measurement choices by banks that was withheld from investors in 2006 and that might have explained a concurrent disclosure choice. In summary, the major disclosure option in 2006 with respect to measurement bases has been the choice between a separate presentation of the fair value category on the balance sheet and no information at all.

In the following, we will not restrict our analysis to a description of the set of accepted procedures but also, as it is the nature of positive accounting theory, focus on explanations of banks' choice among those accepted procedures (Watts and Zimmerman, 1986, p. 246) so that our main research question is: *What drives this disclosure choice?* The two general choices for the financial year 2006 have been the ones identified above: The first choice is about a product-specific distinction between derivative and non-derivative financial instruments on the face of the balance sheet, and the second choice is about the disclosure of the measurement bases.

### 4.2.3 Theoretical Framework and Hypotheses Development

In accordance with the principle of materiality as laid out in the IFRS Conceptual Framework (para. 29-30), the inclusion of any separate line item on the balance sheet could just be due to the relative importance of the underlying type of assets or liabilities to the business of the firm. Across firms, we should thus expect a positive association with the relative book value of a certain type of instrument and its separate presentation on the face of the balance sheet. However, accounting literature has long suggested other and potentially offsetting factors explaining accounting and disclosure choices. Fields et al. (2001) distinguish in their classification of management's motivations for disclosure choices between asset pricing motivations which could be related to contractual motivations and third-party relations, especially with regulators.

#### 4.2.3.1 Enforcement Activities by National Banking Supervisors

At first glance, the latter motivation seems more apparent in the banking industry. Banking institutions are like almost no other industry affected by regulatory activity. This regulatory activity usually focuses on the enforcement of capital restrictions and additional risk disclosures besides the financial statement (Linsley and Shrivies (2005), Basel Committee on Banking Supervision (2003)). In Europe, there are, however, some national supervisory authorities that prescribe the presentation of IFRS financial statements. An explicit requirement to report financial instruments by measurement categories is given, e.g., in Circular Letter No. 262 issued by the Banca d'Italia in December 2005. Under this decree, all Italian banks that apply the fair value option are obliged to separately disclose the respective instruments on the balance sheet. Information about the usage of financial derivatives can, on the other hand, only be disclosed in the footnotes. The enforcement of Circular Letter No. 262 is likely to be the dominant explanatory factor for presentation choices by Italian banks. The regulatory environment is similar in Portugal (according to Notice 1/2005 issued by the Banco de Portugal in February 2005).

The separate disclosure of assets measured at fair value is also mandatory in Spain (according to Circular Letter No. 04/2004 issued by the Banco de España in December 2004) where at the same time the additional disclosure of derivatives usage is required on the balance sheet. Instruction No. 2006-04 issued by the Banque de France in June 2006 only deals with regulatory filings which are as such not publicly available to investors

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and which have to be presented by measurement categories. As internal harmonization of regulatory and IFRS disclosures by a bank makes a transition of the accounting data redundant, it is likely to reduce reporting complexity and thereby costs so that the enforcement of the French instruction in regulatory filings will also affect disclosure choices in IFRS financial statements.

Reporting financial instruments by measurement categories, as required or at least recommended by, e.g., Italian, Spanish, Portuguese, and French banking supervision, is in conformity with a guideline issued by the Committee of European Banking Supervisors (CEBS (2007)) as an attempt to harmonize regulatory activity in Europe. This guideline is non-binding since executive and legislative power in banking supervision is located at the national level. Banking supervision in other countries indeed requires different presentation formats. The Danish FSA, e.g., as the national financial supervisory authority has the right to announce bank disclosure requirements that are more specific than those under IFRS. As a consequence, Executive Order No. 1466 issued in December 2006 prescribes a presentation of financial instruments by products that distinguishes, amongst others, between bonds and shares, but not between derivative and non-derivative instruments. In Denmark, neither measurement bases nor derivatives usage can therefore be inferred from the balance sheet. Other nordic countries such as Norway and Sweden require at least the separate disclosure of financial derivatives.

Overall, there are three groups of countries in Europe. First, there are countries where national supervisory authorities require banks to separately disclose financial derivatives and/or measurement categories on the face of the balance sheet. Secondly, there are countries where national supervisory authorities require some alternative presentation format that is not compatible with the separate disclosure of financial derivatives and/or measurement categories. In these countries, information about financial derivatives is contained in the footnotes and information about measurement categories is, if at all, only voluntarily provided in an additional statement. In these first two groups of countries, enforcement activity by national banking supervision is likely to have an effect on disclosure choices by banks. Such an observation would be in conformity with, e.g., Ball et al. (2003), Ball et al. (2000), or Leuz et al. (2003) who demonstrate that accounting quality or, more specifically, earnings management depends on the institutional environment, which provides preparers incentives for disclosure, rather than on the content of accounting standards. We can therefore conclude with the following hypotheses:

*H1a: The probability of a bank separately disclosing financial derivatives on the face of the balance sheet is positively associated with the enforcement of a corresponding presentation format by national banking supervision.*

*H1b: The probability of a bank presenting financial instruments by measurement categories is positively associated with the enforcement of a corresponding presentation format by national banking supervision.*

Yet, a majority of countries accepts that it is neither the responsibility nor the competence of bank regulators to interpret financial reporting standards. A requirement how to present regulatory filings should thus never override a presentation principle underlying the IFRS which are endorsed by the European legislative. In these other countries, third-party relations with regulators cannot explain disclosure choices with respect to financial derivatives and measurement bases.

#### **4.2.3.2 Market Effects of Presentation and Disclosure Choices**

##### **4.2.3.2.1 Literature Review**

The second motivation for accounting choices brought forward by Fields et al. (2001) are capital market consequences. Since this chapter is concerned with pure disclosure and presentation choices which do not affect measurement and income of a firm, it is at first necessary to justify the general relevance of these choices for investors. This justification can be based on evidence from both experimental and archival literature concerned with the impact of classification choices on investors' perceptions. A theoretical foundation of the different impact of balance sheet and footnote information is laid by Barth et al. (2003) and Hirshleifer and Teoh (2003). While the first study is based on a market setting where a higher information quality adherent to balance sheet information accounts for the higher price informativeness of balance sheet information in a rational expectations model, the latter study considers boundedly rational behavior by investors, for whom time and attention is costly, and derives conditions under which only limited attention is given to footnote information so that a management's presentation choice between balance sheet and footnote information potentially affects market prices.

The theoretical idea is confirmed in various experimental settings. Frederickson et al.

(2006), Dietrich et al. (2001) and Bloomfield and Libby (1996), for example, provide evidence that the general association between balance sheet information and market prices is stronger than the association between footnote information and market prices. This behavior can to a large extent be explained by the strong cognitive reliance of investors on labels used on the balance sheet which is not fully eliminated by detailed footnote information (Koonce et al. (2005a)). These results are conforming with behavioral theory stating that the individual perception of information by investors and the use of this information in decision-making strongly relies on the format in which the information is presented (i.e. on its framing, see Tversky and Kahneman (1986)). Libby et al. (2006) find in an experiment with professional participants that even auditors are less concerned with misstatements in footnotes than with misstatements on the balance sheet and require more often a correction of the latter.

Corresponding archival evidence for accounting information about financial derivatives is given by Ahmed et al. (2006) and McAnally (1996) who find a higher value-relevance and a higher risk-relevance, respectively, for financial derivatives recognized on the balance sheet than for those merely disclosed in the footnotes (see Koonce and Mercer (2005) for a broader overview). An explanation might be the higher reliability of balance sheet information as compared with information contained in the footnotes (Hodge et al. (2004)). With respect to short-term liabilities, Gramlich et al. (2006) find that even debt ratings are affected by the balance sheet classification of the instruments.

Generally speaking, an identical underlying economic situation will be perceived to be of different risk if the balance sheet does not appear in an identical format; footnote information cannot fully correct these misperceptions. Easily accessible information from the balance sheet corresponds more strongly with market prices than less easily accessible information from the footnotes does. Against this theoretical background, bank management has the possibility to influence investors' perceptions by opportunistically applying the presentation options regarding financial derivatives in particular and measurement bases of financial instruments in general.



#### 4.2.3.2.2 Biases in the Risk Perception of Financial Derivatives and Fair Value Measurement

There is by now some convincing evidence how the distinction of a certain type of financial instrument, i.e. the ease by which decision-makers can recall it, will result in a biased risk perception by investors. The ease is particularly high for financial derivatives due to investor's cognitive availability of losses from derivatives usage broadly covered in the media (Koonce et al. (2005a), Koonce et al. (2005b), and Koonce et al. (2008)). Evidence on the direction of a potential bias in the risk perception of financial derivatives is, however, more ambiguous. On the one hand, management seems to be aware of the findings on the cognitive availability of negative media coverage. Bodnar and Gebhardt (1999) and Vietze (1997) found in survey studies that a substantial number of managers anticipated a lack of knowledge about derivatives usage in their disclosure choices. Besides, there is a tendency to hide speculative involvement with financial derivatives (Benston and Mian (1995)). On the other hand, more recent findings suggest that the risk associated with derivatives usage significantly decreases if the hedging purpose is made explicit, i.e. if hedging instruments are presented separately (Koonce et al. (2005a)). This finding can be explained by evidence that certain classes of financial derivatives are indeed capable to reduce the risk exposure of banks (Guay (1999), McAnally (1996)).

In addition, a similar argument might hold as regards the presentation of financial instruments by measurement base. Reasonable investors might readily be aware of the IASB's repeatedly and publicly stated objective to measure at least those instruments at fair value that are exposed to short-term market risk and that in particular unexceptionally all financial derivatives are regarded to be exposed to that kind of risk. The more financial assets a bank presents under the label of fair value measurement, the more likely will investors then be to associate short-term market risk with the bank, even though the same instruments might just as well be involved in a well-hedged trading strategy. This negative association could easily have been established by media coverage, as fair value measurement was at the core of the political controversies surrounding the adoption of IAS 39 (see Hague (2004) or Walton (2004)).<sup>2</sup> Besides the French government, it was

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<sup>2</sup> The economic debate about the causes of the latest subprime crisis has also centered around fair value measurement (Ryan (2008)). Potential effects on disclosure choice can, however, not yet be observed in the data for the financial year 2006.

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especially the ECB which stressed the volatility of that measurement base and its potential risks for the whole banking industry (European Central Bank (2004), see Armstrong et al. (2007) for a timeline of IAS 39 implementation in Europe).

A recent survey provides initial evidence that fair value measurement is unfavorably viewed by professional investors at least if the valuation is based on internal models (Gassen and Schwedler (2008)). There is also ample evidence that volatile earnings are thought to be riskier than smooth earnings (Graham et al. (2005)) and that fair value measurement in the mixed accounting model under extant IAS 39 results in more volatile earnings (Gebhardt et al. (2004)). This might be an economic explanation for the experimental evidence provided by Hirst et al. (2004) that a firm that is exposed to interest rate risk and discloses a fair value label on the face of the balance sheet is judged to be of higher risk than an identically exposed firm disclosing fair value results solely in the notes. According to my findings in Chapter 3, risk perception by investors varies with the measurement category a financial instrument is classified into. More specifically, the risk of a bank presenting the use of the fair value option is, in this experiment, judged to be higher than the risk of banks presenting trading instruments or available for sale instruments.

The existence of a negative effect of these biases in the risk perception of financial derivatives and fair value measurement on asset pricing, which could in turn motivate managers to disclose financial instruments opportunistically, still needs to be established. Lambert et al. (2007) have shown that cost of capital generally depends on investors' assessment of the covariance between the cash flows of a firm with the cash flows of all market participants. The assessment of the variance of a firm's own cash flows forms part of this evaluation. This is where we can combine classical capital market theory and the insights from behavioral theory discussed above: It is the variance of the cash flows of two economically alike banks that might be perceived to differ if investors learn that one bank has invested more in financial derivatives or is more broadly applying the fair value option. In terms of a pricing model, a higher risk is tantamount to a higher variance of cash flows through which the covariance with other cash flows, and thereby the cost of capital, can be affected. To sum up, the more financial derivatives a bank has invested in and the more fair value measurement is applied, the more has the disclosure of it the potential to negatively affect equity prices. From this, we can derive two hypotheses that would provide evidence for opportunistic behavior in disclosure choices:

*H2a: The probability of a bank separately disclosing financial derivatives on the face of the balance sheet is negatively associated with the materiality (i.e. the relative value) of the financial derivatives.*

*H2b: The probability of a bank presenting financial instruments by measurement categories is positively associated with the materiality (i.e. the relative value) of financial instruments measured at fair value.*

## **4.2.4 Empirical Results**

### **4.2.4.1 Sample and Descriptive Statistics**

The sample is taken from BvD BankScope. From 28 European countries, all banks are selected which present consolidated financial statements (codes C1 or C2) in accordance with IFRS. Overall, 545 banks are hereby identified. We exclude banks that are not primarily engaged in retail, i.e. commercial, banking so that broker firms, investment banks, clearing banks, stock exchanges, and investment trusts are not contained in the sample (66 banks). Deviations in presentation choices by these kind of firms from presentation choices by commercial banks would be solely due to fundamental differences in the business model. To avoid biases from the impact of non-European enforcement institutions, subsidiaries of parent banks located outside of Europe (19 banks) are eliminated from the sample. Subsidiaries of parent banks that are themselves included in the sample (215 banks) are also excluded in order not to double-count certain presentation choices. Finally, some financial statements were not available on the internet, or at least were not available in English, so that their banks' presentation choices could not be analyzed due to practical impediments (this affected 45 banks in total, see Table 4.1 for details).

Overall, 200 banks from 28 different European countries are included in the final sample. Basic financial data (total assets, equity capital and net income) for the financial year 2006 is taken from BvD BankScope whereas data on presentation choices is manually collected from the original financial statements for the financial year 2006. As pointed out above, the use of measurement categories in 2006 had to be identified from 2007 financial statements because with IFRS 7 becoming effective this kind of disclosure was mandatory for the first time so that the measurement bases of financial instruments presented in the 2006 financial statement could be retrospectively identified from the 2007 comparative

TABLE 4.1: SAMPLE SELECTION

European Banks presenting consolidated IFRS accounts (BvD Codes C1 or C2)	545
Major Business not in Retail (Commercial) Banking	66
Subsidiaries (>50%) of a Non-European Bank	19
Subsidiaries (>50%) of Another European Bank in the Sample	215
Financial Statements for 2006 not Published in English Language	36
Financial Statements not Published on the Internet (as of September 1, 2008)	9
<hr/>	
# Banks (Total Sample)	200
IFRS 7 Application in 2006	11

information. A total of 400 financial statements were thus evaluated in detail.

The summary in Table 4.2 shows that the sample is extremely heterogeneous across countries in terms of bank size, with average total assets within a range from 837m. EUR (Lithuania) to 476,296m. EUR (France). Heterogeneity across countries can also be observed with respect to the main variables of interest in this chapter. The average investment in financial derivatives (as a fraction of the total book value of financial instruments) varies between .02% (Cyprus) and 5.93% (France). There are six countries in which all banks contained in the sample separately present their financial derivatives on the balance sheet (Greece, Ireland, Latvia, Norway, Spain, and Slovenia) and seven countries in which no bank does so (Cyprus, Denmark, Hungary, Italy, Malta, Portugal, and Slovakia). The fair value option is, on average, most widely applied in Denmark (33.5% of total financial instruments). Its application is least common in Cyprus (.08%). In Italy and Spain, 83% of the banks contained in the sample separately present the fair value option on the balance sheet. This is the largest proportion in the sample (the other 17% do not apply the option in both countries). There are nine countries in which no bank presents its use of the fair value option (Cyprus, Denmark, Finland, France, Greece, Hungary, Malta, Norway, and Sweden).

TABLE 4.2: SAMPLE STATISTICS BY COUNTRY

Country	N	Total Assets		Fair Value Option			Financial Derivatives		
		Mean	SD	Mean	SD	Disclosure	Mean	SD	Disclosure
Sample	200	133,014	298,625	.0518	.1097	.30	.0245	.0327	.43
Austria	11	44,817	57,175	.1126	.1239	.09	.0176	.0147	.09
Belgium	5	337,772	338,370	.0471	.0807	.80	.0353	.0265	.40
Cyprus	3	10,698	12,879	.0033	.0008	.00	.0014	.0002	.00
Czech Rep.	4	19,350	12,138	.0232	.0364	.25	.0213	.0046	.75
Denmark	11	42,284	108,292	.1827	.3350	.00	.0214	.0192	.00
Finland	4	18,676	22,085	.2101	.2923	.00	.0281	.0238	.75
France	10	476,296	543,835	.0351	.0261	.00	.0620	.0593	.20
Germany	13	166,750	190,643	.0390	.0532	.23	.0578	.0507	.08
Greece	9	26,955	27,709	.0129	.0198	.00	.0035	.0038	1.00
Hungary	4	10,765	11,889	.0197	.0395	.00	.0048	.0015	.00
Iceland	5	18,455	17,828	.0448	.0295	.40	.0170	.0111	.40
Ireland	4	124,191	58,467	.1066	.1716	.25	.0202	.0109	1.00
Italy	24	83,812	196,727	.0280	.0379	.83	.0258	.0251	.00
Latvia	7	1,103	1,176	.0005	.0012	.14	.0012	.0014	1.00
Lithuania	4	837	779	.0034	.0069	.25	.0008	.0012	.25
Malta	2	2,881	3,578	.0783	.0760	.00	.0010	.0011	.00
Netherlands	9	330,228	477,133	.0108	.0153	.22	.0313	.0354	.56
Norway	7	28,854	58,770	.1871	.1172	.00	.0137	.0188	1.00
Poland	4	13,051	9,000	.0154	.0309	.25	.0188	.0111	.75
Portugal	10	31,081	35,068	.0317	.0552	.50	.0111	.0080	.00
Slovakia	3	3,314	2,458	.0079	.0112	.33	.0158	.0183	.00
Slovenia	6	4,147	5,206	.0017	.0041	.50	.0005	.0007	.50
Spain	12	146,533	246,558	.0023	.0051	.83	.0195	.0213	1.00
Sweden	4	227,260	84,319	.1429	.1440	.00	.0426	.0235	1.00
Switzerland	5	305,597	662,095	.1578	.1984	.20	.0577	.0431	.40
UK	18	342,785	533,737	.0319	.0486	.17	.0286	.0475	.83

One bank each from Croatia and Estonia is included in the sample. Total assets are calculated from book values and denoted in million EUR. Application of the fair value option is calculated as the ratio of the book value of financial instruments that are optionally measured at fair value to the total book value of financial instruments. Usage of financial derivatives is calculated as the ratio of the fair value of financial derivatives to the total book value of financial instruments. ‘Disclosure’ denotes the fraction of banks separately presenting the fair value option or the financial derivatives, respectively, on the face of the balance sheet.

We model the disclosure behavior of a bank as a binary choice. Our first dependent variable, DERIVDSCL, takes a value of 1 if a bank separately presents the financial derivatives on the balance sheet and a value of 0 otherwise. Our second dependent variable, FVODSCL, takes a value of 1 if a bank discloses the use of the fair value option in the financial statement. The two experimental variables, DERIVREL and FVOREL, are inferred from our hypotheses. DERIVREL represents the relative book value (i.e. the fair value) of a bank’s financial derivatives as a fraction of the total book value of financial instruments. We use it as a proxy for the extent to which a bank has invested in financial derivatives. FVOREL represents the relative book value of a bank’s financial

assets that are optionally measured at fair value through profit & loss (as a fraction of the book value of total financial instruments). We use it as a proxy for the extent to which a bank voluntarily applies fair value as a measurement base.

In addition, four control variables that were identified in other studies as being explanatory for accounting choices in general are introduced for the multivariate analysis: SIZE, EQUITY, RETURN, and LISTING. Size is regarded to be an explanatory variable in various settings (see Kerstein and Rai (2007) or Baginski et al. (2004) for recent examples). We use the natural logarithm of the book value of a bank's total assets as a proxy for size. Other factors that might explain disclosure choice are a bank's leverage and its profitability (Gramlich et al. (2001)). Therefore, we introduce EQUITY (a bank's ratio of the total book value of equity to the book value of its total assets) and RETURN (a bank's ratio of net income to its book value of equity) into the matrix of control variables. Wasley and Wu (2006), for example, find analyst following to be explanatory for the decision to voluntarily disclose cash flow forecast. We use the public listing of a bank's equity instruments as a proxy for analyst following. LISTING is used as a binary control variable taking a value of 1 if at least one equity instrument of a bank is publicly listed. Descriptive statistics for all variables are summarized in Table 4.3.

#### 4.2.4.2 Usage of Financial Derivatives and Presentation Choice

A univariate analysis of the presentation of derivatives usage provides some initial evidence supporting (H1a) and (H2a). Univariate tests of the experimental and control variables are summarized in Panel A of Table 4.4. Among all banks, the average usage of financial derivatives is 2.85% for banks that do not separately disclose derivatives and 1.96% for banks that disclose the information on the balance sheet ( $p = .066$ , two-sided). Evidence is both economically and statistically stronger if we restrict the observations to banks in non-regulated environments, i.e. to countries in which banking regulation does neither restrict nor require the separate presentation of derivatives ( $N=111$ ). The mean in this sub-sample is 3.81% for banks that do not disclose and 2.12% for banks that disclose ( $p = .027$ , two-sided), and a non-parametric Wilcoxon test for differences between the medians is significant at a 10%-level. We also observe that capital ratio and return to equity are higher in banks that disclose financial derivatives.

Banking regulation obviously confounds presentation choices which is in conformity

TABLE 4.3: DEPENDENT AND INDEPENDENT VARIABLES

Variable	Mean	SD	Median	Minimum	Maximum
<i>Dependent Variables:</i>					
DERIVDSCL	.4300	.4963	.0000	.0000	1.0000
FVODSCL	.3000	.4594	.0000	.0000	1.0000
<i>Experimental Variables:</i>					
DERIVREL	.0245	.0327	.0105	.0000	.1454
FVOREL	.0518	.1097	.0113	.0000	.9191
<i>Control Variables:</i>					
SIZE	23.5641	2.2369	23.6274	17.7529	28.0297
EQUITY	.0786	.0555	.0668	.0144	.5488
RETURN	.1490	.0655	.1412	.0000	.4715
LISTING	.6200	.4866	1.0000	.0000	1.0000

DERIVDSCL (FVODSCL) is a binary dependent variable which is set equal to 1 if a bank separately presents the usage of financial derivatives (the application of the fair value option) on the face of the balance sheet (0 otherwise). DERIVREL (FVOREL) denotes the experimental variable and is calculated as the ratio of the fair value of financial derivatives (of financial instruments optionally measured at fair value) to the total book value of the bank's financial instruments. SIZE, EQUITY, RETURN, and LISTING are used as control variables. SIZE is measured as the natural logarithm of the book value of total assets. EQUITY denotes the ratio of the book value of equity (under the definition of IAS 32) to the book value of total assets. RETURN is calculated as the ratio of net income to the book value of equity. LISTING is a binary variable equal to 1 if at least one class of the bank's equity shares is publicly traded (0 otherwise).

with (H1a). Therefore, we introduce two additional binary variables that control for institutional differences across countries, REGPOS and REGNEG. REGPOS takes a value of 1 if banking supervision requires or recommends the separate disclosure of financial derivatives on the balance sheet (Greece, Ireland, Latvia, Norway, Spain, and Slovenia) and 0 otherwise. REGNEG takes a value of 1 if banking supervision restricts this presentation choice (Cyprus, Denmark, Hungary, Italy, Malta, Portugal, and Slovakia). Panel B of Table 4.4 reveals that both variables are highly correlated with the dependent variable DERIVDSCL. DERIVREL does, however, only significantly correlate with DERIVDSCL if the sub-sample of non-regulated countries is used (Pearson- $\rho = -.2166$ , Spearman- $\rho = -.1736$ ). The negative coefficient is again in conformity with (H2a).

The multivariate analysis by means of a probit model shows an effect in the same direction. The coefficient for DERIVREL is significantly negative ( $p < .05$ , two-sided) both in the basic model and in the model including REGPOS and REGNEG (see Table 4.5 for details). The size of the effect is similar in both models: On average, a 1% increase in derivatives usage is associated with a 4% decrease in disclosure probability. The latter

TABLE 4.4: PRESENTATION OF DERIVATIVES: UNIVARIATE ANALYSIS

Panel A. Univariate Tests for Differences								
	Total Sample				Non-regulated Countries			
	DERIVDSCL=0		DERIVDSCL=1		DERIVDSCL=0		DERIVDSCL=1	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
N	114		86		57		54	
DERIVREL	.0285	.0146	.0196*	.0088	.0381	.0201	.0212**	.0113*
SIZE	23.4393	23.3894	23.7296	23.9008	23.7847	23.8980	23.5980	23.8480
EQUITY	.0780	.0651	.0795	.0677	.0735	.0557	.0795	.0690**
RETURN	.1434	.1353	.1564	.1511*	.1467	.1337	.1667	.1605**
LISTING	.6053		.6395		.5614		.5370	

Panel B. Correlation Matrix								
	DERIVDSCL	REGPOS	REGNEG	DERIVREL	SIZE	EQUITY	RETURN	LISTING
DERIVDSCL				-.2166**	-.0369	.0483	.1440	-.0245
				-.1736*	-.0685	.2332**	.1608*	-.0193
REGPOS	.5025***							
	.4965***							
REGNEG	-.5484***	-.2755***						
	-.5461***	-.2712***						
DERIVREL	-.1356*	-.1068	-.1141		.6525***	-.2617***	.0155	.1805*
	-.1056	-.0871	-.0471		.7552***	-.5731***	.1426	.2809***
SIZE	.0644	.0758	-.1331*	.6125***		-.5935***	.0769	.3118***
	.0398	.0786	-.1196	.6728***		-.7404***	.1381	.3067***
EQUITY	.0132	.0066	.0445	-.2528***	-.5268***		.0668	-.0503
	.0659	-.0133	.1490**	-.4813***	-.6159***		.0044	-.1837*
RETURN	.0981	-.0677	-.0851	.0577	.0964	.0385		.1186
	.0939	-.0611	-.0571	.1781**	.1458**	-.0688		.2642***
LISTING	.0350	.1731	.0379	.1083	.2499***	-.0549	.1273*	
	.0051	.1596	.0982	.1689**	.2370***	-.0888	.2259***	

Panel A gives univariate tests for differences between means (medians) of banks that disclose derivatives usage on the face of the balance sheet and those that do not. Variables are defined in Table 4.3. Parametric test statistics for differences between means are calculated in t-tests (in z-tests for LISTING). Non-parametric test statistics for differences between medians are calculated in Wilcoxon rank-sum tests. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% level, respectively. All p-values are two-sided. Non-regulated countries are countries in which national banking supervision does neither require nor forbid a separate disclosure of derivatives usage. Panel B reports the correlation coefficients. Pearson correlations are reported in the first row, Spearman correlations are reported in the second row. Below the diagonal, the coefficients are calculated from the total sample (N=200). Above the diagonal, the coefficients are calculated from the subsample of non-regulated countries (N=111). REGPOS (REGNEG) is a dummy variable equal to 1 if national banking supervision requires (restricts) the separate disclosure of derivatives usage (0 otherwise). \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% level, respectively.

model has, however, substantially more explanatory and predictive power than the basic model. The two coefficients for REGPOS and REGNEG are statistically significant in the hypothesized directions. This is further evidence for the strong impact of the enforcement by national banking supervisors on presentation choices by banks.



TABLE 4.5: PRESENTATION OF DERIVATIVES: PROBIT MODEL

Dependent variable Model	Presentation of Derivatives Usage (DERIVDSCL)			
	Basic Model		Regulation	
	Coefficient (Robust SE)	$dy/dx$	Coefficient (Robust SE)	$dy/dx$
CONST	-3.576 (1.508)		-2.530 (2.101)	
<i>Test Variable</i>				
DERIVREL	-10.892 (3.903)	-4.289	-11.024 (4.992)	-4.398
<i>Control Variables</i>				
REGPOS			6.673 (.000)	.5046
REGNEG			-6.598 (.000)	-.4954
SIZE	.144 (.064)	.057	.103 (.088)	.041
EQUITY	2.168 (1.991)	.854	1.936 (2.934)	.772
RETURN	1.212 (1.420)	.477	2.033 (1.949)	.811
LISTING	-.089 (.205)	-.035	-.097 (.273)	-.039
$\chi^2$ (p-value)	9.87 (.079)		> 100 (< .001)	
McFadden's (adjusted) $R^2$	.04 (.00)		.46 (.40)	
Correct predictions (scaled)	64.7% (21.7%)		78.8% (47.4%)	

Tests were conducted with the total sample of banks. Due to incomplete observations, 16 banks were excluded (N=184). Variables are defined in Table 4.3. REGPOS and REGNEG are dummy variables that are included in the regulation model. REGPOS (REGNEG) takes a value of 1 if national banking supervision requires (restricts) the separate presentation of financial derivatives on the face of the balance sheet. Coefficients are reported with robust standard errors in parentheses.  $dy/dx$  is the average derivative evaluated with all independent variables set at their mean or (for binary variables) at their median, respectively. For the binary variables REGPOS, REGNEG, and LISTING,  $dy/dx$  is equal to the difference in the probability of MEASDSCL=1 between values of 0 and 1. McFadden's  $R^2$  is calculated according to McFadden (1973). The percentage of correct predictions is scaled according to Veall and Zimmermann (1996).

There is another aspect to be considered with respect to financial derivatives. As outlined in the institutional setting, forgoing a presentation of derivatives on the balance sheet will lead to an obligation to provide footnote information. The finding that an increase in the investment in derivatives is associated with a decrease in the probability of balance sheet presentation should thus correspond with an increase in footnote

TABLE 4.6: FOOTNOTE DISCLOSURE OF DERIVATIVES

	DERIVDSCL=0		DERIVDSCL=1	
	Mean	Median	Mean	Median
N	114		86	
RISKREPORT	17.407	8.0	10.123***	9.0
MARKETRISK	6.527	3.0	4.173**	4.0
ACCPOLICY	75.62	62.0	62.65**	56.0*

RISKREPORT denotes the total page numbers of a bank's audited risk report (as part of either the footnotes or the management review). MARKETRISK denotes the number of pages devoted to disclosures about market risk exposures, i.e. exposures to changes in market prices such as interest rates, currencies, or equity prices. ACCPOLICY denotes the total page numbers of the footnotes (excluding the risk report) which accompany the financial statement. Univariate tests are conducted for differences between means (medians) of banks that disclose derivatives usage on the face of the balance sheet and those that do not. Parametric test statistics for differences between means are calculated in t-tests. Non-parametric test statistics for differences between medians are calculated in Wilcoxon rank-sum tests. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% level, respectively. All p-values are two-sided.

disclosures. Table 4.6 shows that the average length (proxied for by page numbers) of footnote disclosures is indeed significantly higher for banks not disclosing derivatives on the balance sheet (75.62 pages vs. 62.65 pages,  $p < .05$ , two-sided). Page numbers are an admittedly noisy proxy. The advantage of that measure is its high degree of objectivity (Daske et al. (2007)). The results still hold and are even stronger if the analysis focuses on those parts of the footnotes that are most relevant for disclosures of financial derivatives, i.e. the risk report and the market risk section within the risk report. Since footnote disclosure is more relevant for investors who exert a high information-processing effort (usually professional investors) than for less-expert investors (Kachelmeier and King (2002); Koonce and Mercer (2005)), managers seem to expect that the bias in the risk perception of financial derivatives is stronger for non-professional investors and that more sophisticated investors are able to distinguish between risk-decreasing and risk-increasing engagements in derivatives if sufficient information is provided.

#### 4.2.4.3 Fair Value Measurement and Presentation Choice

In a univariate analysis of (H1b) and (H2b), we test for differences in the means and medians of FVOREL between banks that disclose and banks that do not disclose the use of the fair value option. Since only 62.5% of all banks in the sample apply the fair value option, tests are conducted with this sub-sample (N=123). The results are summarized in

Panel A of Table 4.7. The average fraction of financial instruments optionally measured at fair value is 9.77% (median 4.36%) for banks that disclose and 3.53% (median 1.97%) for banks that do not disclose the measurement bases. The differences are economically substantial and statistically significant. The results remain significant, albeit only at the 5%-level, in the sub-sample of non-regulated countries ( $N=73$ ). We observe in both samples that, if banks disclose the fair value option, they are, on average, larger in size than otherwise.

The correlation matrix in Panel B of Table 4.7 shows that banking regulation has again a strong impact on disclosure choice. We introduce REGPOS as a dummy variable for countries in which banking supervision requires or recommends the presentation of the fair value option (Spain, Italy, and Portugal) and REGNEG as a dummy variable for countries in which banking supervision restricts a balance sheet presentation by measurement bases (Denmark, France, Greece, and Norway). Both variables are correlated with FVODSCL in the hypothesized directions. The correlation of FVOREL and FVODSCL is significantly negative (Pearson- $\rho = -.2392$ , Spearman- $\rho = -.2059$ ). Due to the small sample size, the significance becomes, however, relatively low in the sub-sample of non-regulated banks.

The results of the multivariate analysis by means of a probit model underline the findings in the univariate analysis (Table 4.8). In individual tests of the effect on MEASDSCL, the coefficient on FVOREL is significantly negative both in the basic model and in the amended model including REGPOS and REGNEG as control variables ( $p < .05$ , two-sided). This is the hypothesized direction in (H2a). The size of the effect is somewhat smaller than for financial derivatives. A 1% increase in the proportion of instruments optionally measured at fair value is associated with a 2.0% (1.4%) decrease in disclosure probability. The difference in the coefficients for FVOREL is likely to be due to the correlation between FVOREL and both REGPOS and REGNEG so that there seems to be an omitted variables bias in the basic model. The inclusion of the institutional control variables substantially increases explanatory and predictive power of the model so that the results overall support the importance of enforcement activity by national banking supervision as hypothesized in (H1b).

TABLE 4.7: DISCLOSURE OF FAIR VALUE OPTION: UNIVARIATE ANALYSIS

Panel A. Univariate Tests for Differences								
	Total Sample				Non-regulated Countries			
	FVODSCL=0		FVODSCL=1		FVODSCL=0		FVODSCL=1	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
N	79		44		51		22	
FVOREL	.0977	.0436	.0353***	.0197**	.0917	.0374	.0419**	.0233
SIZE	24.1059	24.0288	24.8132*	24.5446*	24.0944	24.0442	25.1062*	25.6357*
EQUITY	.0688	.0567	.0654	.0674	.0730	.0567	.0567	.0538
RETURN	.1523	.1513	.1562	.1406	.1529	.1573	.1722	.1648
LISTING	.6962		.6591		.7059		.5909	

Panel B. Correlation Matrix								
	FVODSCL	REGPOS	REGNEG	FVOREL	SIZE	EQUITY	RETURN	LISTING
FVODSCL				-.2046*	.2285**	-.1115	.1318	-.1123
				-.0708	.2100*	-.0992	.0878	-.1123
REGPOS	.5276***							
	.5276***							
REGNEG	-.3675***	-.2549***						
	-.3675***	-.2549***						
FVOREL	-.2392***	-.1782**	.1681*		.0314	.0120	.0171	.0380
	-.2059**	-.2294**	.1606*		.1308	-.0510	.0845	-.0042
SIZE	.1623*	.0187	-.0483	-.0240		-.5775***	.0488	.2482**
	.1486*	.0050	-.0474	.0414		-.7357***	.1990*	.2353**
EQUITY	-.0299	.0413	-.0574	-.0150	-.5197***		.1149	.0240
	.0979	.2417	-.0231	-.0199	-.6435***		.0313	-.0567
RETURN	.0295	-.0771	-.0382	-.0800	.0971	.0588		.2031*
	-.0234	-.0880	-.0272	-.0014	.2100**	-.0678		.3017***
LISTING	-.0382	.0104	.0269	-.0562	.1923**	-.0571	.0571	
	-.0382	.0104	.0269	-.0128	.1934**	-.0556	.1447	

Tests were conducted with the subsample of banks applying the fair value option for financial instruments in the financial year 2006 (N=123). Panel A gives univariate tests for differences between means (medians) of banks that disclose the application of the fair value option on the face of the balance sheet and those that do not. Variables are defined in Table 4.3. Parametric test statistics for differences between means are calculated in t-tests (in z-tests for LISTING). Non-parametric test statistics for differences between medians are calculated in Wilcoxon rank-sum tests. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% level, respectively. All p-values are two-sided. Non-regulated countries are countries in which national banking supervision does neither require nor forbid a separate disclosure of the fair value option. Panel B reports the correlation coefficients. Pearson correlations are reported in the first row, Spearman correlations are reported in the second row. Below the diagonal, the coefficients are calculated from the total subsample (N=123). Above the diagonal, the coefficients are calculated from the subsample of non-regulated countries (N=73). REGPOS (REGNEG) is a dummy variable equal to 1 if national banking supervision requires (restricts) the separate disclosure of the fair value option (0 otherwise). \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% level, respectively.

#### 4.2.4.4 Robustness Checks

A major weakness of the statistical models is caused by the skewness of both DERIVREL and FVOREL. Both variables are right-skewed with the mass of the distribution being

TABLE 4.8: DISCLOSURE OF FAIR VALUE OPTION: PROBIT MODEL

Dependent variable Model	Presentation of Fair Value Option (FVODSCL)			
	Basic Model		Regulation	
	Coefficient (Robust SE)	$dy/dx$	Coefficient (Robust SE)	$dy/dx$
CONST	-3.641 (1.734)		-4.994 (2.230)	
<i>Test Variable</i>				
FVOREL	-5.941 (1.908)	-1.996	-4.781 (2.006)	-1.404
<i>Control Variables</i>				
REGPOS			1.527 (.379)	.555
REGNEG			-6.526 (.000)	-.217
SIZE	.148 (.070)	.050	.188 (.090)	.055
EQUITY	2.408 (2.291)	.809	1.869 (2.144)	.549
RETURN	.046 (2.043)	.016	1.760 (2.231)	.517
LISTING	-.280 (.271)	-.101	-.404 (2.230)	-.119
$\chi^2$ (p-value)	12.87 (.025)		> 100 (< .001)	
McFadden's (adjusted) $R^2$	.10 (.03)		.37 (.27)	
Correct predictions (scaled)	63.4% (0%)		81.3% (47.7%)	

Tests were conducted with the subsample of banks applying the fair value option for financial instruments in the financial year 2006 (N=123). Variables are defined in Table 4.3. REGPOS and REGNEG are dummy variables that are included in the regulation model. REGPOS (REGNEG) takes a value of 1 if national banking supervision requires (restricts) the separate presentation of the fair value option on the face of the balance sheet. Coefficients are reported with robust standard errors in parentheses.  $dy/dx$  is the average derivative evaluated with all independent variables set at their mean or (for binary variables) at their median, respectively. For the binary variables REGPOS, REGNEG, and LISTING,  $dy/dx$  is equal to the difference in the probability of MEASDSCL=1 between values of 0 and 1. McFadden's  $R^2$  is calculated according to McFadden (1973). The percentage of correct predictions is scaled according to Veall and Zimmermann (1996).

concentrated below the mean. The skewness could result in the size and standard errors of coefficients being sensitive to outliers in the sample. Therefore, we apply the bootstrap method to test for the robustness of the test statistics (Greene (2003)). Hereby, the sample is randomly redrawn from the original sample with replacement so that we obtain empirical distributions of the estimated coefficients for DERIVREL and FVOREL.

Running 1,000 iterations of the probit models containing REGPOS and REGNEG, the bootstrap standard error is 6.461 ( $p = .088$ , two-sided) for the coefficient on DERIVREL and 2.531 for the coefficient on FVOREL ( $p = .059$ , two-sided). Due to the skewness of the distributions, the bootstrap standard errors are indeed higher than the robust ones. The negative coefficients remain, however, weakly significantly different from zero. A truncation of the distributions also yields significantly negative coefficients so that the results do not seem to be solely caused by outliers.

We have also used a number of other control variables that are sometimes found in the literature (e.g., the number of board managers to control for differences in corporate governance) in the models. For brevity, we do not report the results because those variables fail to explain presentation choices and do not substantially alter the results for the experimental variables.

#### 4.2.5 Implications and Conclusions

We analyze presentation and disclosure choices by European banks. Our findings show that presentation choices are not based on the materiality of the different classes of financial instruments but can rather be explained by third-party relationships with regulators and by capital market effects. The latter seems to be the cause for discretionary action of banks or, specifically, for opportunistic disclosure management. We argue with respect to behavioral theory that particularly the investment in financial derivatives and the application of fair value accounting result in biases in investors' risk perception. Such a negatively biased risk perception of financial derivatives and fair value measurement was confirmed in several experimental studies. We hypothesize that banks are aware of those biases and therefore try to adjust their reporting strategies.

We find in a comprehensive sample of European banks that the relative book value of both financial derivatives and financial instruments optionally measured at fair value is indeed negatively associated with the probability of separately disclosing a respective line item on the balance sheet. The interpretation is that the larger the extent to which a bank has invested in financial derivatives or to which a bank applies fair value measurement, the less likely the bank is to disclose that information. The empirical evidence supports our hypotheses. In the case of derivatives, however, we need to interpret the results more carefully, because, with usage of derivatives increasing and balance sheet information

diminishing, detailed footnote information is also increasing. This finding suggests that banks expect sophisticated investors who are more likely to consider the footnotes to have a smaller bias in risk perception of derivatives than less-expert investors who often restrict their analysis to the balance sheet.

Another apparent factor affecting the presentation choice is the regulatory environment of a bank which is not yet fully harmonized across Europe. Some national regulating institutions explicitly require or recommend a presentation of financial instruments by measurement categories as well as a separate presentation of financial derivatives. There is significant evidence in our sample that such a regulatory action strongly affects a bank's disclosure choices. If we accept that the high degree of heterogeneity in the presentation of financial instruments across banks results in a lack of comparability and thereby negatively affects the decision-usefulness of IFRS financial statements, this finding calls for a more distinct interpretation of the presentation principles under IFRS 7. This may be achieved by standard setting itself but it may also be achieved by action of European enforcement institutions.

Overall, the results are a substantive call for standard-setting activity. Both opportunistic behavior by banks and regulatory heterogeneity in the enforcement across Europe will only be reduced if the IFRS provide banks with a binding framework for the presentation of financial instruments. The management approach realized in IFRS 7 is not a useful approach to ensure comparability and usefulness of information, since materiality is currently not the driving factor in the disclosure of financial instruments.

## 4.3 The Impact of IFRS 7 Adoption on Bank Disclosure in Europe<sup>1</sup>

### 4.3.1 Problem

As part of its long-term project on financial instruments, the IASB has consolidated all disclosure requirements related to financial instruments in IFRS 7. The endorsed standard became effective in Europe for firm years beginning after December 31, 2006. While the standard has to be applied by all companies engaged in financial instruments, it is likely to have a particularly strong effect on the banking industry, where financial instruments account for more than 90% of total assets and liabilities on average. This study examines the effect of the first-time adoption of IFRS 7 on disclosure and presentation choices by European banks and thereby on overall disclosure quality. The results shed light on how the introduction of more specific and mandatory disclosure requirements alters the disclosure of previously voluntary information, and they yield insight regarding how the introduction of additional voluntary disclosure recommendations affects the behavior of financial statement preparers. In order to explain cross-country differences in the change in disclosure quality, the study further investigates how various institutional settings at the national level influence the application of IFRS 7.

The examination of the effect of IFRS 7 adoption on disclosure quality is motivated by prior empirical literature on bank disclosure. Nelson et al. (2008), Hodgeon and Wallace (2008), and Ernst & Young (2008) suggest that IFRS 7 adoption has had, generally speaking, a positive effect on disclosure quality for large banks. The conclusions are based on descriptive evidence from small samples of selected major banks (sample sizes are in a range from 17 to 24 banks). Prior to IFRS 7 adoption, Hossfeld (2004) investigates disclosure practices in the IFRS financial statements of 26 European banks and observes a severe lack of comparability. Woods and Marginson (2004) analyze the effect of the then newly published British standard FRS 13 on derivatives disclosures by nine UK

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banks. They conclude that disclosures are insufficient from a user's perspective. The findings correspond to previous evidence from the US where Edwards and Eller (1996) have described derivatives disclosures by the ten largest commercial banks as having improved over time but as still being incomplete. Similarly, surveys conducted by the Bank for International Settlements among 54 internationally active banks show that the overall level of disclosures has increased over time (Basel Committee on Banking Supervision (2003)). Against this historical perspective, IFRS 7 seems to be a logical next step in a general development towards more transparency in the banking industry and it will be interesting to observe to what extent this objective is attained.

The examination of institutional differences as an explanatory factor for cross-country differences in the change of disclosure quality is motivated by prior literature in the field of institutional economics. In two seminal papers, Ball et al. (2003) and Ball et al. (2000) demonstrate that accounting quality depends on the institutional environment, which provides preparers incentives for disclosure, rather than on the content of accounting standards. With respect to earnings management, Leuz et al. (2003) come to an identical conclusion. In the banking industry, it is the supervisory authorities that create the most important features of the institutional environment at the national level, since banking supervision is not yet fully harmonized across Europe. Guidelines published by the Committee of European Banking Supervisors (CEBS) are mere recommendations and are not legally binding. Cross-country heterogeneity in the application of IFRS 7 is thus likely to be partially explained by differences in national bank regulation.

For the analysis, I use a dataset that is hand-collected from financial statements including risk reports from 171 banks in 28 different European countries and amended by financial data retrieved from the BvD BankScope database. Since the sample size is large relative to almost any previous studies on bank disclosure, the results are likely to be generalizable. The data set consists of various variables that capture disclosure quality. Disclosure quality is measured both quantitatively, by the length of financial statements and risk reports, and qualitatively, through the analysis of the content of these reports. This allows me to distinguish between several dimensions of disclosure quality in comparing post-IFRS 7 scores with pre-IFRS 7 scores. The data are further analyzed for cross-country differences. The Southwestern and the Nordic countries, particularly, exhibit distinctive features with respect to the effects of first-time IFRS 7 adoption. A qualitative and exemplary examination of banking regulation in these regions delivers

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insights into the interplay between incentives provided by supervisory institutions and the actual practice of bank disclosure. In addition to the implications for institutional economics, this analysis is also of academic interest against the background of the controversial debate about EU-wide consistency in the application of the IFRS, which has recently been published in *Accounting in Europe* (see Alexander (2006); Wüstemann and Kierzek (2006); see also Najderek (2008)).

The main finding of the study is that the overall disclosure level of European banks has increased during the year of first-time IFRS 7 adoption. As the new rules put considerably more emphasis on the regulation of exposures to credit risks, the focus of bank disclosure has shifted from market risk exposures to credit risk exposures. The increase of disclosures is not restricted to mandatory information; voluntary disclosure, e.g., about exposures to operational risks, has been increasing as well. The latter finding suggests that IFRS 7 has contributed to a general paradigm shift towards greater transparency in the banking industry. Unlike the effect on disclosure practice, the standard's effect on presentation choices is weak. Although the new rules favor a presentation of financial instruments by measurement categories, the proportion of banks that have utilized this presentation format is increasing, if at all, only slightly.

Cross-country differences in the effect of IFRS 7 adoption can at least be partially explained by differences in the regulatory environment. Specifically, banking supervision in Europe varies with regard to the extent of interventions into financial accounting, i.e., to those interpretations of the IFRS that not only clarify but also restrict several disclosure choices. The effect of IFRS 7 adoption is particularly weak in countries such as Italy, where the application of the IFRS has previously been restricted by banking supervision so that the disclosure level was already relatively high. The proportion of banks not conforming to mandatory disclosure rules is, however, also higher in these more highly regulated countries if banking supervision does not specifically require the respective disclosure.

The remainder of the paper is structured as follows. In section 2, hypotheses are derived from prior research and from the institutional background of IFRS 7 adoption in Europe. In section 3, the effects of IFRS 7 adoption on disclosure choices and on presentation choices are separately analyzed. In section 4, a country-level analysis reveals differences in the effect of IFRS 7 adoption and an exemplary institutional analysis of selected countries

partially explains these cross-country differences. Finally, the implications and conclusions of the study are discussed in section 5.

## **4.3.2 Institutional Setting and Hypotheses Development**

### **4.3.2.1 Bank Disclosure under IFRS 7 in Europe**

For financial years beginning in 2007, IFRS 7 superseded IAS 30; furthermore, it replaced all parts of IAS 32 that dealt with disclosure requirements so that by now all disclosure requirements related to the use of financial instruments are consolidated under the new standard. Unlike IAS 30, IFRS 7 is not a bank-specific regulation; instead, it applies to all entities that use financial instruments. The extent of disclosure is thus determined by the extent of an entity's use of financial instruments rather than by an entity's industrial sector (Gornik-Tomaszewski (2006)). Generally speaking, the required level of disclosure is higher under IFRS 7 than under the previous standards. The increase in disclosure requirements forms part of the IASB's long-term project with regard to financial instruments. This project is aimed at meeting growing concerns about risks arising from financial instruments that were brought up particularly by the Joint Working Group (JWG) of Standard Setters in its Draft Standard (Joint Working Group of Standard Setters (1999)) and by the Bank for International Settlements in the Third Pillar of its Basel II Framework (Basel Committee on Banking Supervision (2004); see also Linsley and Shrives (2005)).

IFRS 7 concentrates on two different types of disclosure. First, the standard requires the disclosure of the significance of the measurement categories used in accordance with IAS 39 and of underlying accounting policies, such as the assumptions made in determining fair values. Second, it is mandatory to disclose qualitative as well as quantitative information about exposures to credit risk, liquidity risk, and market risk. Credit risk is the risk of defaults in payments to be received by customers and is thus a function of the customers' credit quality. Liquidity risk arises from maturity gaps in an entity's asset and liability management if obligations to be serviced exceed the entity's current liquidity. Market risk refers to the entity's exposure to fluctuations in market prices. IFRS 7.41 names interest rates and exchange rates as examples of fluctuating prices. However, market risk is not restricted to these two factors, so that information on material exposures

to changes (in, for example, equity prices, commodity prices and real estate prices) will also need to be disclosed. Even though operational risk is defined as a separate risk area in the Basel II Framework (para. 824), its disclosure is not required under IFRS 7 but rather explicitly discarded in the Basis for Conclusions, as measurements of such a risk are yet judged to be insufficient (BC 65).

IFRS 7 does not prescribe any specific presentation format for financial instruments neither for the balance sheet nor for the income statement. It is possible to meet the disclosure requirements by presenting financial instruments by measurement categories on the face of the balance sheet. Presentation in increasing or decreasing order of liquidity, as generally recommended by IAS 1, is another option. For example, the IAS 1 criteria could be met by distinguishing between financial instruments held for short-term trading purposes and those instruments held as long-term investments. As any format will be compatible with the highly vague principles, banks are also free to present financial instruments by product types as was once advocated by the JWG.

#### **4.3.2.2 Hypotheses Development**

Both survey studies and archival studies have investigated the supplementary value of additional disclosures to supplement information from balance sheets and income statements. Survey studies have found that both investors and managers regard footnote information for financial statements as useful (see Gassen and Schwedler (2008) for a survey among investors and Vietze (1997) for a survey among managers). Most of the archival literature that examines capital market effects of footnote disclosure of financial instruments focuses on disclosure of financial derivatives. While Venkatachalam (1996) finds that off-balance sheet disclosures of fair values of derivatives are relevant in the equity valuation of banks, Ahmed et al. (2006) compare the value-relevance of derivatives recognition on the balance sheet and derivatives disclosure in the footnotes. The results suggest that off-balance sheet information is less relevant. Schrand (1997) provides evidence that off-balance sheet disclosures of derivatives usage in reducing the risks from maturity gaps have the potential to be value-relevant. Among studies going beyond derivatives disclosures, McAnally (1996) examines the relevance of off-balance sheet information about financial instruments such as loan commitments or letters of credits to the market assessment of a bank's risk. The results suggest that off-balance sheet information is considered in equity valuation.

In more general terms, Chipalkatti (2005) and Baumann and Nier (2004) find a negative association between a bank's level of disclosures and the volatility of its equity returns as well as its bid-ask spreads.

While this literature overall suggests that additional disclosure is judged as useful by investors, it is at first glance stunning that bank disclosure has been viewed as less than optimal for decades (Benston (1984), see Capie and Billings (2001) for a historical perspective). In the 1990's, at least some substantial improvements were observed in terms of transparency in the US (Edwards and Eller (1995, 1996)) and Australia (Chalmers and Godfrey (2004)). In Europe, the banking industry was among the first industries to voluntarily adopt the IFRS (Cairns (1996)), and yet disclosure by European banks is found to have been incomplete until today (Woods and Marginson (2004); Basel Committee on Banking Supervision (2003)). This evidence is in conformity with Gebhardt et al. (2004), who report a certain tendency by banks to oppose new standards that require higher-quality disclosures. This incompleteness of prior disclosures is one of the premises that IFRS 7 has an effect on disclosure practice, since regulation will in this case not be anticipated by voluntary compliance.

Reasons for the sub-optimality of the disclosure practice from an investor's perspective can be found in classical banking theory. Proprietary information about credit quality of private or corporate customers is at the core of a commercial bank's business model, which is based on the costly monitoring of loan contracts (Freixas and Rochet (1997); Diamond (1984)). Since publication of this proprietary knowledge would severely endanger the bank's profitability (Frolov (2007)) or even cause bank runs (Cordella and Yeyati (1998)), voluntary disclosure is particularly unlikely for information about credit risk. Edmister and Chen (1989) find in an early study that a new regulatory requirement to publicly report nonperforming loans, which can be interpreted as a credit risk-related regulation, indeed had an effect on disclosure practice. This result suggests that information about credit risk is not voluntarily disclosed. I therefore conjecture that the introduction of new disclosure requirements under IFRS 7 has a particularly strong effect on the practice of credit risk reporting. The hypotheses related to the effects of IFRS 7 on disclosure practice can be summarized as follows:

*H1a: The overall level of disclosure by European banks has significantly increased during the year of IFRS 7 adoption.*

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*H1b: The increase in the disclosure of information about exposure to credit risk is significantly higher than the increase in the disclosure of information about exposures to liquidity risk and market risk.*

Whereas disclosure requirements all need to be met through footnote information, the presentation of neither balance sheet nor income statement is directly addressed by IFRS 7. Unlike IAS 30, the new standard does not recommend that financial instruments be presented by liquidity. It is only in IAS 1 that bank-specific presentation rules are addressed and that a deviation from the generally recommended distinction between current and non-current assets is explicitly allowed. However, forgoing any presentation requirements might also have an effect on disclosure practice. Even before IFRS 7 adoption, a majority of European banks have opted for the method of presentation by measurement categories and thus for a violation of the format recommended by IAS 30, not least due to corresponding referrals by supervisory institutions (CEBS (2007)). Now that the application of a measurement-oriented presentation format is no longer a violation of IAS 30's recommendation, a change in presentation format seems even more preferable to banks. Since IFRS 7 does require separate disclosure of measurement categories, at least in the footnotes, such a change could further help to reduce the complexity of potential deviations of balance sheet categories from measurement categories. Therefore I hypothesize:

*H2: The proportion of European banks presenting financial instruments by measurement categories has significantly increased during the year of IFRS 7 adoption.*

Besides conducting an aggregate examination of European banks, one might also find it interesting to identify national patterns in bank disclosure. Fields et al. (2001) argue that third-party relations, e.g. with regulators, potentially affect accounting choices. Ball et al. (2000) and Leuz et al. (2003) suggest that cross-country differences in the regulatory environment, i.e., in the quality of institutions, explain differences in accounting quality. Banking institutions are strongly affected by regulatory activity that is not yet fully integrated across Europe. The CEBS has made several efforts to harmonize regulatory disclosure requirements. The guidelines issued by the CEBS are, however, mere recommendations; they are not binding for supervisory authorities at the national level. Even though banking supervisors acknowledge differences between the objectives of financial reporting and those of banking regulation (Basel Committee on Banking

Supervision (2002)), disclosure in financial statements is at the core of the Third Pillar of the Basel II Framework, and national authorities therefore try to impose additional restrictions on banks that exceed or partly contradict the requirements of IFRS 7. The behavior of regulatory authorities and the scope of those restrictions vary across Europe and are thus likely to have an impact on the effects of IFRS 7 adoption. It will thus be necessary to investigate regulatory requirements with respect to financial reporting at a national level. To that end, I will concentrate on Italy as providing an example for supervisory activity in South-Western Europe, and on Denmark as providing an example of such activity in Northern Europe. I expect to find differences between disclosure practices in these two regions and therefore conjecture:

*H3: The effect of IFRS 7 adoption on the disclosure level of European banks varies according to differences in the activity of national supervisory authorities.*

### **4.3.3 The Effect of IFRS 7 Adoption on Disclosure and Presentation Choices by European Banks: Empirical Results**

#### **4.3.3.1 Sample Selection and Descriptive Statistics**

The sample is taken from BvD BankScope. From 28 European countries, all banks are selected that present consolidated financial statements (codes C1 or C2) in accordance with the IFRS. Overall, 545 banks are hereby identified. I exclude banks that are not primarily engaged in retail, i.e. commercial, banking so that broker firms, investment banks, clearing banks, stock exchanges, and investment trusts are not contained in the sample (66 banks). Deviations in the effects of IFRS 7 on disclosures by these kinds of firms from the effects on disclosures by commercial banks would be solely due to fundamental differences in their business models. To avoid biases arising from the impact of non-European enforcement institutions, subsidiaries of parent banks located outside of Europe (19 banks) are eliminated from the sample. Subsidiaries of parent banks that are themselves included in the sample (215 banks) are also excluded in order not to double-count certain disclosure policies. Finally, some financial statements were not available on the internet, or at least were not available in English, so that their banks' disclosure policies could not be analyzed due to practical impediments (this affected 74 banks in total, see Table 4.9 for details).

A total 171 banks from 28 different European countries are included in the final sample. Financial data are taken from BvD BankScope, whereas data on disclosure policies are collected by hand from the original financial statements for the financial years 2006 and 2007. Overall, 342 financial statements were thus evaluated in detail. In those cases in which the financial statement refers to an audited section of the management review that covers the mandatory risk disclosures, the management review is analyzed as well. Eleven of the banks had already voluntarily adopted IFRS 7 in the financial year 2006. Therefore, the impact of IFRS 7 adoption on their disclosure policies could not be observed in this study, and their reporting practice was therefore not considered in the analysis of immediate effects of the new regulation. Eight banks opted not to apply IFRS 7 during the financial year 2007 because their financial year began before January 1, 2007. An effect of IFRS 7 adoption cannot be observed for these banks either.

TABLE 4.9: SAMPLE SELECTION

European Banks presenting consolidated IFRS accounts (BvD Codes C1 or C2)	545
Major Business not in Retail (Commercial) Banking	66
Subsidiaries (>50%) of a Non-European Bank	19
Subsidiaries (>50%) of Another European Bank in the Sample	215
Financial Statements for 2006 and 2007 not Published in English Language	36
Financial Statements not Published on the Internet (as of July 1, 2008)	38
<hr/>	
# Banks (Total Sample)	171
IFRS 7 Application in 2006	11
IFRS 7 Application in 2007	164
<hr/>	
# Banks (First-Time Adoption of IFRS 7 in 2007)	153

The sample is heterogeneous in terms of size. The smallest bank (from Latvia) had a book value of total assets of only EUR 51.3m in 2006 (EUR 73.5m in 2007), whereas the book value of total assets of the largest bank amounted to EUR 1,489,900m in 2006 (Switzerland) and to EUR 2,590,000m in 2007 (UK). On the national level, Lithuania has the smallest mean of total assets (EUR 837m in 2006 and EUR 1,151m in 2007), while French banks show the highest mean in the sample (EUR 514,829m in 2006 and



EUR 587,372m in 2007). Return to equity (proxied for by book values) is dispersed as well and varied in 2006 between 0% (Latvia) and 47.1% (Iceland), in 2007 between -45.9% (Netherlands) and 46.2% (Finland) on an individual level. On the national level, the smallest mean return for both years can be observed in Austria (9.8% in 2006 and 6.5% in 2007); the highest mean return for 2006 can be observed in Iceland (29.1%) and the highest for 2007 in Finland (22.3%). The statistics are consistent with findings that indicate that the 2007 subprime crisis has resulted in an increase in total assets (from EUR 148,188m to EUR 170,290m) even though returns have on average dropped substantially (from 15.4% to 13.4% in the European sample, see Greenlaw et al. (2008) for US data). Descriptive statistics are summarized by country in Table 4.10.

Table 4.10 also includes descriptive statistics with regard to page numbers of financial statements and risk reports. Page numbers are used as a quantitative proxy for disclosure quality. The major advantage, on the one hand, is the high degree of objectivity (Daske et al. (2007)). On the other hand, the downside of this proxy is the obvious noise included in the measure. For this reason, it will be necessary to additionally refer to other, more qualitative proxies in the due course of the analysis. The length of the reports varies across countries. Portuguese banks publish the shortest risk reports on average (4.9 pages in 2006, 9.8 pages in 2007), Latvian banks publish the shortest financial statements (34.4 pages in 2006, 34.9 pages in 2007). The most extensive disclosure in both risk reports and financial statements is provided by Italian banks, where the average length of risk reports has increased from 61.4 pages in 2006 to 64.1 pages in 2007 and the average length of financial statements from 145.2 pages in 2006 to 150.8 pages in 2007.

TABLE 4.10: DESCRIPTIVE STATISTICS BY COUNTRY

Country	N	Total Assets, m. EUR		Return to Equity		Risk Report		Financial Statement	
		2006	2007	2006	2007	2006	2007	2006	2007
Sample	171	148,188 (318,618)	170,290 (383,041)	.154 (.067)	.134 (.097)	13.9 (17.5)	20.1 (18.1)	69.4 (41.3)	73.7 (42.7)
Austria	8	56,126 (64,190)	62,237 (72,502)	.098 (.061)	.065 (.119)	8.5 (4.2)	19.0 (12.0)	52.3 (21.0)	64.6 (29.5)
Belgium	4	417,399 (332,093)	458,658 (369,658)	.167 (.047)	.141 (.032)	19.5 (14.7)	28.0 (18.1)	109.3 (77.1)	115.5 (77.4)
Czech Rep.	4	19,350 (12,138)	23,047 (14,514)	.181 (.025)	.197 (.027)	9.0 (4.7)	18.5 (7.0)	48.8 (16.1)	49.8 (18.2)
Denmark	11	42,311 (108,383)	51,316 (132,309)	.171 (.061)	.147 (.058)	6.9 (4.0)	11.1 (6.9)	43.2 (9.3)	45.0 (12.6)
Finland	4	18,676 (22,085)	13,743 (13,834)	.130 (.043)	.223 (.161)	15.8 (15.9)	20.0 (18.3)	67.8 (40.3)	53.5 (23.6)
France	8	514,703 (609,365)	587,372 (699,012)	.175 (.058)	.126 (.049)	8.8 (5.5)	18.1 (12.8)	67.3 (26.7)	74.6 (30.0)
Germany	12	176,313 (195,703)	200,409 (206,420)	.118 (.028)	.083 (.134)	17.2 (10.9)	22.6 (11.9)	76.3 (18.3)	80.4 (19.3)
Greece	9	26,954 (27,709)	33,637 (33,626)	.138 (.081)	.125 (.069)	6.4 (1.5)	11.4 (4.8)	52.6 (16.1)	56.4 (17.1)
Hungary	3	11,704 (14,379)	13,310 (17,470)	.185 (.108)	.128 (.054)	5.3 (.6)	12.7 (2.1)	35.0 (7.2)	46.0 (8.7)
Iceland	5	18,455 (17,828)	25,585 (23,602)	.291 (.106)	.167 (.039)	5.8 (3.0)	12.4 (6.2)	36.8 (12.5)	43.2 (14.0)
Ireland	4	124,357 (58,628)	137,929 (58,159)	.215 (.044)	.223 (.053)	12.3 (1.5)	19.5 (6.6)	91.0 (20.9)	92.8 (20.5)
Italy	14	126,882 (250,631)	143,241 (293,058)	.123 (.064)	.127 (.069)	61.4 (28.0)	64.1 (28.5)	145.2 (54.7)	150.8 (58.7)
Latvia	7	1,103 (1,176)	1,484 (1,562)	.188 (.127)	.180 (.113)	8.0 (1.7)	14.9 (4.5)	34.4 (8.2)	34.9 (6.4)
Lithuania	4	837 (779)	1,151 (1,040)	.152 (.067)	.118 (.024)	6.8 (2.2)	22.3 (8.8)	40.8 (11.6)	48.0 (6.7)
Malta	2	2,881 (3,578)	3,031 (3,732)	.143 (.031)	.139 (.045)	7.5 (2.1)	13.5 (10.6)	41.5 (10.6)	48.0 (18.4)
Netherlands	9	330,580 (477,962)	349,433 (502,980)	.124 (.042)	.085 (.214)	10.3 (4.7)	17.6 (9.9)	69.6 (26.1)	73.1 (31.2)
Norway	6	33,212 (63,358)	41,165 (73,198)	.120 (.039)	.135 (.031)	7.5 (2.9)	10.5 (4.7)	37.2 (11.4)	43.5 (12.6)
Poland	4	13,051 (9,000)	16,299 (9,538)	.182 (.037)	.222 (.029)	14.8 (7.2)	23.3 (6.0)	83.5 (14.4)	86.5 (11.4)
Portugal	8	36,804 (37,333)	40,963 (41,074)	.142 (.037)	.128 (.048)	4.9 (2.8)	9.8 (5.8)	86.3 (44.3)	95.9 (50.6)
Slovakia	2	3,682 (3,358)	4,481 (4,256)	.142 (.068)	.145 (.069)	7.5 (4.9)	17.5 (4.9)	45.5 (10.6)	50.5 (14.8)
Slovenia	5	4,808 (5,532)	5,972 (7,088)	.127 (.018)	.133 (.028)	11.6 (8.4)	20.8 (10.0)	51.6 (8.7)	59.8 (8.6)
Spain	10	173,556 (263,544)	197,480 (294,167)	.136 (.043)	.151 (.058)	11.6 (5.4)	14.3 (6.3)	115.8 (22.8)	122.9 (29.1)
Sweden	4	227,250 (84,338)	251,000 (97,519)	.198 (.016)	.189 (.011)	8.5 (1.7)	11.3 (4.3)	51.8 (18.0)	52.8 (17.8)
Switzerland	5	305,617 (662,140)	285,329 (612,028)	.175 (.075)	.139 (.126)	9.0 (3.9)	20.6 (18.3)	65.0 (34.4)	65.6 (29.1)
UK	16	372,460 (559,220)	478,867 (796,495)	.171 (.051)	.102 (.119)	8.6 (7.0)	13.7 (10.8)	55.8 (31.0)	56.9 (24.6)

One bank each from Croatia, Cyprus, and Estonia, respectively, is included in the sample. Total assets are calculated from book values. Return to equity is calculated as the ratio of net published income to book value of equity. Risk report and financial statement are measured in number of total pages. The page numbers of the risk report refer only to audited parts of the report either within the financial statement or as part of a management review. If the risk report is included in the financial statement, these pages are deducted from the page number of the corresponding financial statement. The means are reported with standard deviations in parentheses.

#### 4.3.3.2 Risk Disclosure: Empirical Findings

As pointed out in section 2, IFRS 7 requires banks to disclose more information on financial instruments than IAS 30 did previously. The length of the financial statement has therefore increased from 81.9 to 91.6 pages in the first year of IFRS 7 adoption. At first, the increase could reflect more detailed footnote information on those line items that represent financial instruments in the balance sheet or in the income statement. A majority of banks (88% before and 86% after IFRS 7 adoption) have also integrated risk reports into their financial statements. Only a few of the banks that are obliged to disclose a management review under national law have chosen to integrate the audited risk report into this review. The average increase in financial statement information could therefore also be due to more comprehensive risk reporting. The findings reveal that both factors account for the increase in information. Financial statement information (excluding the risk report) has increased from 69.9 pages before IFRS 7 adoption to 74.6 pages after IFRS 7 adoption, and information in the risk report increased from 13.8 to 20.4 pages. Both differences are significant (see Table 4.11) and support hypothesis H1a if we accept page numbers as a reasonable proxy for disclosure quality. Since no other new accounting standard regulating financial instruments or risk reporting became effective in the financial year 2007, it is reasonable to conclude that the first-time adoption of IFRS 7 causally explains the observations.

A more detailed analysis reveals the nature of the information that is additionally disclosed. First, both qualitative and quantitative information on risk exposure and risk management have increased. The increase is approximately proportional. Quantitative information accounted for 52.1% of the risk report before and 52.6% of the risk report after IFRS 7 adoption. The difference is not statistically significant (Table 4.11). Secondly, all three types of risk exposure (credit risk, liquidity risk, and market risk) about which IFRS 7 requires information are presented in more detail. In this respect, however, IFRS 7 has significantly changed the nature of risk disclosure. Before IFRS 7 adoption, information on market risk was most detailed (on average 5.4 pages, amounting to 41.5% of the risk report). After IFRS 7 adoption, the most details were presented about the exposure to credit risk (on average 8.4 pages, amounting to 39.7% of the risk report), whereas information on market risk now accounts for no more than 30.0% of the report. The relative importance of information about liquidity risk has slightly decreased, from

TABLE 4.11: UNIVARIATE ANALYSIS OF DISCLOSURE QUANTITY

	Pre-IFRS 7 Mean (SE)	Post-IFRS 7 Mean (SE)	Parametric Test Statistic	Non-Parametric Test Statistic
FSPAGES	69.869 (3.361)	74.614 (3.452)	$ t_0  = 5.227$ ( $< .001$ )	$ z_0  = 5.891$ ( $< .001$ )
RSKPAGES	13.810 (1.436)	20.399 (1.461)	$ t_0  = 11.265$ ( $< .001$ )	$ z_0  = 9.686$ ( $< .001$ )
RSKQUANT	.521 (.019)	.526 (.015)	$ t_0  = .4304$ (.668)	$ z_0  = .232$ (.816)
CREDABS	4.627 (.692)	8.379 (.723)	$ t_0  = 10.671$ ( $< .001$ )	$ z_0  = 9.637$ ( $< .001$ )
CREDREL	.291 (.012)	.397 (.010)	$ t_0  = 7.931$ ( $< .001$ )	$ z_0  = 7.185$ ( $< .001$ )
LIQABS	2.072 (.164)	2.804 (.152)	$ t_0  = 7.361$ ( $< .001$ )	$ z_0  = 7.681$ ( $< .001$ )
LIQREL	.202 (.010)	.170 (.008)	$ t_0  = 3.324$ (.001)	$ z_0  = 4.131$ ( $< .001$ )
MARKABS	5.438 (.593)	6.124 (.567)	$ t_0  = 3.464$ ( $< .001$ )	$ z_0  = 4.654$ ( $< .001$ )
MARKREL	.415 (.013)	.300 (.010)	$ t_0  = 9.110$ ( $< .001$ )	$ z_0  = 8.137$ ( $< .001$ )

Tests were conducted with the subsample of banks adopting IFRS 7 for the first time in the financial year 2007 (N=153, see Table 4.1). FSPAGES denotes the number of total pages of a bank's financial statement excluding any management review and net of the risk report (if contained in the financial statement). RSKPAGES denotes the number of total pages of the risk report either contained in the bank's financial statement or in its management review. RSKQUANT denotes the proportion of quantitative information given in the risk report relative to all information (proxied for by the number of pages). CREDABS (CREDREL) indicates the absolute number (or the relative proportion, respectively) of pages in the risk report devoted to the bank's exposure to credit risk. LIQABS (LIQREL) and MARKABS (MARKREL) refer to liquidity risk and to market risk. The second column gives the means of the variables before IFRS 7 introduction in the financial year 2006 (with the standard errors reported in parentheses). The third column gives the means of the variables after IFRS 7 introduction in the financial year 2007 (with the standard errors reported in parentheses). Parametric test statistics are calculated in paired t-tests assuming normally distributed means. Non-parametric test statistics are calculated in Wilcoxon signed-rank tests. Two-sided p-values for both test statistics are reported in parentheses.

20.2% (2.1 pages) to 17.0% (2.8 pages). All differences are statistically significant at a .1% level (Table 4.11). The evidence is thus in conformity with hypothesis H1b.

So far, the results solely cover a quantitative dimension of disclosure quality. In order to examine whether the increase in disclosure quality is due to a mere increase in the quantity of disclosures or is also a result of more useful information being provided, I

TABLE 4.12: UNIVARIATE ANALYSIS OF DISCLOSURE QUALITY

	Pre-IFRS 7 Mean (SE)	Post-IFRS 7 Mean (SE)	Test Statistic
A. Credit Risk:			
CREDQUAL	.280 (.035)	.727 (.034)	$\chi^2 = 68.875$ ( $< .001$ )
PASTDUE	.083 (.021)	.636 (.036)	$\chi^2 = 113.253$ ( $< .001$ )
B. Liquidity Risk:			
ASSETS	.810 (.030)	.727 (.034)	$\chi^2 = 3.258$ (.071)
LIAB	.845 (.028)	.926 (.020)	$\chi^2 = 5.596$ (.018)
C. Market Risk:			
INTEREST	.964 (.014)	1.000 (.000)	$\chi^2 = 6.397$ (.011)
CURRENCY	.851 (.028)	.926 (.020)	$\chi^2 = 4.913$ (.027)
EQUITY	.321 (.036)	.523 (.038)	$\chi^2 = 14.258$ ( $< .001$ )
D. Voluntary Disclosure:			
OPRTLRSK	.494 (.039)	.670 (.036)	$\chi^2 = 11.012$ (.001)
LEGALRSK	.060 (.018)	.085 (.021)	$\chi^2 = .843$ (.359)

CREDQUAL indicates whether information about the credit quality of customers (ratings) is provided (IFRS 7.36). PASTDUE indicates whether information about the age of financial assets that are past due but not impaired is provided (IFRS 7.37). ASSETS (LIAB) indicates whether a maturity analysis for financial assets (liabilities) is disclosed (IFRS 7.39). INTEREST, CURRENCY, and EQUITY indicate whether information about the bank's exposure to changes in market interest rates, exchange rates, and equity prices is provided (IFRS 7.41). OPRTLRSK (LEGALRSK) indicates whether information about exposure to operational risk (legal) risk is voluntarily disclosed. All variables are binary where 1 denotes disclosure in the risk report. The second column gives the means of the variables before IFRS 7 introduction in the financial year 2006 (with the standard errors reported in parentheses). The third column gives the means of the variables after the introduction of IFRS 7 in the financial year 2007 (with the standard errors reported in parentheses). Test statistics are calculated using  $\chi^2$ -tests. The application of Fisher's exact test would not substantially alter the results.

will now turn to an analysis of the content of the financial statements. The predecessor standards of IFRS 7 as well as the Third Pillar of the Basel II Framework have already defined the two major categories of risk that any bank is exposed to: credit risk and

market risk. Credit risk arises from changes in the value of banking book assets, whereas market risk arises from changes in the value of trading book assets (Mikes (2008)).

A basic measure of credit risk is the probability of default, which describes the credit standing of a bank's customer. For internal usage, banks sort their customers into rating classes that correspond with the customers' default probabilities (Bessis (2002)). Information about rating classes is thus useful for investors as they seek to assess a bank's financial position and allow the prediction of asset impairments or loan loss provisions, respectively (Gebhardt (2008)). Compared with previous standards, IFRS 7 specifies more precisely the details of credit risk exposures that are to be disclosed by banks. Specifically, companies are supposed to include information about the credit quality of financial assets in their financial statements. Twenty-eight percent of European banks voluntarily disclosed the internal or external ratings of their customers before IFRS 7 adoption. In 2007, this proportion increased to 72.7%. The same observation can be made for information about the age of financial assets that are past due but not impaired on the reporting date. The proportion of banks disclosing such an analysis has increased from 8.3% to 63.6%.

Market risk can be measured by sensitivities or by a value-at-risk approach. Sensitivity is a basic measure that refers to the change in the value of a bank's trading assets generated by a specific change in market prices. Value-at-risk is the maximum loss at a preset confidence level (Bessis (2002)). The latter is thus a more sophisticated measure providing more useful information to investors than sensitivity is alone. IFRS 7 specifies that either sensitivities or a value-at-risk shall be disclosed with respect to currency risk, interest rate risk, and any other price risk (Appendix A). In 2007, without exception, all banks that were applying IFRS 7 disclosed information about their exposure to changes in market interest rates, and 92.6% of those banks disclosed information about their exposure to changes in exchange rates. Both proportions have slightly increased after IFRS 7 adoption. Even though exposure to changes in equity prices is not explicitly mentioned in IFRS 7 and might only be subsumed under other price risks, a substantial increase can be observed in the proportion of banks including this information in the risk report (see Table 4.12). As regards the measures reported, 30.1% of the banks report sensitivities, 24.2% report a value-at-risk, 37.3% report both measures, and only 8.5% disclose a totally different measure.

Besides disclosures of credit risk and market risk, IFRS 7 devotes a third section to

disclosures of liquidity risk which is defined as the risk that an entity cannot meet its obligations associated with financial liabilities at any future point in time. However, compared with previous standards, requirements for disclosures regarding liquidity risk are reduced in that the specific requirement of presenting a maturity analysis of assets is abandoned (Ernst & Young (2006)). It is only for liabilities that a maturity analysis remains mandatory. This change in disclosure regulation has had an observable effect on disclosure practice. Before IFRS 7 adoption, there was only a slight difference between the proportion of banks disclosing maturities of assets and the proportion of banks disclosing maturities of liabilities (81.0% vs. 84.5%). After IFRS 7 adoption, the proportion of banks now voluntarily disclosing asset maturities has decreased to 72.7% whereas the proportion of banks mandatorily disclosing maturities of liabilities has increased to 92.6%. The difference in 2007 is significant at a .1% level ( $|t_0| = 6.368$ ). This finding is in conformity with evidence provided by Hossfeld and Zepp (2007) who investigate liquidity risk disclosures by European banks before IFRS 7 adoption and who argue that the new disclosure requirements are a setback compared with then-current industry practice.

The interpretation that voluntary disclosure is declining due to IFRS 7 adoption is generally not supported by other findings. Exposure to operational risk, for example, is discussed in the Board's Basis for Conclusions on IFRS 7, and it is explicitly stated that this information is not required by the standard (BC 65). However, the proportion of banks disclosing information about their exposure to operational risk has significantly increased since IFRS 7 adoption, suggesting that even non-binding rules in an Appendix to a standard have an effect on disclosure practice. Other risk factors not at all discussed in the Basis for Conclusions have not benefitted from the adoption. This holds true for legal risk (see Table 4.12) as well as, e.g., for reputational and IT risk.

#### **4.3.3.3 Presentation of Financial Instruments: Empirical Findings**

Before IFRS 7 adoption in 2006, there were three general ways in which banks would present their financial instruments on the face of the balance sheet. First, a majority of banks would present financial instruments by measurement categories (51.6%). IFRS 7 allows a bank to use those measurement categories that were introduced by IAS 39 for measurement purposes as line items on the financial statement so that the choice of an instrument's measurement base affects not only the company's income but also its presen-

tation and disclosure (Gornik-Tomaszewski (2006)). Secondly, a large fraction of banks presented financial instruments by product types (19.6%) as has been advocated by the JWG, which particularly aimed at a distinction between derivative and non-derivative instruments (Joint Working Group of Standard Setters, 1999, BC 5.1-5.5). Thirdly, another fraction of banks would present financial instruments by investment purposes (13.7%) and distinguish, for example, between a short-term trading purpose, a hedging purpose and a long-term investment purpose. Only 15.0% of the banks in the sample chose a presentation format that could not be categorized in this way because it combined at least two of these formats.

Table 4.13 provides evidence that the proportion of banks presenting financial instruments by measurement categories increased to 59.5% in the year of IFRS 7 adoption but that the overall change in the distribution of the presentation format is not significant ( $p = .211$ ). The effect of IFRS 7 adoption on presentation practice is thus, unlike the effect on disclosure practice, weak (if it can be considered an effect at all). This is underlined by an analysis in the number of line items presented. In 2007, the total number of line items increased from 15.5 to 15.8 (assets) and from 17.3 to 17.8 (equity and liabilities). Both changes are not large in size but are statistically significant ( $p < .01$ ). However, the slight increase cannot be attributed to financial instruments, as the total number of both financial assets and financial liabilities remains constant (Table 4.13, Panel B).

The data also provide interesting insights into the theoretical controversy around whether a presentation by measurement categories is compatible with the general presentation principles under IAS 1. The main point in this controversy is that IAS 1 demands a separate presentation of financial assets held for long-term investment purposes and of receivables from goods and services that are not necessarily classified into different measurement categories. A presentation by measurement categories would thus fail to provide some information required by IAS 1 (Löw (2006)) and would thereby not enable investors to distinguish between these two kinds of instruments. Bonham et al. (2008) argue, on the other hand, that the use of different measurement categories still suggests differences in the nature and function of financial instruments and that a corresponding presentation would therefore provide useful information.

The actual practice of European banks is of importance in this case since, in the absence of a specific disclosure policy, management has to base its disclosure choice on professional



TABLE 4.13: PRESENTATION FORMAT

Panel A. Presentation Format			
	Pre-IFRS 7 (# Banks)	Post-IFRS 7 (# Banks)	
Measurement Categories	79 (51.6%)	91 (59.5%)	
Products	30 (19.6%)	28 (18.3%)	
Investment Purposes	21 (13.7%)	18 (10.5%)	
Other Format	23 (15.0%)	16 (10.5%)	
Test Statistic			$\chi^2 = 4.52$ ( $p = .211$ )

Panel B. Line Items			
	Pre-IFRS 7 Mean (SE)	Post-IFRS 7 Mean (SE)	Test Statistic
Assets	15.49 (.473)	15.80 (.464)	$ t_0  = 2.926$ ( $p = .004$ )
Financial Assets	7.90 (.243)	7.95 (.239)	$ t_0  = .599$ ( $p = .550$ )
Equity & Liabilities	17.32 (.559)	17.77 (.544)	$ t_0  = 2.802$ ( $p = .006$ )
Financial Liabilities	6.36 (.215)	6.50 (.213)	$ t_0  = 1.950$ ( $p = .053$ )

Tests were conducted with the subsample of banks adopting IFRS 7 for the first time in the financial year 2007 (N=153, see Table 4.1). Panel A shows the distribution of the three general presentation formats before and after IFRS 7 adoption. The  $\chi^2$ -statistic tests whether the two distributions are identical. Panel B shows the number of line items presented on the face of the balance sheet. Assets and Equity & Liabilities refer to the total number of items presented by a bank. Financial assets and financial liabilities are defined as those items that represent financial instruments accounted for under IAS 39. Means are reported with standard errors in parentheses. Parametric test statistics are calculated in paired t-tests. All p-values are two-sided.

judgment - which is, in the end, tantamount to an interpretation of accounting standards in terms of industry practice (IAS 8.12). Under this rationale, a widely applied disclosure policy that is accepted by auditors would be in conformity with the extant IFRS and, therefore, provide valid guidance in management's interpretation of IFRS 7. Insights into accepted industry practice are therefore indispensable to the application of IFRS 7. The

data in Table 4.13 indicates that the prevalent use of measurement categories as line items on the balance sheet establishes an accepted accounting practice in the European banking industry. Thus, even if professional judgment is required in presentation choice due to the lack of guidance on presentation policy, this choice will not be impeded by the potential inconsistency between IFRS 7 and IAS 1, which is argued to inhibit presentations by measurement categories.

### **4.3.4 The Impact of National Enforcement Institutions on the Effects of IFRS 7 Adoption**

#### **4.3.4.1 European Discussion about EU-wide Uniformity in the Application of IFRS**

So far, the investigation has been confined to the European level. The finding that IFRS 7 has induced banks to disclose more information about both risk exposure and accounting policies does thus not necessarily hold at a national level. Whereas the mean increase in risk disclosure amounts to 6.59 pages (Table 4.11), there is indeed some variation at country level, with the smallest increase of 0 pages in Estonia and the largest increase of 15.5 pages in Lithuania. It is likely that national factors account for those differences. A further examination of these factors is of academic interest; shortly after the EU-wide implementation of IFRS accounting, *Accounting in Europe* published a controversial debate on the need for the consistent application of the standards across countries. Whereas Alexander (2006) points out that IFRS would continue to be interpreted differently in different cultural contexts, Wüstemann and Kierzek (2006) argue that a uniform interpretation of accounting standards would enhance the comparability of European financial statements, which was the core reason for the European Commission's decision to pass the IAS regulation 1606/2002. The data presented here cannot give a conclusive answer to the normative problem raised in this discussion; however, it can at least present some evidence regarding the current level of uniformity achieved in Europe.

In accordance with empirical findings on the importance of a country's institutional setting to the application of international accounting standards (Leuz et al. (2003); Ball et al. (2000)), Wüstemann and Kierzek (2006) emphasize that the enforcement of rules has a stronger impact on accounting practice than does the content of the rules. With

respect to the banking industry, supervisory authorities are the most important enforcement institution. As banking supervision is not yet fully harmonized across Europe, the extent of disclosure requirements, which are set up and enforced by national authorities in addition to IFRS rules, can vary. An examination of differences in bank disclosure across countries should thus carefully take these regulatory differences into consideration. Among the countries where a below-average increase in risk disclosure can be observed are particularly South-Western countries (Italy: 1.3 pages, Portugal: 4.9 pages, Spain: 2.7 pages) and Northern countries (Denmark: 3.9 pages, Norway: 3.6 pages). These two regions (or “cultural contexts” to borrow Alexander’s (2006) term) have in common that national banking supervisors have traditionally set up financial accounting standards for financial institutions. After the introduction of the IFRS, the institutions have still provided their own interpretations of the European accounting standards.

The effect of IFRS 7 adoption will highly depend on whether (and in what manner) the standard is interpreted and enforced by national supervisors. The nature of this regulatory activity might, in turn, explain why the effect of the standard’s adoption is partially mitigated in these regions. Besides the effect on disclosure choices in the risk report, regulatory activity also seems to have an impact on presentation choices. While presentation of financial instruments is at least somewhat diverse in most countries (see above, 3.3), 97.5% of South-Western banks presenting financial instruments by measurement categories and 80.0% of Nordic banks presenting financial instruments by products suggest a high degree of uniformity within the respective region. In a more detailed examination of hypothesis H3, I will concentrate on Italy, where Circular Letter No. 262 (December 2005) issued by the Banca d’Italia is an example of regulatory intervention in financial accounting in South-Western Europe. I will also concentrate on Denmark, where Executive Order No. 1466 (December 2006), issued by the Finanstilsynet (FSA), serves as an example for regulatory activity in Nordic countries.

#### **4.3.4.2 South-Western Europe: The Case of Italy**

As the Italian central bank, Banca d’Italia is charged with the supervision of national financial institutions. According to Art. 67(1) of Legislative Decree 385/1993 (“Banking Law”) and Art. 9(1) of Legislative Decree 38/2005 (“Accounting Law”), the interpretation of accounting standards by means of specific instructions is part of the supervisory activity.

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After the European Union required financial institutions to present their consolidated financial statements under IFRS, Circular Letter No. 262 (“Il bilancio bancario: Schemi e regole di compilazione”) was issued in December 2005. The instructions were meant to guide banks in the application of IFRS, and they are said to have been in conformity with the standards. The Circular Letter mainly consists of an appendix describing a detailed format to be applied in the presentation of consolidated balance sheets, income statements, cash flow statements, and statements of changes in shareholders’ equity as well as in the corresponding footnotes.

This general approach already contradicts the purpose of IFRS 7, since the standard explicitly avoids a mandatory format for the presentation and disclosure of financial instruments and rather seeks the disclosure of information as it is internally provided to a bank’s own management (IFRS 7.BC47). The detailed specifications about footnote disclosure given in Circular Letter No. 262 are not compatible with such a management approach. Besides the general objectives, differences between IFRS 7 and the Circular Letter also arise from individual disclosure requirements. No Italian bank in the sample, for example, discloses information about loans that are past due but not impaired - even though this information is required according to IFRS 7.37. The apparent explanation is that a respective footnote is not included in the format required by the Banca d’Italia. Thus, Circular Letter No. 262 does not only restrict the management approach and thereby the general objective underlying IFRS 7, it also restricts individual disclosure requirements by simply omitting them in the standardized disclosure format.

On the other hand, it is also necessary to recognize that the overall disclosure level in Italy is relatively high thanks to the extensive disclosure instructions provided by the banking supervision. The average risk report for an Italian bank was composed of 65.5 pages in 2007, which is the maximum value at a national level and far above the European mean of 20.4 pages (Table 4.11). Regulatory intervention in the interpretation of financial accounting standards can obviously also have a positive impact on accounting quality. We learn from the Italian case that this benefit is at least partially outweighed by a heterogeneous application of IFRS 7 across Europe, since other supervisory institutions do not restrict the standard in a comparable way. The Italian case therefore provides some evidence in favor of hypothesis H3.

Similar observations can be made in Spain, where the Banco de España (as the national

supervisory authority) issued Circular Letter No. 4/2004 in December 2004 in order to interpret IFRS in light of regulatory concerns. The detailed presentation format that is prescribed in Annex III is comparable to the Italian requirements in that its application is also mandatory for all financial institutions. However, the Circular Letter is currently under revision with the objective of better conforming it to IFRS 7 (Banco de España, June 5, 2008). Other national supervisors, such as the French Commission Bancaire de la Banque de France, have also issued detailed formatting instructions for the disclosure of financial accounting information (Instruction No. 2006-04). In France, though, this format is only mandatory for regulatory filings and serves as a mere recommendation for market disclosures.

#### **4.3.4.3 Northern Europe: The Case of Denmark**

The Danish Financial Business Act (Consolidated Act No. 286) grants the FSA, the national financial supervisory authority, the right to announce bank disclosure requirements that are more specific than those of IFRS 7 (Section 183(6)). The FSA is an agency under the Ministry of Economics and Business Affairs and is overseen by independent councils (the Financial Business Council and the Danish Securities Council). It issued Executive Order No. 1466 in December 2006 in order to exercise this right. In Section 1(2) of the Executive Order, the FSA emphasizes the primacy of the accounting standards as endorsed by the European Commission. It aims, with this in mind, to regulate those conditions that are not regulated by international accounting standards. The case is thus different from the observations from those of Italy and Spain, where the primacy of EU-IFRS is not recognized as explicitly as in Denmark.

However, a related question does still arise. This is the question of whether those conditions that lack a regulation under IFRS 7 are purposely left to management's discretion as part of the standard's management approach. The question is relevant because a regulation of those conditions by a national authority will, on the one hand, not contradict a specific disclosure requirement but will, on the other hand, still restrict the general objective of IFRS 7, since the potential benefits from a management approach can only be realized if management is left with a certain leeway.

The presentation format of the balance sheet is a representative example. IFRS 7.7 allows managers to use the format that best enables users to evaluate the significance of

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financial instruments for the company's financial position. Presentation by measurement categories is optional according to IFRS 7.8. The Danish FSA has formed its own opinion as to which format best meets the overall objective. Annex 2 of Executive Order No. 1466 requires Danish banks to use a format that distinguishes between products such as loans, bonds, and shares. The fact that this format is used by all eleven Danish banks in the sample suggests either that banks view this product-based format as the most relevant one, in accordance with the FSA, or that Annex 2 actually restricts a disclosure choice that was purposely introduced by IFRS 7. Even though this format was advocated in the 1999 Draft Standard of the Joint Working Group (BC 5.1-5.5), its relevance for users might at least be questioned by the observation that it is today not applied outside Nordic countries such as Denmark, Sweden, or Norway.

### 4.3.5 Implications and Conclusions

This study examines the effects of IFRS 7 adoption on disclosure practice by European banks. In a sample of 171 banks from 28 different countries, the level of disclosure has significantly increased during the year of the standard's first-time adoption. This is due to both a more extensive description of accounting policies and a more elaborate disclosure of information about exposures to significant risks. The major part of the risk report still covers the three areas of risk exposure that were already defined by the preceding standards: credit risk, liquidity risk, and market risk. In the adoption year, the focus has, however, shifted from disclosures of market risks to disclosures of credit risks. An analysis of information about selected details that are theoretically important to investors' judgment of a bank's current financial situation, such as the disclosure of credit ratings of customers, reveals that disclosures are not only more extensive but also more profound, suggesting that the increase in the quality is not solely due to a mere increase in the quantity of disclosures.

Besides mandatory disclosures, voluntary disclosure of exposures to operational risks has increased as well. Even though the disclosure of exposures to operational risk is not explicitly required by IFRS 7, the proportion of banks disclosing this information has significantly risen. Given all these findings, it seems reasonable to conclude that the adoption of IFRS 7 has contributed to an overall increase in the quality of bank disclosures in Europe. Yet, disclosure quality is still less than perfect, as about one-third of the banks

in the sample do not disclose certain information about their exposures to credit risk that are required under IFRS 7, e.g., customer ratings or age analyses of loans in arrears.

The study further investigates the effects on presentation choices. Before IFRS 7 adoption, a presentation of financial instruments by measurement categories was the prevalent choice among European banks. The new standard even requires that presentation at least in the footnotes. The number of banks adjusting their presentation format has however only slightly grown. Most of the banks having presented financial instruments by other criteria beforehand (especially by products or by internal purposes) now provide the additional information in the footnotes. The effect of IFRS 7 on disclosure practice is therefore substantially stronger than the effect on presentation practice.

It is apparent that the effects of IFRS 7 adoption substantially vary across countries. I find that regulatory activity by national supervisory authorities explains some of these differences at the country level. The effect of the adoption of IFRS 7 is less strong in countries such as Italy or Denmark, where disclosure formats prescribed by the national supervisory body restrict a number of disclosure choices. The analysis, in turn, does not suggest that regulatory intervention has a negative effect on disclosure quality since the extent of disclosures by, for example, Italian banks had already been relatively high before the new requirement came into effect. Rather, the evidence underlines findings in previous and not bank-specific literature that it is the nature of enforcement and of legal institutions at the national level, instead of the content of accounting standards set at a supra-national level, that determines accounting quality.

From a European perspective, I conclude that interventions by banking supervision in the regulation of financial accounting can have a positive effect on the enforcement of EU-IFRS. However, as long as these activities do occur at the national level and are not fully harmonized, they also account for the heterogeneity in the enforcement and application of accounting standards across Europe. This can be observed in Nordic countries where only presentation but not disclosure formats are required by national supervisors and where almost all banks present financial instruments by products (and thereby in a format that is not applied elsewhere). Generally speaking, a European best-practice has just not evolved. The results documenting substantial differences in the disclosure practice of major banks from different countries show that it is unlikely that such a uniform best practice can be achieved by the industry and by auditors alone. The results are therefore

a call for more harmonization in the field of banking supervision, at least with respect to interventions in financial accounting. The Committee of European Banking Supervisors' attempts (CEBS (2007)) to issue non-binding guidelines for supervisory disclosures have proven not to be not sufficient.

Finally, neither determinants of disclosure choices at company-level nor the capital market effects of IFRS 7 are addressed by this study. The results can, however, serve as a motivation for future research in these areas because they characterize the IFRS 7 adoption by European banks as an event that is associated with a significant increase in both disclosure quantity and disclosure quality. Theoretical links between disclosure quality, firm characteristics and the capital market should therefore be observable in the first-time adoption of the standard.





# Chapter 5

## Summary

The IFRS do not establish a consistent model of fair value measurement. The measurement principles can rather be characterized by a coexistence of amortized costs, fair values, and technical items not valued systematically. In theory, such an inconsistent system, if consistently applied, is not impeding the usefulness of information per se. The signals provided by the extant IFRS are, however, potentially ambiguous. A decrease in fair values of liabilities due to a change in creditworthiness can either be positive (if it results from changes in the firm's capital structure) or negative (if it results from failed investments). Since the impact of failed investments (e.g., on goodwill) is, for good reasons, not correspondingly recognized, investors are not able to unambiguously infer the underlying economics of a net income due to a decrease in the fair values of liabilities. Instead, such a 'mixed accounting model', that does not recognize offsetting changes in fair values of assets and liabilities to a comparable extent, will always give rise to artificial, i.e. economically non-existing, volatility in reported income figures.

This effect on income volatility is at the core of the public criticism by central banks and politicians that a full fair value concept has been facing. This media coverage, along with the role of fair value measurement during the latest subprime crisis, has obviously caused some negative bias in (non-professional) investors' risk perception of assets measured at fair value. This dissertation presents experimental evidence that an identical economic investment in financial instruments is perceived to be of higher risk if the instruments are labelled as being measured at fair value. This finding corresponds with previous literature suggesting similar biases in the risk perception of financial derivatives. By today, disclosures of fair value measurement and of financial derivatives seem to cause

equivalent biases in risk perception.

Banks obviously acknowledge these biases in their disclosure policies. This dissertation presents empirical evidence that the relative book value of assets optionally measured at fair value as well as the relative book value of financial derivatives are negatively associated with the probability of a bank presenting these investments separately on the balance sheet. This reporting strategy is tantamount to information about the application of the fair value option being concealed and to information about financial derivatives being shifted into footnotes when the materiality of the items is increasing. Since previous literature has shown the substantial weight of balance sheet information in (non-professional) investment decisions as compared with footnote information, the findings suggest that banks tend to strategically influence the risk perception of those investors.

Overall, this result sheds light on negative effects of the inconsistencies in the measurement and disclosure principles under IAS 39 and IFRS 7. Even though the latter standard had a positive impact on disclosure quantity and disclosure quality by banks in the year of its first-time adoption, the shortcomings due to the lack of a standardized and stringent reporting format remain a severe limitation of the decision-usefulness of IFRS financial statements by banks. I did, however, not analyze any capital market effects of these shortcomings in fair value measurement and disclosure. This question is left to future research for which this dissertation aims to provide a thorough starting point.

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## Eidesstattliche Erklärung

Ich versichere an Eides Statt, dass ich die Dissertation selbstständig und ohne Benutzung anderer als der angegebenen Quellen und Hilfsmittel angefertigt und die den benutzten Quellen wörtlich oder inhaltlich entnommenen Stellen als solche kenntlich gemacht habe. Diese Arbeit hat in gleicher oder ähnlicher Form noch keiner Prüfungsbehörde vorgelegen.

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“Der Grundsatz der Fair-Value-Bewertung von Schulden nach IFRS : Zweck, Inhalte und Grenzen” (“The fair value principle for the measurement of liabilities under IFRS: Objectives, norms, and limitations”), *Zeitschrift für Betriebswirtschaft*, Vol. 76 (2006), Special Issue 6, pp. 77 – 110 (with J. Wüstemann).

- Andere Zeitschriften

“Ausweis von Finanzinstrumenten in europäischen Bankbilanzen: Normative Erkenntnisse empirischer Befunde” (Disclosure of Financial Instruments by European Banks: Normative Insights from Empirical Evidence”), *Die Wirtschaftsprüfung*, Vol. 61 (2008), S. 865–873 (with J. Wüstemann).

“Internationale Gläubigerschutzkonzeptionen” (“International concepts of creditor protection”), *Betriebs-Berater*, Vol. 62 (2007), Special Issue 5, pp. 13–19 (with J. Wüstemann and S. Kierzek).

“Zweckmäßigkeit erfolgsunabhängiger Aufsichtsratsvergütung” (“Usefulness of an invariable remuneration for outside directors”), *Betriebs-Berater*, Vol. 61 (2006), pp. 2627 – 2633.

- Kapitel

“The Fair Value Principle and its Impact on Debt and Equity – Theoretical Traditions, Conceptual Models, and Analysis of Existing IFRS”, in: *The Routledge Companion to Fair Value*, ed. by Peter Walton, London, Routledge, 2007, pp. 210 – 230 (with J. Wüstemann).

“International Financial Reporting Standards: Zur Bedeutung und Systembildung der internationalen Rechnungslegungsregeln” (“International Financial Reporting Standards: Principles and interpretation of international accounting standards”, in: *Handbuch des Jahresabschlusses*, ed. by Klaus von Wysocki et al., Köln, Verlag Dr. Otto Schmidt, 2007, Abt. I/3 (with J. Wüstemann and S. Kierzek).

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“Aktivische Finanzinstrumente” (“Financial Assets”), in: *Synopse der Rechnungslegung nach HGB und IFRS*, Munich, Vahlen Verlag, 2006, pp. 92 – 105 (with J. Wüstemann).

“Eigenkapital” (“Equity”), in: *Synopse der Rechnungslegung nach HGB und IFRS*, Munich, Vahlen Verlag, 2006, pp. 131 – 139 (with J. Wüstemann).

“Finanzielle Verbindlichkeiten” (“Financial Liabilities”), in: *Synopse der Rechnungslegung nach HGB und IFRS*, Munich, Vahlen Verlag, 2006, pp. 139 – 153 (with J. Wüstemann).

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