Seeger, Norbert

Working Paper
International accounting standards (IAS): implications for financial institutions

Arbeitsberichte der Hochschule für Bankwirtschaft, No. 34

Provided in Cooperation with:
Frankfurt School of Finance and Management


This Version is available at:
http://hdl.handle.net/10419/27800
No. 34

International Accounting Standards (IAS)

Implications for Financial Institutions

Norbert Seeger

October 2001

ISBN 1436-9761

Author:  
*Dr. Norbert Seeger*
Professor for Accounting and Taxation  
Hochschule für Bankwirtschaft  
University of Applied Sciences in  
Banking an Finance  
Frankfurt/M.  
Germany  
seeger@hfb.de

Publisher:  
Hochschule für Bankwirtschaft  
Private Fachhochschule der BANKAKADEMIE  
Sonnemannstraße 9-11  •  D-60314 Frankfurt/M.  •  Germany  
Phone.: ++49/69/154008731  •  Fax: ++49/69/154008728
International Accounting Standards (IAS): Implications for Financial Institutions

Contents:

1. Aims of accounting standards ........................................................................................................ 3
   1.1 General aims ................................................................................................................................... 3
   1.2 Specific aims of accounting standards for banks ........................................................................ 4
   1.3 Aims of International Accounting Standards ............................................................................ 4

2. Principles of accounting and valuation according to IAS ............................................................... 5

3. Components of the annual financial statements prepared by banks according to IAS ........... 5
   Layout of a bank balance sheet according to IAS ............................................................................ 6
   Liabilities and shareholders' equity .................................................................................................. 6
   Profit (loss) from operations ............................................................................................................ 7

4. Overview of bank-specific standards ............................................................................................. 8

5. Explanation of bank-specific risks .................................................................................................. 10
   5.1 Credit risks ................................................................................................................................... 10
   5.2 Interest rate risks ........................................................................................................................ 12

6. Accounting and valuation of financial instruments ........................................................................ 13
   6.1 The terms "financial investment" and "financial instrument" ....................................................... 13
   6.2 Disclosure and valuation ............................................................................................................ 16
   6.3 Hedge accounting ....................................................................................................................... 17

7. References ......................................................................................................................................... 19

8. Appendix: Documents of the Lecture of September 25th, 2001 in Hangzhou, China ........ 20
1 Aims of accounting standards

1.1 General aims

When referring to accounting standards in general terms, it is vital not to lose sight of their true aims and purposes in the mass of highly complex subject matter and the sometimes inconceivable amount of detail. In some countries, accounting standards are used as a basis for taxation or as the benchmark for paying out profit shares. The two main aims with regard to the latter are that the benchmark should be as fair as possible, and that the payments calculated on the basis of the accounting standard should not endanger the existence of the company. Cautious and conservative calculation of profits is therefore necessary.

However, even if we were to disregard this more operational objective of accounting standards, one overarching aim remains: a company's annual financial statements must provide all interest groups with information that is relevant to their decisions. The content of this information therefore depends on which interest groups make which decisions. The following potential and current investors are among the most important groups requiring information:

**Investors** need a clearly defined basis on which to decide whether the return on investment they can expect fits into their individual investment strategy. To do this, they need companies to provide them with forecasts of future payouts as well as information on the risks involved.

**Lenders** generally have similar interests to those of investors, but different priorities. As the majority of payouts received by lenders are not dependent on profits, their primary concern is the risk of a company defaulting on claims arising from the debt it has been granted.

What is more, in this context the terms "investor" or "lender" should be interpreted as widely as possible. Employees and suppliers are also in a sense lenders and sometimes even investors as a result of the receivables they are owed by the company.
Taking into account the interests of the relevant decision makers, the aim of an accounting standard must be to give the readers of annual financial statements as precise an insight as possible into a company's current net assets, financial position and results of operations. In addition, these statements should provide all the data which decision makers need to make their own predictions as to the company's net assets, financial position and results of operations.

1.2 Specific aims of accounting standards for banks

Having presented the general aims of accounting standards for companies, we must examine to what extent the accounts drawn up by banks are subject to specific requirements. The specialist role played by financial intermediaries necessitates specific requirements. Thus, how solvent a bank is plays an important role in addition to the above-mentioned criteria such as net assets, financial position and results of operations. Other highly significant factors are the specific risks that arise from credit business and how they are covered.

1.3 Aims of International Accounting Standards

"You can't do business globally and use provincial accounting standards." This quote from a member of a German bank's Managing Board reflects the concerns being expressed by institutions from many countries that are united in the IASC (International Accounting Standards Committee). In a world of global enterprises and global capital markets, where people can access the information they need anywhere in the world online and on time, the biggest problem is a lack of transparency and comparability of information. The main objective of International Accounting Standards (IASs) is therefore to provide a global standard for drawing up annual financial statements in line with the general aims mentioned above.

In addition to the international focus of these standards, they aim to ensure that investors can compare data extensively by reporting period and company and thus obtain a sound basis on which to make their decisions. This is why the basic principle behind the IASs is that of providing a true and fair view and of fair presentation.
These standards dispense with the extremely cautious interpretation of data aimed at protecting creditors – which characterizes the continental European model, for example – in favor of accounting policies that are as up-to-date and accurate as possible.

2 Principles of accounting and valuation according to IAS

As a matter of principle, a distinction must be made between the overall framework and the individual standards. The overall framework provides the guidelines for developing new standards and revising existing ones. However, if existing standards and the overall framework contradict each other, the concrete regulation laid down in a particular standard always takes priority.

The primary objective of the overall framework is to provide a wide target group with information that is relevant to their decisions, i.e. a true and fair view of the status and development of the company’s net assets, financial position and results of operations. Presentation is based on the principles of accrual accounting and a going concern. It is vital that the information provided is reliable and comparable. This objective is extremely important – particularly from the point of view of potential investors. Only if the principle of fair presentation is applied can investors allocate their capital optimally.

3 Components of the annual financial statements prepared by banks according to IAS

A complete set of IAS financial statements is composed of the following:

- balance sheet
- income statement
- statement of changes in equity
- cash flow statement
- explanatory notes including accounting policies
### Layout of a bank balance sheet according to IAS

**Assets**

<table>
<thead>
<tr>
<th>Description</th>
<th>Standard no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash funds</td>
<td>30.19</td>
</tr>
<tr>
<td>Loans and advances to banks</td>
<td>30.19</td>
</tr>
<tr>
<td>Loans and advances to customers</td>
<td>30.19</td>
</tr>
<tr>
<td>Loan loss allowance</td>
<td>30.19</td>
</tr>
<tr>
<td>Trading assets</td>
<td>30.19</td>
</tr>
<tr>
<td>Liquidity portfolio (available-for-sale)</td>
<td>1.71 and 39.10</td>
</tr>
<tr>
<td>Investment securities</td>
<td>30.19</td>
</tr>
<tr>
<td>Investments in enterprises accounted for using the equity method</td>
<td>1.66 and 28.28</td>
</tr>
<tr>
<td>Property and equipment</td>
<td>1.66</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>1.66</td>
</tr>
<tr>
<td>Tax assets</td>
<td>1.66 and 12.69</td>
</tr>
<tr>
<td>Outstanding called capital</td>
<td></td>
</tr>
</tbody>
</table>

**Liabilities and shareholders’ equity**

<table>
<thead>
<tr>
<th>Description</th>
<th>Standard no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liabilities to banks</td>
<td>30.19</td>
</tr>
<tr>
<td>Liabilities to customers</td>
<td>30.19</td>
</tr>
<tr>
<td>Certificated liabilities</td>
<td>30.19</td>
</tr>
<tr>
<td>Trading liabilities</td>
<td></td>
</tr>
<tr>
<td>Provisions</td>
<td>1.66</td>
</tr>
<tr>
<td>Tax liabilities</td>
<td>1.66 and 12.69</td>
</tr>
<tr>
<td>Other liabilities</td>
<td></td>
</tr>
<tr>
<td>Subordinated equity</td>
<td></td>
</tr>
<tr>
<td>Minority interest</td>
<td>1.66 and 27.26</td>
</tr>
<tr>
<td>Equity</td>
<td>1.66</td>
</tr>
<tr>
<td>• Issued capital</td>
<td>1.73</td>
</tr>
<tr>
<td>• Share premium account</td>
<td>1.73</td>
</tr>
<tr>
<td>• Retained earnings</td>
<td>1.73</td>
</tr>
<tr>
<td>• Reserve for general banking risks</td>
<td>30.55</td>
</tr>
<tr>
<td>• Revaluation surplus</td>
<td>16.39, 25.32, 38.76, 39.103</td>
</tr>
<tr>
<td>• Foreign currency translation reserve</td>
<td>21.42</td>
</tr>
<tr>
<td>• Consolidated profit (loss)</td>
<td></td>
</tr>
</tbody>
</table>
## Layout of a bank income statement according to IAS

<table>
<thead>
<tr>
<th>Component</th>
<th>Standard no.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest and current income</strong></td>
<td>30.10</td>
</tr>
<tr>
<td>Interest expense</td>
<td></td>
</tr>
<tr>
<td>Net interest income and current income</td>
<td></td>
</tr>
<tr>
<td>Loan loss allowance</td>
<td></td>
</tr>
<tr>
<td>Net interest income and current income after loan allowance</td>
<td></td>
</tr>
<tr>
<td>Fee and commission income</td>
<td></td>
</tr>
<tr>
<td>Fee and commission expense</td>
<td></td>
</tr>
<tr>
<td>Net fee and commission income</td>
<td></td>
</tr>
<tr>
<td><strong>Net trading income</strong></td>
<td></td>
</tr>
<tr>
<td>Profit (loss) from available-for-sale-securities</td>
<td>1.71 and 39.10</td>
</tr>
<tr>
<td>Profit (loss) from investment securities</td>
<td>30.10</td>
</tr>
<tr>
<td>Profit (loss) from enterprises accounted for using the equity method</td>
<td>1.75 and 28.28</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>30.10</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td></td>
</tr>
<tr>
<td><strong>Profit (loss) from operations</strong></td>
<td>1.75</td>
</tr>
<tr>
<td>Other operating income</td>
<td></td>
</tr>
<tr>
<td>Other operating expenses</td>
<td></td>
</tr>
<tr>
<td>Profit (loss) from ordinary activities before tax</td>
<td></td>
</tr>
<tr>
<td>Income taxes on ordinary activities</td>
<td></td>
</tr>
<tr>
<td>Profit (loss) from ordinary activities after tax</td>
<td></td>
</tr>
<tr>
<td>Extraordinary income</td>
<td></td>
</tr>
<tr>
<td>Extraordinary expense</td>
<td></td>
</tr>
<tr>
<td>Income taxes on extraordinary profit (loss)</td>
<td></td>
</tr>
<tr>
<td><strong>Total net profit (loss) for the period</strong></td>
<td></td>
</tr>
<tr>
<td>Minority interest in profits</td>
<td>1.75 and 27.26</td>
</tr>
<tr>
<td>Minority interest in losses</td>
<td>1.75 and 27.26</td>
</tr>
<tr>
<td><strong>Net profit (loss) for the period</strong></td>
<td>1.75</td>
</tr>
<tr>
<td><strong>Earnings per share</strong></td>
<td>33.47</td>
</tr>
</tbody>
</table>
Cash Flow Statement

Cash and cash equivalents at the end of the prior period
Cash flow from operating activities
Cash flow from investing activities
Cash flow from financing activities
Cash and cash equivalents at the end of the period

4 Overview of bank-specific standards

As a matter of principle, International Accounting Standards have been developed to apply to any legal form or industry. Three standards address the specific requirements on banks and similar financial institutions that are mentioned above:

- IAS 30: Disclosures in the Financial Statements of Banks and Similar Financial Institutions
- IAS 32: Financial Instruments: Disclosure and Presentation

These special regulations are briefly outlined below.

IAS 30: Disclosures in the Financial Statements of Banks and Similar Financial Institutions

Readers of bank financial statements need specific information concerning net assets, financial position and results of operations. Liquidity, solvency and the risks arising from the bank's assets, liabilities and off-balance sheet items are particularly important. The risks associated with banking include liquidity risk, currency risk, the risk of interest rate fluctuations, market price risk and counterparty risk.

Banks must disclose their maturity profiles so that their liquidity can be assessed. This also enables readers to analyze interest rate and currency risks. In addition, IAS 30 requires the disclosure of major concentrations of assets, liabilities and off-balance sheet items according to geographical region, customer or industry group or other key risk factors. Disclosing the loan loss allowance also allows specific bank risks to be evaluated.
IAS 32: Financial Instruments: Disclosure and Presentation

IAS 32 concerns the disclosure of equity and debt. It states that the issuer of a financial instrument should classify it as a liability or as equity according to the substance of the contractual agreement. The key criterion for defining instruments here is recovery by the individual investor or lender. If a financial instrument contains both equity and debt elements (such as is the case with convertible bonds), these components must be disclosed separately.

Banks must comply with extensive disclosure requirements to enable the price, counterparty, liquidity and cash flow risks to be assessed by the people reading its balance sheet. On-balance sheet and off-balance sheet assets or liabilities as well as equity instruments must be classified according to term, contractual conditions and the accounting policies used. The fair values for each class must be disclosed and explained in the notes.

IAS 39: Financial Instruments: Recognition and Measurement

IAS 39 differentiates between the following financial assets according to their characteristics and their intended purpose:

- loans and receivables originated by the enterprise
- financial assets or liabilities held for trading
- held-to-maturity investments
- available-for-sale financial assets.

Securities held for trading or liquidity (available-for-sale) purposes must be carried at fair value. The bank as a whole may chose once whether all changes in the fair value of the individual securities will be recognized directly in income, or whether these changes will be recorded in equity and not recognized in income until their disposal. In contrast, loans and receivables originated by the enterprise as well as held-to-maturity investments must be carried at their amortized acquisition cost.
5 Explanation of bank-specific risks

5.1 Credit risks

In accordance with IAS 30, valuation allowances must be set up for acute and potential credit risks associated with loans from banks. Risks that can be identified in relation to individual customers or countries must be taken into account by means of valuation allowances or direct loss charges. Non-specific identifiable risks must be recognized by means of a global valuation allowance. Provisions must also be set up to cover off-balance sheet risks.

The amount of the loan loss allowance is determined by the maximum default risk, not taking into account any collateral furnished. The counterparty risk corresponds to the carrying amount of the receivables or loans, less the appropriate loan loss allowance. Concentrations of the counterparty risk must be disclosed and can be defined according to region or with regard to industries or special key accounts.

The method for calculating the loan loss allowance is specified in IAS 39. Firstly, the bank must use impairments tests to examine whether there is a high counterparty risk (impairment) with regard to individual financial instruments. The estimated recoverable amount of a receivable, for example, will be lower than its carrying amount. If this is the case, a valuation allowance must be set up or a direct loss charge made and recognized in income. The recoverable amount corresponds to the cash value of the estimated future discounted cash flows. The discount applied is the original effective interest rate for the receivable. If the financial instrument has an identifiable market price, the recoverable amount corresponds to the market price. In the case of secured loans and probable foreclosure, the recoverable amount corresponds to the fair value of the collateral.

IAS differs from many continental European accounting standards, for example, in that it permits a loan loss allowance to be set up not only for individual loans, but also for an entire portfolio as an option. Examples of this are global valuation allowances for, among others, similar types of mortgage loan, home loans, installment loans or receivables with country risks.
If there is no longer any reason to maintain a valuation allowance because, for example, the creditworthiness of the borrower has improved, the valuation allowance must be reversed and recognized in income. However, the resulting write-up may not exceed the amortized acquisition cost of the receivable.

As IAS 30 requires the disclosure of valuation allowances, PricewaterhouseCoopers recommends the following statement of changes in valuation allowances:

<table>
<thead>
<tr>
<th>Specific valuation allowance (credit risk)</th>
<th>January 1, 2001</th>
<th>Addition</th>
<th>Utilization</th>
<th>Reversal</th>
<th>Effects of exchange rate fluctuations</th>
<th>December 31, 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country valuation allowance (country risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global valuation allowance (potential risks)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan loss allowance for credit business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisions (credit risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.2 Interest rate risks

In accordance with IAS 32, when preparing their accounts banks must provide information about the interest rate risks associated with on-balance sheet as well as off-balance sheet financial instruments. Changes in the market interest rate can have direct effects on cash flows (cash flow risk) and on the fair value (price risk) of a financial instrument. Cash flows are particularly affected by financial instruments with variable interest rates such as floating rate notes or swaps. The fair value of fixed-interest securities is subject to the interest rate risk. Information must be given on the extent of the interest rate risks associated with all categories of financial instrument, taking into account maturities and opportunities to adjust interest rates. The categories are formed on the basis of the specific features of the financial instruments (interest rate, term, currency). The following represents the minimum number of categories:

- primary receivables from banks and customers (amortized acquisition cost)
- purchased receivables (fair value)
- held-to-maturity (amortized acquisition cost)
- available-for-sale (fair value)
- trading securities (fair value)
- trading liabilities (fair value)
- other liabilities (repayment amount).

It is useful to disclose the remaining maturities for the individual categories. In accordance with IAS 32, banks should not only differentiate between the subdivisions of remaining maturities used by all companies, such as:

- up to one year
- one to five years
- more than five years,

but also between remaining maturities of up to one month and up to three months.
Information about interest rate risks is only useful if at the same time the bank can publish at least average effective interest rates for the individual categories. In addition, the other kind of interest rate risk posed by the problem of currency fluctuations must be mentioned here. It would therefore appear useful to differentiate between interest rate risks according to currency.

6 Accounting and valuation of financial instruments

6.1 The terms "financial investment" and "financial instrument"

Given the large volume of financial instruments included in bank balance sheets, explicit standards on accounting and valuation are vital in order to analyze banks. The adoption of IAS 39 closed the existing gaps and supplemented the current IAS 25 and IAS 32 standards.

In accordance with IAS 25, financial investments are assets held by a company to generate interest, dividend and fee income or to realize increases in value. Investments which will not be held for longer than a year are regarded as short-term financial investments. All others are considered as long-term.

As defined in IAS 39, financial instruments are contractual agreements which result in one company recording a financial asset and the other a financial liability or an equity instrument. Financial instruments comprise both primary and derivative instruments. IAS 39 also covers the liabilities side of the balance sheet.

Financial assets comprise in particular:

- cash
- contractual rights to receive cash and cash equivalents or other assets from other companies (e.g. bonds)
- contractual rights to exchange financial assets with another company at favorable conditions (e.g. options)
- equity instruments.
Financial liabilities are contractual liabilities

- to provide another company with cash and cash equivalents or other financial assets an (e.g. debt instruments)

- to exchange financial instruments with another company at favorable conditions (e.g. short positions in options).

**Equity instruments** such as shares define the rights of holders to a residual interest in the company after the deduction of all its liabilities. **Derivatives** are characterized by the fact that their value fluctuates in line with their underlying security, that they require little or no initial investment and are settled or fulfilled in the future.

<table>
<thead>
<tr>
<th>Financial instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
</tr>
<tr>
<td>Receivables</td>
</tr>
<tr>
<td>Liabilities</td>
</tr>
<tr>
<td>- Bank balances /liabilities to banks</td>
</tr>
<tr>
<td>- Trade receivables/payables</td>
</tr>
<tr>
<td>- Bonds, debt instruments, borrower's notes</td>
</tr>
<tr>
<td>- Bills</td>
</tr>
<tr>
<td>- Interest deferrals</td>
</tr>
<tr>
<td>Equity interests/equity securities</td>
</tr>
</tbody>
</table>
In accordance with IAS 39, all financial instruments must be subdivided into four categories:

- held for trading
- held to maturity
- loans and receivables originated by the enterprise
- available for sale

**Held-for-trading securities** are primarily used to generate profits from short-term changes in the market price or in the dealer margin. Derivatives are always regarded as financial instruments that are held-for-trading. Exceptions to this rule are only possible if derivatives are used to hedge an underlying transaction. Items from the "held for trading" category cannot be reclassified into other categories. Reclassification in the opposite direction is mandatory if, contrary to the bank's original intention, its primary aim becomes that of generating short-term profits.

Liabilities from trading business cover derivatives with negative market values as well as delivery obligations arising from short sales of securities. Liabilities from refinancing trading business are not counted as trading business themselves.

**Held-to-maturity securities** are characterized by payments that have been or can be calculated as well as the existence of a maturity date. Equity instruments which do not have a maturity date cannot be assigned to this category. However, the crucial factor is not the existence of a maturity date but the intention and the ability of the bank to hold the security in question until maturity.

**Loans and receivables originated by the enterprise** cover all financial assets which arise from the provision of money, goods or services directly to the borrower and which are not intended to be sold immediately.

All other financial instruments can be classified as **available for sale**. This category covers all financial instruments which cannot be assigned to any of the other three groups. This group is characterized by the fact that, although these instruments may be sold at any time, they are not intended to be sold.
6.2 Disclosure and valuation

In accordance with IAS 39, all financial assets and liabilities must be included in the balance sheet if the company is bound by the contractual regulations of the financial instrument in question. This also means that all rights and obligations arising from derivatives must be disclosed explicitly.

When financial instruments are added to the balance sheet, they are initially valued at acquisition cost; this corresponds to the fair value at the time of purchase. If the acquisition cost cannot be calculated, the fair value is determined by the cash value of the payment flows, which is determined on the basis of the market interest rate adjusted by the credit risk.

Subsequent valuations of financial instruments in accordance with IAS 39 depend on their assignment to one of the four categories mentioned above. As a matter of principle, all financial assets must be carried at fair value. Primary loans and receivables and held-to-maturity securities must be valued at their amortized acquisition cost. For reasons of simplification, short-term receivables as well as trade payables are valued at their principal amounts.

Changes in the value of held-for-trading securities must be recognized directly in income. In the case of available-for-sale securities, however, banks have a one-off option to choose whether these – like trading securities – are recognized directly in income or whether the change in value is recorded in equity via the revaluation surplus and is not recognized in income. The option must be exercised consistently for all securities of this category. If a held-to-maturity security is reclassified as a trading security or an available-for-sale security, any difference in value between the amortized acquisition cost and the fair value must be dealt with according to the above-mentioned principles.

At each balance sheet date, the bank must examine whether the financial assets are unrecoverable in whole or in part. If this is the case, an impairment of the financial instrument must be assumed. However, this relates merely to the future payment flows and not to the actual market price (fair value) of the financial instrument. The company is obliged to perform a write-down if the carrying amount
calculated using the fair value or the amortized acquisition cost exceeds the recoverable amount on the basis of the future discounted cash flows. Conversely, a write-up must be performed if in subsequent periods the impairment test reveals that the recoverable amount has risen again. The same principle must also be applied to financial instruments that are valued on the basis of their amortized acquisition costs.

<table>
<thead>
<tr>
<th></th>
<th>Trading</th>
<th>Available-for-sale</th>
<th>Held-to-maturity</th>
<th>Primary loans/receivables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuation benchmark</td>
<td>Fair value</td>
<td>Fair value</td>
<td>Amortized cost</td>
<td>Amortized cost</td>
</tr>
<tr>
<td>Change in value</td>
<td>Recognized in income</td>
<td>Recognized or not recognized in income</td>
<td>Distribution of the difference between acquisition cost and principal amount</td>
<td>Distribution of the difference between acquisition cost and principal amount</td>
</tr>
<tr>
<td>Impairment test</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### 6.3 Hedge accounting

In accordance with IAS 39, a distinction must be made in principle in hedge accounting between fair value hedges and cash flow hedges:

**Fair value hedge**
Existing assets are hedged against fair value changes that are recognized in income, based on changes in the market price

**Cash flow hedge**
Assets and open positions (that are not to be included in the balance sheet) are hedged against fluctuations in cash flow.

The key requirements for hedge accounting in accordance with IAS 39 are that, on the one hand, the relationship between the underlying and the hedge transactions is clearly demonstrated and, on the other hand, that the risk being hedged and the hedging instrument largely offset each other. The main hedging instruments are
derivatives, while the existing underlying transaction not only consists of on-
balance sheet assets and liabilities but also off-balance sheet liabilities (firm
commitments). What is more, both individual transactions as well as portfolios can
be hedged. However, this assumes a narrow definition of portfolios: only assets
and liabilities with a comparable risk structure can be hedged as part of hedge
accounting in accordance with IAS 39.

In the case of fair value hedges, profits and losses generated by the hedging
transaction and the underlying transaction must be recognized in income. The
carrying amount of the underlying transaction must be adjusted accordingly.
This regulation is only significant where changes in fair value are recorded via
the revaluation surplus or where the underlying transaction has been
accounted for at acquisition cost. In this case, the hedge automatically
produces the desired effects when the fair value is directly recognized in
income.

IAS does not contain any explicit regulations for existing underlying
transactions in the case of cash flow hedges. In my view, however, the
principles of the fair value hedge could also be applied to this case. If, on the
other hand, a cash flow hedge is not based on an underlying transaction which
must be disclosed in the balance sheet, profits and losses generated by the
hedging transaction should be recorded via the revaluation surplus and not
recognized income. If the open transaction then results in an asset or a liability,
the corresponding value adjustments will become part of the acquisition cost
(basis adjustment).
7. References


Rainer Bossert / Peter Hartmann, Jahresabschluß, Internationaler Abschluß, Konzernabschluß, Stuttgart 2000


8. Appendix:

Documents of the Lecture of September 25th, 2001 in Hangzhou, China

International Accounting Standards

Implications for Financial Institutions

Prof. Dr. Norbert Seeger

Contents

1 Aims of accounting standards
   1.1 General aims
   1.2 Specific aims of accounting standards for banks
   1.3 Aims of International Accounting Standards

2 Principles of accounting and valuation according to IAS

3 Components of the annual financial statements

4 Overview of bank-specific standards
Contents

5  Explanation of bank-specific risks
   5.1 Credit risks
   5.2 Interest rate risks

6  Accounting and valuation of financial instruments
   6.1 The terms “financial investment” and “financial instrument”
   6.2 Disclosure and valuation
   6.3 Hedge accounting

7  Outlook on the development of IAS for banks

1  Aims of accounting standards

1.1 General aims

Functions:
   Basis of taxation
   Benchmark for profit distribution

Aims are derived from these functions:
   As fair a benchmark as possible
   No endangering of the company’s existence
   Cautious and conservative calculation of profits
1 Aims of accounting standards

1.1 General aims

Overarching aim:

To provide information relevant for decision-making for financial statement readers
- e.g. investors: profit forecasts, risks
- e.g. lenders: default risk
- e.g. employees, suppliers, the government

Aim:

Precise insight into a company’s current net assets, financial position and results of operations
1 Aims of accounting standards

1.2 Specific aims of accounting standards for banks

Aim:

Precise insight into a bank’s current net assets, financial position and results of operations

and

estimate of the risks arising from credit business

1 Aims of accounting standards

1.3 Aims of International Accounting Standards

“You can’t do business globally and use provincial accounting standards“

⇒ Transparency
⇒ Topicality
⇒ Comparison by reporting period and company

⇒ True and fair view
⇒ Fair presentation
⇒ Globally accepted accounting principles
2 Principles of accounting and valuation according to IAS

Underlying principles:
Accrual basis  Going concern  Comparability  Reliability  Prudence  Neutrality  Materiality  Comprehensibility

Relevance for decisions  Fair presentation  True and fair view

3 Components of the annual financial statements prepared by banks according to IAS

- Balance sheet
- Income statement
- Statement of changes in equity
- Cash flow statement
- Explanatory notes including accounting policies
3 Components of the annual financial statements prepared by banks according to IAS

The balance sheet

<table>
<thead>
<tr>
<th>Components</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash funds</td>
<td>Liabilities to banks/customers</td>
</tr>
<tr>
<td>Loans and advances to banks/customers</td>
<td>Trading liabilities</td>
</tr>
<tr>
<td>Loan loss allowance</td>
<td>Provisions</td>
</tr>
<tr>
<td>Assets (held for trading, available-for-sale)</td>
<td>Tax liabilities</td>
</tr>
<tr>
<td>Investment securities (held-to-maturity)</td>
<td>Other liabilities</td>
</tr>
<tr>
<td>Investments in enterprises accounted for at equity</td>
<td>Subordinated equity</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>Minority interest</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>Equity</td>
</tr>
<tr>
<td>Tax assets</td>
<td>- Issued capital</td>
</tr>
<tr>
<td>Other assets</td>
<td>- Retained earnings/share premium account</td>
</tr>
<tr>
<td></td>
<td>- Reserve for general banking risks</td>
</tr>
<tr>
<td></td>
<td>- Revaluation surplus</td>
</tr>
<tr>
<td></td>
<td>- Consolidated profit/loss</td>
</tr>
</tbody>
</table>

The income statement

Net interest income and current income
- Loan loss allowance
+ Net fee and commission income
= Net trading income
+ Profit (loss) from available-for-sale securities
+ Profit (loss) from investment securities
+ Profit (loss) from enterprises accounted for at equity
- Administrative expenses
= Profit (loss) from operations
+ Other operating profit
= Profit (loss) from ordinary activities before tax
- Income taxes on ordinary activities
= Profit (loss) from ordinary activities after tax
- Extraordinary profit (loss) (incl. income taxes)
= Total net profit (loss) for the period (earnings per share)
3 Components of the annual financial statements prepared by banks according to IAS

The cash flow statement

Cash and cash equivalents as of end of prior period
+ Cash flow from operating activities
+ Cash flow from investing activities
+ Cash flow from financing activities

= Cash and cash equivalents as of end of period

4 Overview of bank-specific standards

The principle is: The IAS apply to any legal form or industry

Specific requirements on financial institutions

IAS 30: Disclosures in the Financial Statements of Banks and Similar Financial Institutions

IAS 32: Financial Instruments: Disclosure and Presentation

IAS 39: Financial Instruments: Recognition and Measurement
4 Overview of bank-specific standards

IAS 30: Disclosures in the Financial Statements of Banks and Similar Financial Institutions

- Bank-specific information on liquidity and solvency
- Risks: currency risks, interest rate risks, market price risks and risk of counterparty default
- Disclosure of maturity profile to allow the analysis of interest rate and currency risks
- Disclosure of major concentrations of assets and liabilities according to region, customer and industry
- Disclosure of loan loss allowances

IAS 32: Financial Instruments: Disclosure and Presentation

- Differentiation of financial instruments according to equity and borrowed capital
- Disclosure of assets, liabilities and equity instruments as well as off-balance sheet obligations according to term, contractual conditions and accounting policies used
- For each category, the fair values should be disclosed and explained in the Notes
4 Overview of bank-specific standards

IAS 39: Financial Instruments: Recognition and Measurement

• Differentiation of financial instruments according to:
  – Held-for-trading: securities are held to profit from short-term price fluctuations (held for disposal)
  – Loans and receivables generated by the enterprise
  – Held-to-maturity (securities are held to maturity)
  – Available-for-sale (cash and cash equivalents and all securities that cannot be assigned to the other categories)

5 Explanation of bank-specific risks

5.1 Credit risks

Loan loss allowances
• Valuation allowances or direct write-downs on identifiable risks arising from individual customers or countries
• Global valuation allowances for non-specific identifiable risks
• Provisions for off-balance sheet transactions (e.g. incomplete contracts)
• No taking into account of any collateral
• Disclosure of concentrations of counterparty default (e.g. industries or large customers)
5 Explanation of bank-specific risks

5.1 Credit risks

Calculation of loan loss allowances:
- Impairment test of individual financial instruments or portfolios:
- Portfolio: similar mortgage loans, home loans, instalment loans or receivables with country risks

Estimated recoverable amount < carrying amount
Write-down or value adjustment obligation

Recoverable amount = Estimated discounted future cash flow
Market price
Fair value of the collateral

5 Explanation of bank-specific risks

5.1 Credit risk

Disclosure of valuation allowances

<table>
<thead>
<tr>
<th></th>
<th>01.01.01</th>
<th>Addition</th>
<th>Utilization</th>
<th>Reversal</th>
<th>12.31.01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific valuation allowance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Credit risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country valuation allowance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Country risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global valuation allowance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Potential risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan loss allowance for credit business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Credit risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5  Explanation of bank-specific risks

5.2 Interest rate risks

• Disclosure of interest rate risks pursuant to IAS 32
• Effects of changes in the market interest rate on the fair value and cash flow of a financial instrument (e.g. in the case of floating-rate securities such as floating-rate notes or swaps)
• Disclosure of terms to maturity of the different categories of securities
• Typical: due within 1 year, due after 1 year, due after 1 year through 5 years, due after 5 years
• Bank-specific: term to maturity of up to 1 month and up to 3 months
• Disclosure of average effective interest rates
• Disclosure of currency risks

6  Accounting and valuation of financial instruments

6.1 The terms “financial investment“ and “financial instrument“

• Any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise

• Financial instruments comprise both primary and derivative financial instruments

• Compared to the previous specifications of IAS 25, the definition in IAS 39 also covers the liabilities side
6 Accounting and valuation of financial instruments

6.1 The terms “financial investment” and “financial instrument”

<table>
<thead>
<tr>
<th>Primary financial instruments</th>
<th>Derivative financial instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receivables</td>
<td>Financial options</td>
</tr>
<tr>
<td>Liabilities</td>
<td>Futures</td>
</tr>
<tr>
<td>- Bank balances/liabilities to banks</td>
<td>Forwards</td>
</tr>
<tr>
<td>- Trade receivables/payables</td>
<td>Interest rate swaps</td>
</tr>
<tr>
<td>- Bonds, debt instruments, borrower’s notes</td>
<td>Exchange rate swaps</td>
</tr>
<tr>
<td>- Bills</td>
<td></td>
</tr>
<tr>
<td>- Interest deferrals</td>
<td></td>
</tr>
<tr>
<td>Equity interests/equity securities</td>
<td></td>
</tr>
</tbody>
</table>

Differentiation of financial instruments according to:

- Held-for-trading: securities are held to profit from short-term price fluctuations (held for disposal)
- Loans and receivables generated by the enterprise
- Held-to-maturity (securities are held to maturity)
- Available-for-sale (cash and cash equivalents and all securities that cannot be assigned to the other categories)
6 Accounting and valuation of financial instruments

6.1 The terms “financial investment“ and “financial instrument“

Differentiation of financial instruments according to:

- Held-for-trading: securities are held to profit from short-term price fluctuations (held for disposal)
- Loans and receivables generated by the enterprise
- Held-to-maturity (securities are held to maturity)
- Available-for-sale (cash and cash equivalents and all securities that cannot be assigned to the other categories)

6 Accounting and valuation of financial instruments

6.2 Disclosure and valuation

Disclosure of financial instruments

All financial assets and liabilities must be included in the balance sheet if the company is bound by contractual regulations

⇒ Explicit disclosure of the rights and obligations arising from derivatives
6 Accounting and valuation of financial instruments

6.2 Disclosure and valuation

Initial valuation

- The financial instruments are to be initially valued at purchase cost which corresponds to the fair value at the time of purchase.

- If no fair value can be determined, the discounted cash flows are to be determined on the basis of the market interest rate adjusted for the credit risk.

<table>
<thead>
<tr>
<th></th>
<th>held for trading</th>
<th>available for sale</th>
<th>held to maturity</th>
<th>loans and receivables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuation benchmark</td>
<td>fair value</td>
<td>fair value</td>
<td>amortised cost</td>
<td></td>
</tr>
<tr>
<td>Change in value</td>
<td>recognised in income</td>
<td>recognised or not recognised in income</td>
<td>Distribution of the difference between acquisition cost and principal amount</td>
<td></td>
</tr>
<tr>
<td>Impairment test</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>
6 Accounting and valuation of financial instruments

6.3 Hedge accounting

Key requirements for hedge accounting:

- Description of the relationship between the underlying and the hedge transaction
- Description of the risk to be hedged
- Description of how the risk is compensated for by the hedge

Application of hedge accounting:

- Both individual transactions and portfolios (narrow definition of portfolio)
- Fair-value hedge if no immediate effect on profit or loss as a result of a change in market prices
- IAS 39 does not contain a regulation concerning cash-flow hedges. However, the principles applying to incomplete contracts can be applied, using the revaluation surplus
7 Outlook on the development of IAS for banks

• The recognition and measurement of financial instruments is being reviewed by a Joint Working Group
  – Development of lease accounting, hedge accounting
    ⇒ Aim: One global standard for financial instruments
• Recognition of the International Accounting Standards by IOSCO in 2000
• Recommendation: Use the IAS financial statements of foreign issuers to obtain access to national capital markets
• However: Permission of “Supplemental treatments“
  – Reconciliations
  – Supplemental disclosure
  – Interpretations
• SEC reserves the right to interpret the IAS and reconciliations

⇒ Aim: One global standard for financial instruments

Different accounting standards and restrictions on admission are real trade barriers

⇒ Aim: One global standard for accounting
## Published papers:

<table>
<thead>
<tr>
<th>No.</th>
<th>Author/Title</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Moormann, Juergen</td>
<td>1995</td>
</tr>
<tr>
<td></td>
<td>Lean Reporting und Fuehrungsinformationssysteme bei deutschen Finanzdienstleistern</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cremers, Heinz; Schwarz, Willi</td>
<td>1996</td>
</tr>
<tr>
<td></td>
<td>Interpolation of Discount Factors</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Jahresbericht 1996</td>
<td>1997</td>
</tr>
<tr>
<td>4</td>
<td>Ecker, Thomas; Moormann, Juergen</td>
<td>1997</td>
</tr>
<tr>
<td></td>
<td>Die Bank als Betreiberin einer elektronischen Shopping-Mall</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Jahresbericht 1997</td>
<td>1998</td>
</tr>
<tr>
<td>6</td>
<td>Heidorn, Thomas; Schmidt, Wolfgang</td>
<td>1998</td>
</tr>
<tr>
<td></td>
<td>LIBOR in Arrears</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Moormann, Juergen</td>
<td>1998</td>
</tr>
<tr>
<td></td>
<td>Stand und Perspektiven der Informationsverarbeitung in Banken</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Heidorn, Thomas; Hund, Juergen</td>
<td>1998</td>
</tr>
<tr>
<td></td>
<td>Die Umstellung auf die Stueckaktie fuer deutsche Aktiengesellschaften</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Loechel, Horst</td>
<td>1998</td>
</tr>
<tr>
<td></td>
<td>Die Geldpolitik im Waehrungsraum des Euro</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Loechel, Horst</td>
<td>1998</td>
</tr>
<tr>
<td></td>
<td>The EMU and the Theory of Optimum Currency Areas</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Moormann, Juergen</td>
<td>1999</td>
</tr>
<tr>
<td></td>
<td>Terminologie und Glossar der Bankinformatik</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Heidorn, Thomas</td>
<td>1999</td>
</tr>
<tr>
<td></td>
<td>Kreditrisiko (CreditMetrics)</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Heidorn, Thomas</td>
<td>1999</td>
</tr>
<tr>
<td></td>
<td>Kreditderivate</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Jochum, Eduard</td>
<td>1999</td>
</tr>
<tr>
<td></td>
<td>Hoshin Kanri / Management by Policy (MbP)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Deister, Daniel; Ehrlicher, Sven; Heidorn, Thomas</td>
<td>1999</td>
</tr>
<tr>
<td></td>
<td>CatBonds</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Chevalier, Pierre; Heidorn, Thomas; Ruetze, Merle</td>
<td>1999</td>
</tr>
<tr>
<td></td>
<td>Gruendung einer deutschen Stromboerse fuer Elektrizitaetsderivate</td>
<td></td>
</tr>
</tbody>
</table>
17 Cremers, Heinz 1999
Value at Risk-Konzepte fuer Marktrisiken

18 Cremers, Heinz 1999
Optionspreisbestimmung

19 Cremers, Heinz; Robé Sophie, Thiele Dirk 2000
Beta als Risikomass – Eine Untersuchung am europaeischen Aktienmarkt

20 Wolf, Birgit 2000
Die Eigenmittelkonzeption des § 10 KWG

21 Heidorn, Thomas 2000
Entscheidungsorientierte Mindestmargenkalkulation

22 Boeger, Andreas; Heidorn, Thomas; Philipp Graf Waldstein 2000
Hybrides Kernkapital fuer Kreditinstitute

23 Heidorn, Thomas 2000
 Neue Moeglichkeiten durch die Namensaktie

24 Moormann, Juergen; Frank, Axel 2000
Grenzen des Outsourcing: Eine Exploration am Beispiel von Direktbanken

25 Loechel, Horst 2000
Die oekonomischen Dimensionen der ‚New Economy‘

26 Cremers, Heinz 2000
Konvergenz der binomialen Optionspreismodelle gegen das Modell von Black/Scholes/Merton

27 Heidorn, Thomas / Klein, Hans-Dieter / Siebrecht, Frank 2000
Economic Value Added zur Prognose der Performance europaeischer Aktien

28 Horst Loechel / Guenter Georg Eberle 2001
Die Auswirkungen des Uebergangs zum Kapitaldeckungsverfahren in der Rentenversicherung auf die Kapitalmaerkte

29 Rita Biswas / Horst Loechel 2001
Recent Trends in U.S. and German Banking: Convergence or Divergence?

30 Thomas Heidorn / Oliver Jaster / Ulrich Willeitner 2001
Event Risk Covenants

31 Peter Roßbach 2001
Behavioral Finance - Eine Alternative zur vorherrschenden Kapitalmarkttheorie?
32 Juergen Strohhecker / Zbynek Sokolovsky 2001
Fit für den Euro Simulationsbasierte Euro-Massnahmenplanung für Dresdner-Bank-Geschäftsstellen

33 Frank Stehling / Juergen Moormann 2001
Strategic Positioning of E-Commerce Business Models in the Portfolio of Corporate Banking

34 Norbert Seeger 2001
International Accounting Standards (IAS)
Implications for Financial Institutions

Price of printed version: DM 50,- plus DM 5,- for shipping
Download at: http://www.hfb.de/forschung/veroeffen.html

Mail address/contact:

Bettina Tischel, Hochschule fuer Bankwirtschaft,
Sonnemannstraße 9-11, 60314 Frankfurt/M., Germany
Phone: ++49/69/154008-716, Fax: ++49/69/154008-728
E-Mail: tischel@hfb.de

More information on Hochschule fuer Bankwirtschaft can be found at www.hfb.de