



**ECONOMIC RESEARCH PAPERS**

**N° 70**

**International Accounting Standards-IAS 39  
Accounting for Financial Instruments:  
Implementation Issues and  
Decision-Making Dilemma**

by

Ahmed Bahgat, Ph.D  
Vice President, Finance  
African Development Bank

The views and interpretations in this paper are those of the author  
and not necessarily those of the African Development Bank

# **ECONOMIC RESEARCH PAPERS**

**N° 70**

---

## **International Accounting Standards-IAS 39: Accounting for Financial Instruments: Implementation Issues and Decision-Making Dilemma**

by

Ahmed Bahgat, Ph.D  
Vice President, Finance  
African Development Bank

Copyright © 2002  
The African Development Bank  
01 B.P. 1387  
Abidjan 01  
Côte d'Ivoire

## **Abstract**

The IAS 39 brings visibility in the use of derivative instruments for investors and other financial statements users. However, its implementation requires firms to incur additional investment in technical capacity building including acquisition of asset and liability management systems, systems of evaluation adapted to the types of financial instruments in use and proper training of staff to acquire the necessary skills to handle these systems. It also requires more informative disclosure in the financial statements. Furthermore the implementation of IAS 39 requires alerting top management to decide upon the financial information most relevant for decision-making. Despite added constraints and costs to firms, the implementation of IAS 39 brings in the financial statements (balance sheet and income statement) the disclosure of market and credit risks resulting from the use of derivative instruments, which previously were either not disclosed or were inappropriately disclosed as off balance sheet items. Therefore the implementation of IAS 39 not only protects firms from unwanted surprises such as the Barings Bank case, but also gives a better protection to investors by periodically disclosing these derivatives position to them. This standard is mandatory starting from January 2001 for all firms using International Accounting Standards. The corresponding standard in the USA for those firms using GAAP is FASB 133.

## Résumé

La NCI 39 clarifie l'utilisation des instruments dérivés pour les investisseurs et les autres utilisateurs d'états financiers. Cependant, sa mise en œuvre impose aux sociétés d'investir davantage de ressources dans le renforcement de leur capacité technique, notamment l'acquisition de systèmes de gestion de l'actif et du passif et de systèmes d'évaluation adaptés aux types d'instruments financiers utilisés. Elle suppose aussi que le personnel reçoive une formation lui permettant d'acquérir les compétences nécessaires pour gérer ces systèmes. Elle prévoit enfin la publication d'un éventail plus large d'informations dans les états financiers. Par ailleurs, la mise en œuvre de la NCI 39 impose de rappeler à la haute direction qu'il lui revient de sélectionner soigneusement les informations financières les plus pertinentes pour la prise de décisions. Malgré les contraintes et les coûts supplémentaires pour les sociétés, la mise en œuvre de la NCI 39 fait figurer dans les états financiers (bilan et compte de résultats) les risques de marché et risques de crédit résultant de l'utilisation d'instruments dérivés qui, précédemment, n'étaient pas publiés ou étaient publiés de manière inappropriée en tant qu'éléments hors bilan. Ainsi, la mise en œuvre de la NCI 39 non protège seulement les sociétés de mauvaises surprises telles que l'affaire de la banque Barings, mais également les investisseurs en imposant la publication périodique du statut des instruments dérivés. Cette norme s'impose à partir de janvier 2001 à toutes les sociétés utilisant les Normes comptables internationales. La norme américaine correspondante pour les sociétés qui utilisent les GAAP est la norme FASB 133.

# **International Accounting Standards-IAS 39 Accounting for Financial Instruments: Implementation Issues and Decision-Making Dilemma**

by

**Ahmed Bahgat, Ph.D**

## **Rational of IAS 39: Accounting for Financial Instrucments**

This standard aims to bring more visibility to financial statements users with regard to the accounting and disclosure of financial instruments, in particular derivatives. Prior to the entry into force of this standard, derivatives are recorded as off balance sheet items and only disclosed in the notes to financial statements. These disclosures were not in a standardised format. The consequences are that investors and users of financial statements can not fairly substantiate the financial impact of derivatives at any financial statement presentation date and consequently evaluate their implied risks.

## **Overview of IAS 39**

IAS 39 or International Accounting Standard 39 depicts the accounting standards relating to Financial Instruments: Recognition and Measurement. The substantial changes introduced by this new standard are the greater use of fair values for:

- Nearly all derivative assets and derivative liabilities, which prior to the implementation of this standard, most often are not recognised, let alone measured at fair value;
- All debt securities, equity securities, and other financial assets held for trading;
- All debt securities, equity securities, and other financial assets that are not held for trading but nonetheless are available for sale;
- Certain derivatives that are embedded in non-derivative instruments, which prior to the implementation of this standard are generally not recognised;
- Non-derivative financial instruments containing embedded derivative instruments that can not be reliably separated from the non-derivative instrument generally measured at amortised cost prior to the implementation of this standard;
- Non-derivative assets and liabilities that have fair value exposures being hedged by derivative instruments. Prior to the implementation of this standard there were no uniform hedge accounting standards, consequently the practice related to these instrument widely varies;

- Fixed maturity investments that the enterprise does not designate as “held to maturity”;
- and
- Purchased loans and receivables that the enterprise does not designate as “held to maturity”.

### **Significant Highlights of IAS 39**

1. Under IAS 39, all financial assets and financial liabilities are recognised on the balance sheet, including all derivatives. They are initially measured at cost, which is the fair value of whatever was paid or received to acquire the financial asset or liability. An enterprise should recognise normal purchases and sales of financial assets in the market place either at trade date or settlement date. Certain value changes between trade and settlement dates are recognised for purchases if settlement date accounting is used. Transaction costs should be included in the initial measurement of all financial instruments.
2. Subsequent to initial recognition, all financial assets classified as held for trading and/or available for sale should be re-measured to fair value, except for the following, which should be carried at amortised cost subject to a test for impairment:
  - (a) loans and receivables originated by the enterprise and not held for trading;
  - (b) other fixed maturity investments with fixed or determinable payments, such as debt securities and mandatorily redeemable preferred shares, that the enterprise intends and is able to hold to maturity; and
  - (c) financial assets whose fair value cannot be reliably measured (generally limited to some equity securities with no quoted market price and some derivatives; forwards and options that are linked to and must be settled by delivery of such unquoted equity securities).
3. An enterprise should measure loans and receivables that it has originated and that are not held for trading at amortised cost, less reductions for impairment or uncollectibility. The enterprise need not demonstrate intent to hold originated loans and receivables to maturity.
4. An intended or actual sale of a held-to-maturity security due to a non-recurring and not reasonably anticipated circumstance beyond the enterprise’s control does not call into question the enterprise’s ability to hold its remaining portfolio to maturity.
5. If an enterprise is prohibited from classifying financial assets as held-to-maturity because it has sold more than an insignificant amount of assets that it had previously said it intended to hold to maturity, that prohibition expires at the end of the second financial year following the premature sales.
6. After acquisition most financial liabilities are measured at original recorded amount less principal repayments and amortisation. Only derivatives and liabilities held for trading (such as securities borrowed by a short seller) are re-measured to fair value.

7. For those financial assets and liabilities that are re-measured to fair value, an enterprise will have a single enterprise-wide option either to:

- (a) recognise the entire adjustment in net profit or loss for the period; or
- (b) recognise in net profit or loss for the period only those changes in fair value relating to financial assets and liabilities held for trading, with the non-trading financial assets and liabilities; i.e., available for sell securities, fair value changes are reported in equity until the financial asset is sold, at which time the realised gain or loss is reported in net profit or loss. For this purpose, derivatives are always deemed held for trading unless they are designated as hedging instruments.

8. IAS 39 requires that an impairment loss be recognised for a financial asset whose recoverable amount is less than carrying amount. Guidance is provided in the section entitled “**IAS 39 IMPLEMENTATION- CHALLENGES FOR BANKS**” below for calculating impairment.

9. IAS 39 establishes conditions for determining when control over a financial asset or liability has been transferred to another party. For financial assets a transfer normally would be recognised if (a) the transferee has the right to sell or pledge the asset and (b) the transferor does not have the right to reacquire the transferred assets. With respect to derecognition of liabilities, the debtor must be legally released from primary responsibility for the liability (or part thereof) either judicially or by the creditor. If part of a financial asset or liability is sold or extinguished, the carrying amount is split based on relative fair values.

10. Hedging, for accounting purposes, means designating a derivative or a non-derivative financial instrument (only for hedges of foreign currency risk) as an offset in net profit or loss, in whole or in part, to the change in fair value or cash flows of a hedged item. Hedge accounting<sup>1</sup> is permitted under IAS 39 in certain circumstances, provided that the hedging relationship is clearly defined, measurable, and actually effective.

11. Hedge accounting is permitted only if an enterprise designates a specific hedging instrument as a hedge of a change in value or cash flow of a specific hedged item, rather than as a hedge of an overall net balance sheet position. However, the approximate income statement effect of hedge accounting for an overall net position can be achieved, in some cases, by designating part of one of the underlying items as the hedged position.

12. For hedges of forecasted transactions that result in the recognition of an asset or liability, the gain or loss on the hedging instrument will adjust the basis (carrying amount) of the acquired asset or liability.

### **IAS 39 Implementation- Challenges for Banks**

Under IAS 39, financial instruments are defined as “any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity investment of another enterprise”. Financial instruments held by banks primarily include cash, investment securities, loans and guarantees, equity investments or participations, client deposits, borrowings, and derivative financial instruments

such as interest rate and currency swaps, options and futures. Fixed assets are not considered as financial instruments and are therefore excluded from the scope of application of IAS 39. The other items on the balance sheet are affected as follows:

**Cash:** No change to current accounting.

**Investment securities:** Initially measured at cost at their acquisition date, subsequent to their acquisition date they are re-measured in conformity with paragraph 2 of the section “Significant highlights of IAS 39” here above.

**Loans and guarantees:** IAS 39 stipulates that banks’ originated loans should be carried at amortised cost. IAS 39 does not introduce any special changes to the current accounting for banks’ loan portfolio. Guarantees that require payment to be made when the debtor defaults on its obligations are excluded from the scope of application of IAS 39. Such guarantees are reported as off-balance sheet items, with the appropriate provisions for probable losses reflected in the financial statements. However, guarantees that require payments to be made based on changes in interest rates, exchange rates, commodity prices or some other reference or index are derivative financial instruments that fall with the scope of IAS 39 and should be fair valued.

IAS 39 however explicitly outlines the broad principles for determining the degree of impairment in assets, including originated loans. Under IAS 39 if there were a probability that a loan granted by a bank would not be collected in total (principal and interest) according to the contractual terms of the loan, then an impairment or bad debt loss has occurred. The amount of the loss is the difference between the loan’s carrying amount and the present value of expected future cash flows discounted at the original effective interest rate of the loan.

**Equity investments (participations):** in general, IAS 39 requires that equity investments be carried at fair value, where such fair values can be determined. IAS 39 also indicates that unquoted equity investments whose fair values can not be reliably measured may be carried at cost. Whenever equity investments are carried at cost, they should be reported netted of any probable loss.

**Client deposits:** like cash, these items are very liquid and their face values approximate market values, therefore there is no change to current accounting.

**Borrowings and related derivatives:** like most liabilities, borrowings are excluded from the application scope of this standard; that is they are reported at their amortised cost.

Borrowings related derivatives are structured transactions attached to borrowings to obtain lower cost of funding. This is done through the use of a combination of direct borrowings and derivatives (typically interest rate and currency swaps and options) to structure deals with more favourable terms for the borrower. For example, banks may borrow at a fixed rate of interest and then effectively swap such fixed borrowing into a floating rate borrowing through an interest rate swap to obtain a floating rate lower than if the direct borrowing had been at a floating rate. Prior to IAS 39, such a transaction was accounted for to reflect the net effect of the transaction, that is the borrowing cost resulting from the financially engineered floating rate borrowing obtained from the swap transaction, while the counterpart will support the borrowing cost of the direct borrowing.



Now under IAS 39, the direct borrowing is required to be carried at amortised cost and the related interest rate swap in this example, is required to be marked to market, with the mark-to-market result going directly to the income statement. The phenomenon, where one part of a packaged transaction is carried at cost and the remaining part is marked to market is frequently referred to as “mixed attribute accounting”. Such mixed attribution is one of the primary reasons for the volatility in income in accounting for financial instruments under IAS 39. The marking to market of the derivatives related to borrowings at any balance sheet date has the effect of showing what the financial statement effect would be if all such derivative positions were unwound as of that balance sheet date.

**Special hedge accounting:** IAS 39 allows the use of special hedge accounting to lessen the volatility effect resulting from the marking to market of financial instruments. However, special hedge accounting is permissible only under the conditions specified in paragraphs 11 and 12 of the section entitled “**Significant highlights of IAS 39**” here above and, if all of the following criteria are satisfied:

- Formal documentation at the inception of the hedge transaction (define the intention, determine precisely the asset or liability subject of the hedge transaction and the hedge transaction);
- Hedge is expected to be highly effective (i.e., a certain movement in the fair value of the hedged asset or liability should be compensated by a contrary movement in the fair value of the hedge transaction);
- For anticipatory hedges, the forecasted transaction must be highly probable;
- Effectiveness of hedge can be reliably measured (80% up to 125% effectiveness);
- Continuing assessment of effectiveness;
- Risk being hedged must ultimately affect net income.

IAS 39 implementation requires also certain additional disclosures in the financial statements. These include disclosures regarding the methods and assumptions applied in estimating fair values, financial risk management objectives and policies, why certain financial assets that in theory should be fair valued are carried at amortised cost, and disclosures about financial assets pledged as collateral.

#### ***Decision making involving the effect of the implementation of IAS 39***

Firms that apply International Accounting Standards, and compelled to implement IAS 39 will have to decide on whether or not financial transactions they are accustomed to enter into meet the criteria of special hedge. If the answer is yes, then they would have to determine their administrative capacity to put in place the appropriate documentation and reporting implication to meet all the requirements for special hedge accounting. On the other hand, if the answer is no, they would have to use mark-to-market accounting and accept to deal with the resultant volatility in their net income, or else decide to discontinue the use of those transactions which are economically attractive and sound but could cause unmanageable volatility in reported net income. In other words, two options are available to firms under IAS 39:

1. If a transaction meets all the hedge criteria, elect to use special hedge accounting to minimise the profit and loss volatility. The consequences of this option are:

- Ensure all special hedge requirements are met;
- Ascertain qualified and non-qualified transactions for special hedge;
- Ensure monthly and quarterly monitoring and testing of hedge effectiveness, and
- Use of different accounting treatment of similar transactions when some qualified for special hedge and others do not.

2. Whether or not the transaction meets the special hedge accounting criteria, elect not to use special hedge accounting. The consequence in this case would be:

- Greater net income volatility (unrealised gains or losses);
- No distinction between qualified and non-qualified transactions for special hedge; and
- Disclose in the Financial Statements to show pre IAS 39 income and post IAS 39 income.

It should be highlighted that the adoption of the 2<sup>nd</sup> option would create volatility in net income, which affects the following types of business decisions:

- Pricing and charges decisions.
- Income projection and profit planning decisions: it is virtually impossible to predict the impact of IAS 39 on future net income.
- Administrative decisions: the annual budget, staff benefits and other related decisions.
- Net income allocation decisions.

Also certain key ratios of the firms concerned (e.g., Reserves to loans ratio, Long-term debt to equity ratio and Reserve to debt ratio) would be affected by the volatility of net income and would require education of users of those firms' financial statements, such as their Board, and rating agencies.

In order to minimise the volatility effect of IAS 39 on decision making, the current growing trend is for firms to mark all derivative transactions to market and recording its net effect in the income statement as a line entitled "IAS 39 adjustment". This line item is added to or deducted from the Operating income to arrive at the firms' statutory net income<sup>2</sup>. The Operating income defined as the income before the effect of IAS 39 adjustments will be the basis for all internal business decisions, such as these referred to above.

## Conclusion

The IAS 39 brings visibility in the use of derivative instruments for investors and other financial statements users. However, its implementation requires firms to incur additional investment in technical capacity building including acquisition of asset and liability management systems, systems of evaluation adapted to the types of financial instruments in use and proper training of staff to acquire the necessary skills to handle these systems. It also requires more informative disclosure in the financial statements. Furthermore the implementation of IAS 39 requires top management to decide upon the financial information most relevant for decision making. Despite these added constraints and costs to firms, the implementation of IAS 39 brings in the financial statements (balance sheet and income statement) the disclosure of market and credit risks resulting from the use of derivative instruments, which previously were either not disclosed or were inappropriately disclosed as off balance sheet items. Therefore the implementation of IAS 39 not only protects

firms from unwanted surprises such as the Barings Bank case, but also gives a better protection to investors by periodically disclosing these derivative positions to them. This standard is mandatory starting from January 2001 for all firms using International Accounting Standards. The corresponding standard in the USA for those firms using GAAP is FASB 133.

---

## Notes and Reference

1. See Annex-A for hedge accounting.
2. See Annex-B for a proposed format of financial statements under option 2.

INTERNATIONAL ACCOUNTING STANDARDS COMMITTEE, "International Accounting Standards", London, United Kingdom, 2000.

**ANNEX A****HEDGE ACCOUNTING**

As defined in paragraphs 11 and 12 of the section entitled “**SIGNIFICANT HIGHLIGHTS OF IAS 39**”, hedge accounting recognises symmetrically the offsetting effects on net profit or loss of changes in the fair values of the hedging instrument and the related item being hedged. IAS 39 defines three types of hedging relationships:

- a) **Fair value hedge:** a hedge of the exposure to changes in the fair value of a recognised asset or liability, or an identified portion of such an asset or liability, that is attributable to a particular risk and that will affect reported net income.

To illustrate this, let us assume an investment in a fixed rate debt. The fair value of this investment is exposed to changes resulting from interest rates movements. In Year 1 an investor purchases for 100 a fixed rate debt security classified as available for sale. At the end of Year 1, current fair value is 110. Therefore, the increase of 10 is reported in equity (assuming the investor has elected this method), and the carrying amount is increased to 110 in the balance sheet. To protect the 110 fair value of his investment, the holder enters into a hedge transaction by purchasing an option to sell at maturity the debt security at 110. By the end of Year 2, if interest rate increases and consequently the fair value of the debt security declines by 5, the derivative will consequently have a gain of 5 compensating for the loss in the fair value of the underlining instrument.

- b) **Cash flow hedge:** a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability (such as all or some future interest payment on variable rate debt) or a forecasted transaction (such as an anticipated purchase or sale) and that will affect reported net profit or loss.

To illustrate this, let us assume a floating rate debt, whereby the issuer cash flow will vary depending on interest rate changes. Consequently, the issuer may elect to have a stable cash flow in the future. As a result, he/she could contract an interest rate swap on the nominal debt amount where he/she pays fixed to the swap counterpart and receives from that counterpart floating to settle his/her variable rate obligation. The future cash flows hedged are the future interest payments.

- c) **Hedge of a net investment in a foreign entity:** a hedge of the exposure of exchange differences arising on a monetary item that, in substance forms part of an enterprise's net investment in a foreign entity.

As an illustration, let us assume an investment in a foreign entity in a currency other than the investing company's reporting currency. That investment will be exposed to variability depending on the exchange rate movements between the reporting currency and the investment currency. To hedge against such variability, the investing company could borrow the same amount of the invested currency with the same maturity. This hedge transaction will annul the variability effect of the foreign currency in the equity account of the investing company.

## ANNEX-B Format of financial statement for option 2

**Bank XXX implementation results**  
**International Accounting Standard No. 39**  
**First two months ended February 28, 2001**  
*(Amounts in US\$ Million)*

	PREVIOUSLY REPORTED				AFTER IAS 39 ADJUSTMENTS			
	31 Dec. 2000	Jan. 2001	Feb. 2001	Yr. to 28/02/01	1 Jan. 2001	Jan. 2001	Feb. 2001	Yr. to 28/02/01
<b>INCOME STATEMENT</b>								
Loan Income		48.87	37.81	86.68		48.87	37.81	86.68
Investment Income		11.68	10.27	21.95		11.68	10.27	21.95
Borrowing Cost		(30.72)	(29.60)	(60.32)		(30.72)	(29.60)	(60.32)
Operational Income		29.83	18.48	48.31		29.83	18.48	48.31
Provision		(2.23)	(1.79)	(4.02)		(2.23)	(1.79)	(4.02)
Net Operational Income		27.60	16.69	44.29		27.60	16.69	44.29
Admin. Expenses		(1.99)	(2.58)	(4.57)		(1.99)	(2.58)	(4.57)
Other, net		(0.18)	(0.40)	(0.58)		(0.18)	(0.40)	(0.58)
<b>Operating Income</b>		<b>25.43</b>	<b>13.71</b>	<b>39.14</b>		<b>25.43</b>	<b>13.71</b>	<b>39.14</b>
IAS 39 Adjustment						23.79	25.93	49.72
Net Income		25.43	13.71	39.14		49.22	39.64	88.86
<b>BALANCE SHEET</b>								
<i>Assets</i>								
Cash and Investments	2,035.75	2,145.95	2,275.30	2,275.30	2,035.75	2,145.95	2,275.30	2,275.30
Loans	6,565.60	6,526.02	6,508.71	6,508.71	6,565.60	6,526.02	6,508.71	6,508.71
Accum. Provision	(421.48)	(424.02)	(426.36)	(426.36)	(421.48)	(424.02)	(426.36)	(426.36)
Accounts Receivable	1,824.83	1,934.97	1,973.04	1,973.04	1,824.83	1,934.97	1,973.04	1,973.04
Other	208.68	281.72	288.13	288.13	208.68	281.72	288.13	288.13
Derivative Assets					43.06	66.85	92.78	92.78
Total Assets	10,213.38	10,464.64	10,618.82	10,618.82	10,256.44	10,531.49	10,711.60	10,711.60
<i>Liabilities and Equity</i>								
Borrowings	5,412.13	5,497.92	5,563.96	5,563.96	5,412.13	5,497.92	5,563.96	5,563.96
Accounts Payable	1,816.95	1,945.74	2,010.63	2,010.63	1,816.95	1,945.74	2,010.63	2,010.63
Capital	1,714.06	1,714.66	1,724.06	1,724.06	1,714.06	1,714.66	1,724.06	1,724.06
Reserves	1,270.24	1,306.32	1,320.17	1,320.17	1,313.30	1,373.17	1,412.95	1,412.95
Total Liabilities & Equity	10,213.38	10,464.64	10,618.82	10,618.82	10,256.44	10,531.49	10,711.60	10,711.60
Reserves to net loans ratio	20.67%	21.41%	21.70%	21.70%	21.37%	22.50%	23.23%	23.23%
Reserves to gross loans ratio	19.35%	20.02%	20.28%	20.28%	20.00%	21.04%	21.71%	21.71%

N.B.: The reserve figures (or equity) for the months of January and February take into account the reserve balance of December 2000, the income for the period, and the period exchanges gain or loss of assets and liabilities denominated in other currencies than the reporting currency.