

THE CHANGE IN FAIR VALUE ATTRIBUTABLE TO CREDIT RISK

ANDREI Monica, OPREA Margareta

Academy of Economic Studies of Bucharest

mona_andrei@yahoo.com, oprea_margareta@yahoo.com,

Key words: financial instruments, risks, financial performance

Abstract: Users of financial statements need information about an entity's exposure to risks and how those risks are managed. Such information can influence a user's assessment of the financial position and financial performance of an entity or the amount, timing, and uncertainty of its future cash flows. Greater transparency regarding those risks allows users to make more informed judgments about risk and return. Entities should describe the nature and extent of risks arising from financial instruments.

The International Accounting Standards referring to the financial assets and debts have been drafted out of the desire to reflect in accountability some of the most spectacular evolutions that have taken place on the global financial markets during the last decades. By the agency of these norms, the accountability practice has been brought up to day in order to reflect undeniable economic and financial realities, like the very frequent use of the products of the financial market with the goal to obtain the necessary resources to develop the activity, make investments or protect the business against the different risks of a financial nature.

In the perspective of a necessary and expected development of the Romanian capital market the Romanian companies will appeal more and more to the financial instruments. As a consequence, their accountabilisation and presentation and the description of the information concerning the individual or consolidated accounts and the analysis of the impact of using it on the performances and financial position of the entities become very actual subjects for the Romanian professional accountants, for whom the aspects described in the paper proposed to be elaborated get more and more utility.

Accounting hedge operations of a fair value against risks aims to protect the assets, liabilities, unrecognized firm commitments or part of the risk against the amendment because the fair value of interest rate fluctuations, exchange rates or prices of goods.

An operation to cover the fair value will be charged as the followings:

- gain or loss resulted from revaluation of hedging instruments at fair value or the value of its currency accounting assessed in accordance with IAS 21 for a tool to hedge against risks nederivat will be recognized immediately in the profit and loss.
- gain or loss related to a covered item that can be attributed to the risk cover will be adjusted at the value of the item covered and will be recognized in the profit and loss. This principle applies if an item is covered in other conditions evaluated at cost. Recognition in profit and loss of earnings or loss attributable to the risk covered is covered if the item is available for sale financial asset.

For a fair value hedge of the exposure of a portion of a portfolio of financial assets or financial liabilities at the risk of interest rate, method of counting presented above can be achieved by presenting earnings or losses that may be presented to the covered item risk:

- in a single element - the active line, for those periods in which the revaluation of the item covered against risk is an asset, either
- in a single element - separate line in debt, for those periods in which the revaluation of the item covered against risk is a duty.

Separate line-items referred to in previous paragraphs will be presented along with financial assets or financial liabilities. Values included in these elements - line will be removed from the balance sheet when the assets or liabilities that are related are derecognized.

Only if certain risks that can be attributed to an item covered against risks are covered against risk, recognized changes in the fair value of assets covered against risks that are not related to the risk is already covered in the profit and loss when the entity entitled to receive payment is established.

An entity will discontinue hedge accounting prospectively specified above if:

- hedge against the risk expires or is sold, completed or exercised;
- coverage no longer meets the criteria to use hedge accounting or
- revoke the appointment by the entity.

When an unrecognized firm commitment is designated as a covered against risk, the amendment in the aggregate fair value of the firm commitment that is attributable to the risk covered is recognized as active duty or in the corresponding gain or loss recognized in the profit and loss. Changes in the fair value of hedging instruments against the risk are also recognized in the profit and loss.

If an entity enters into a firm commitment to acquire an asset or to assume a debt that is a covered against risk in a fair value hedging against risks, the initial value of the asset or debt arising from that entity and a firm commitment is honored adjusted to include changing the aggregate fair value of the firm commitment that is attributable to the covered risk was recognized in the balance sheet.

In category microcover operations included those hedging links through which it aims to cover the risks of individual items.

Covering against the interest rate risk is performed for items such as:

loans and receivables generated by the entity or assets available for sale, bearing fixed rates;

debt bearing fixed rates and are not held for trading.

Some examples of relationships of the fair value of hedging against such risk are presented in Table 1.1.

Table 1.1. Covering against the interest rate risk

| The covered element | The covering instrument | The covered risk |
|---------------------|--|---|
| Decreased rate | Interest rate swap that pays a floating rate and receives a fixed. | Variability of the value of a fixed-rate debt. |
| Growth rate | Interest rate swap that pays a fixed rate and receives a floating. | Variability asset value of a fixed rate. |
| Decreased rate | Buying a futures contract or a forward contract to purchase, with the active support of a fixed-rate debt. | Variability of the value of a fixed-rate debt. |
| Growth rate | Selling a futures contract or a forward contract of sale, with the support aciv a debt with a fixed rate. | Variability asset value of a fixed rate. |
| Growth rate | Buying a "cap". | Change the value of a fixed-rate assets resulting from fluctuations in interest rates over the limit set in the "head". |
| Decreased rate | Buying a "floor". | Change the value of a fixed-rate debt resulting from interest rate fluctuations under the level set to "floor". |

Source: KPMG, IAS – *Financial Instruments Accounting*, KPMG International, September 2000, p. 128.

Suppose that a company bonds on 01.01.2006 with maturity over 3 years, at nominal value of 50000 USD, with an interest rate of 7%, payable annually. The company would prefer to pay a variable rate. To do this, it contracts an interest-rate swaps with notional

value of 50000 USD, which pays LIBOR and receives a fixed rate of 7%. Evolution of the LIBOR contract period is as follows: 7% in the first year, 5% in the second year and 9% last year. Derivative coincides with the maturity of the loan obligatar. Initial fair value of swap is zero, which is why contract not generate any accounting entries.

Management entity to designate a relationship derived from a fair value hedge against interest rate risk. Operation is considered very effective. Issuance of bonds is recorded as following:

Accounts at banks from issuing loans = Bond 50000

Net flows of Treasury related derivatives during the three periods are calculated in Table 1.2

Table 1.2.

| Year | Variable interest rate (LIBOR) | Fixed interest rate | Cash flows estimated at exit | Cash flows estimated entering | Net flows of Treasury |
|------|--------------------------------|---------------------|------------------------------|-------------------------------|-----------------------|
| 1 | 7% | 7% | (3.500) | 3.500 | 0 |
| 2 | 5% | 7% | (2.500) | 3.500 | 1000 |
| 3 | 9% | 7% | (4.500) | 3.500 | (1000) |

In year 1, determine the fair value of swap by updating the estimated net flows of Treasury year 2 using LIBOR (5%).

$$1000 / (1 + 0.05) + 1000 / (1 + 0.05) (1 + 0.05) = 1859 \text{ USD}$$

Therefore, change the fair value of derivatives has not been a gain of U.S. \$ 1859.

Swap (financial debt) = Unachieved gain from covering operations 1859

Change fair value of debt, calculated by updating the flow coming in the form of a loss recorded in the results (50000 USD - 51859 USD).

$$3500 / (1 + 0.05) + 53500 / (1 + 0.05) (1 + 0.05) = 51859 \text{ USD}$$

3500 where the flow is the annual interest due, and the 53500 USD and is considering the loan repayment period to end.

Article accounting is appropriate:

Unrealized loss of loans = Operations cover the issue of bonds 1859

Interest paid in the first financial year for bonds issued are as follows:

Interest expenses = Bank accounts 3500

The following year, the entity recorded a net settlement of swap in which the receiving 1000 USD, which they distributed among the related interest income from financial debt previously recognized (1859 USD x 5%) and the claim itself. Registration will be related accounts:

Accounts at banks = % Income 1000
Swap (financial debt) 93
Swap (financial debt) 907

Also, the flows were estimated at -1000 USD for three of the century through the interest rate of 9% [$1,000 / (1 + 0.09) = (917)$] is an conversion of swap of debt financial debt and a loss of unrealized fair value changes. Article accounting is appropriate:

Unrealized loss of % 1869
Swap operations coverage (financial debt) 917
Swap (financial debt) 952

Interest expense recorded by the entity issuing the bonds is U.S. \$ 51859 x 5% = 2593 USD. Therefore, payment cash flows of U.S. \$ 3500 generates the following accounting:

% = Accounts at banks 3500
Interest expense 2593
Loans with issued bonds 907

Present value of debt in the second year is $53500 / (1 + 0.09) = 49083$. It is noted that the debt is reduced from 51859 to 49083, which generates a gain unfulfilled.

| | | | |
|---|---|---------------------------------|-------------|
| Loans from the issue of unfulfilled gain | = | Bond operations coverage | 1859 |
|---|---|---------------------------------|-------------|

In the last year of the contract, the entity record swap settlement and payment of 1000 USD expense to distribute the interest on financial debt represented swap ($917 \times 9\%$) and debt balance.

| | | | |
|------------------------------|---|--------------------------|-------------|
| % | = | Accounts at banks | 1000 |
| Interest expenses | | | 83 |
| Swap (financial debt) | | | 917 |

Interest expense on the debt this year is $49083 \text{ USD} \times 9\% = 4417 \text{ USD}$. Accounting for relevant are:

| | | | |
|-------------------------|---|-------------------------------|-------------|
| Interest expense | = | % | 4417 |
| | | Accounts at banks | 3500 |
| | | Loans of programs bond | 917 |

At the end of the debt is repaid.

| | | | |
|---------------------------|---|--------------------------|--------------|
| Borrowing programs | = | Accounts at banks | 50000 |
|---------------------------|---|--------------------------|--------------|

In all three periods of the relationship of coverage, efficiency is 100%, any change to the fair value of the loan is perfectly offset by the hedging derivative instrument. For this reason, changes in market interest rate do not affect any duty not its results.

Hedge accounting recognizes the offsetting effects on the symmetric profit or net loss for the fair value changes of hedging instrument and related events that are covered.

When a company booked a financial instrument as an instrument for hedging risks associated with anticipated future transactions, then the company will present the:

- description of anticipated transactions, including the time period until the emergence of risk is assessed;
- description of the instruments for hedging risks;
- value of any gains or losses deferred or unrecognized and when the expected recognition as income or expense.

An enterprise should present all gains or losses occurred in the financial risk to cover anticipated future transactions, whether those gains or losses have occurred or not in the financial statements.

References

- [1] ***, IAS 39 „Financial Instruments: Recognition and Measurement”, *Official Journal of the European Union*, L 363/9.12.2004, <http://europa.eu.int>.
- [2] Huian M.C.,(2008), „Instrumente financiare: tratamente si opțiuni contabile”, *Editura CECCAR*, Bucuresti, Pp. 262
- [3] Hartwell C.H.(2003),”*Business Combinations and International Accounting*”, *Thomson South-Western*, Ohio, Pp. 281.
- [4] Andrei Monica, “*Impact of IT and technology on Compensation and Benefits Management*”, Conferinta IBIMA - Knowledge Management and Innovation in Advancing Economies (IBIMA), ISBN: 978-0-9821489-2-1, 9-10 Noiembrie 2009, Maroc,
- [5] Oprea Margareta, “*Accounting coverage operations against risks. Coverage relationships of fair value*”, Conferinta IBIMA - Knowledge Management and Innovation in Advancing Economies (IBIMA), ISBN: 978-0-9821489-2-1, 9-10 Noiembrie 2009, Maroc,
- [6] Ristea M., Dumitru C., Carpan A., Manea L., Nichita M., Sahlian D.,(2007) „Politici si tratamente contabile privind activele imobilizate”, *Editura Tribuna Economica*, Bucuresti.
- [7] Tabara N., Avram M.C.,(2005), „Evaluarea instrumentelor financiare la valoarea justă”, *Revista Contabilitatea, expertiza și auditul afacerilor*, nr. 4, *Editura C.E.C.C.A.R*
- [8] Choi F., Meek G.K.(2005), „*International Accounting*”, 5th edition, *Prentice Hall*.