

## **RISK MANAGEMENT COMPANIES AND HEDGE ACCOUNTING**

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**ABSTRACT:** *The increasing use of derivatives for risk management of a company lately has led to the need to report on an actual basis as these instruments and regulate these operations accounting. This paper proposes a presentation of hedging transactions and their accounting evaluating the impact, in terms of accounting, risk management derivatives on a company. Hedges are often ineffective. Overcoming the ineffectiveness of hedging operations can be achieved by proper designation of the hedging relationship and create an appropriate method to demonstrate hedge effectiveness.*

**KEY WORDS:** *derivative, hedging, hedge accounting, financial assets, fair value.*

**JEL CLASSIFICATION:** *M41, G10.*

### **1. INTRODUCTION**

Any entity is exposed to various market risks leading to a constant concern for the reduction or even elimination. From the economic point of view, most of the risks, such as currency risk, capital market risk, interest rate etc. can be covered by using derivatives. The increase in derivatives transactions in recent years shows that increasingly more entities use derivatives to offset their exposure to risk.

The deepening of financial markets' volatility shown around the '70 hit the businesses really hard and determined the financial managers to develop a series of complex financial instruments (known as derivatives) able to help companies face the risks to which they are exposed. Derivatives are instruments whose value depends on the price of another basic asset and are divided into four major categories:

- ✓ forward contracts;
- ✓ futures contracts;
- ✓ options contracts;
- ✓ swap contracts.

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The measures taken by companies to avoid risks are based on the relationship between the principles of finance, derivatives and hedging operations and rely on the following elements:

- looking for opportunities to develop derivatives that allow companies to better face the financial risks;
- two way transactions: derivatives are used to pay others to take risks, so derivatives do not eliminate risk but transfer it to other companies;
- to transfer the risk to another party, one have to provide an income to compensate entirely the risk;
- capital market efficiency resides in the fact that movements in interest rates, commodity prices and exchange rates cannot be predicted with the highest precision, because these "financial prices" have a significant random component in an efficient market;
- comparative advantage means to pay others to bear the risks, which may be more advantageous than facing the risk if the price is low.

## **2. HEDGE OPERATIONS**

The answer given to companies for protection against risks by using derivative financial instruments materialized in the form of hedging transactions, leading to the emergence of hedge accounting operations. Accounting for hedging operations is an accounting practice of allowing entities to mitigate the effect resulted from the use of financial derivatives for hedging. Calling for an entity to coverage of economically not automatically assume that entity apply hedge accounting.

Under IFRS 9 before applying hedge accounting to certain preconditions need to be met. It is necessary that all derivatives used to be marked to market, highlighting these changes in fair value in the income statement.

The new requirements of hedge accounting contained in IFRS 9 is based on harmonized principles with policies of risk management, geared towards demonstrating the relationship between hedged and the hedged item, to the requirements contained in IAS 39, which are expensive and based on rules.

Overall, IFRS 9 retains the IAS 39 accounting models, with the purpose of identifying: hedged item, hedging instrument, effectiveness of the hedging transaction.

The existence of certain discrepancies between the recognition of derivatives, made at fair value, and the recognition of other financial instruments that is not made at fair value determined the development of hedge accounting. Until the advent of IAS 39, most derivatives were considered off-balance sheet items. Thus, the lack of a rigorous control made possible the hiding of risks due to these, inflicting huge losses and even the bankruptcy of companies.

In our opinion, in terms of the recognition, the disparity is due to the recognition of derivatives at the start, while the forecasted transactions that could be hedged are not recognized in the balance sheet. Solving these inconsistencies in accounting can be done by hedging accounting that aims to align the valuation of the hedging instrument and this of the hedged item, and by delaying the registration of

certain gains or losses afferent to the hedging instrument or accelerating the recognition of gains or losses afferent to the hedged element.

The accounting treatment applied to the derivatives used in hedging transactions allows, in the case of efficient ones, the compensation of losses registered in the profit and loss account with earnings on derivatives (which has the effect of bringing no influence on the net result), and at the same time the delay of some incomes by their inclusion directly in equity and not in the income statement (Guay & Kothari, 2003).

The term of *hedging* refers to operations of covering risks in financial terms. Protection is achieved by making transactions on futures and options market which, in connection with the cash market transactions, create a relationship able to make a loss on a market to be offset by the gain on another.

Accounting regulatory bodies have used the concept of hedge accounting, referring to the transaction or instrument used for controlling and / or reducing risk exposure. Hedge accounting means full or partial compensation of the change in fair value of a hedged item or its afferent cash flows with the changes in fair value of a hedging instrument. This type of accounting consists of the systematic and symmetrical recording of changes in the value of hedging instrument and the hedged one.

In the opinion of International Accounting Standards, derivatives are financial instruments that meet certain conditions, synthesized in the Figure 1.

Derivatives	<ul style="list-style-type: none"> <li>• Its value changes according to the evolution of a specified interest rate, the price of a security, commodity price, a foreign exchange rate, index of prices or rates, a classification of credit or a credit index or other similar variable element.</li> </ul>
	<ul style="list-style-type: none"> <li>• It requires no initial net investment or an initial net investment value small compared to other types of contracts that have a similar response to changes in market conditions.</li> </ul>
	<ul style="list-style-type: none"> <li>• It settled at a set date in the future.</li> </ul>

Source: own projection of the IAS 39

**Figure 1. Conditions for a financial instrument to be considered a derivative**

Derivative financial assets and derivative financial liabilities are always deemed to be held for trading unless they are designated and are in fact hedging instruments.

In a study (Ghiță-Mitrescu, 2009) conducted on a sample of 20 banks (using derivatives) in Romania in 2010-2012, it was found that 80% of them use derivatives for hedging, but only 20% of them apply the accounting treatment required by International Accounting Standards. The most commonly used derivatives are swap contracts in foreign currency and on interest rate.

*Hedging operation* involves the designation of hedging instruments whose fair value will offset the changes in fair value of the hedged item. *The hedged item* can be represented by an asset, liability, firm commitment or forecast transaction that implies

a future risk of change in its fair value. *The hedging instrument* can be a financial asset, financial liability or a particular derivative, which has the fair value that can counteract changes in the hedged item's fair value or any cash flows associated with it. The degree to which the change in fair value of the hedged item or its afferent cash flows is compensated by using the hedging instrument determines *the effectiveness of a hedging transaction*.

### 3. CASE STUDY ON HEDGING OPERATIONS

International accounting referential in the field of financial instruments presents *three categories* of hedging operations:

#### a. Fair value hedging operations

A transaction is regarded as a fair value hedging operation if the documentation, risk probability and efficiency assessment allow the use of certain accounting treatments throughout the financial year, as follows:

- By evaluating the financial instrument used for hedging, at fair value, yield a profit / loss to be recognized the net profit or loss;
- Hedged item will record a gain or loss which is adjusted to his account, and will record net profit or loss.

If the hedged item is evaluated at fair value, for the accounting treatment of the hedging transaction the value changes are recognized in equity. However, if the hedged item is measured at historical cost, the same procedure applies.

In order to clarify the method of accounting the fair value hedging operations, we will present a case study on change in the fair value of bonds, determined by the change of interest rates, from the perspective of holder.

A financial investment company acquires, in 2013, bonds worth 100000 lei, which are classified as available for sale. At the end of financial year 2013, the current fair value is 110000 lei. The appreciation of titles by 10000 is reported in equity - assuming that the investor has chosen this method - and the book value of the stock will increase to 110000 lei. To protect the value of 110000 lei, the owner engages in a hedge transaction by purchasing a derivative. By the end of financial year 2014, the derivative registers an increase in value of 5000 lei, and the security records a corresponding reduction in the fair value.

The investing company operated the following accounting records:

■ *In financial year 2012:*

- reflection of bond purchase:

506	=	512	
<i>"Bonds"</i>		<i>"Cash at bank"</i>	<b>100.000 lei</b>

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- reflection of the increase in fair value of the bond by its inclusion in equity:

506	=	105	
			<b>10.000 lei</b>

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<i>“Bonds”</i>	<i>“Revaluation reserves”</i>
<p>➤ <i>In financial year 2013:</i></p> <ul style="list-style-type: none"> <li>• reflection of change in fair value of derivative, made by adding the value of short-term investment to the result, because this financial instrument is meant for trading:</li> </ul>	
508	= 762
<i>“Other short-term investments and receivables”</i>	<i>“Income from short term investments ”</i>
	<b>5000 lei</b>
<ul style="list-style-type: none"> <li>• reflection of the reduction of security's fair value, achieved by addition to the result:</li> </ul>	
664	= 506
<i>“Expenditure on financial investments ceded”</i>	<i>“Bonds”</i>
	<b>5000 lei</b>

At the end of 2014, the value of recorded debt would be 105000 lei, compared to the value of derivative which would be 5000 lei, making a profit of 10000 lei to be recorded in equity until the title debt will be erased from the accountancy.

In our opinion, if the hedging instrument is exercised, sold or its deadline expires, the accounting for hedging operations must be stopped. Also there is no longer accounted as hedge operation that transaction which cannot be classified as such according to the criteria specified in IFRS 9.

To cover the fair value of an equity instrument at fair value through registering other comprehensive income, international standard IFRS 9 states that gains or losses on equity investments are never recognized in profit or loss.

#### **b. Cash-flow hedging operations**

A business activity can be influenced by changes in the size of cash flow, which can lead to the use of protective operations against certain risks, such as changes in price, currency risk or interest rate risk.

Accounting for such an operation is performed as follows:

- Recognized directly in equity gain or loss associated with the hedging instrument generated (a) component cover efficient operation;
- Is recognized immediately in profit or net loss (a) ineffective component of the hedge.

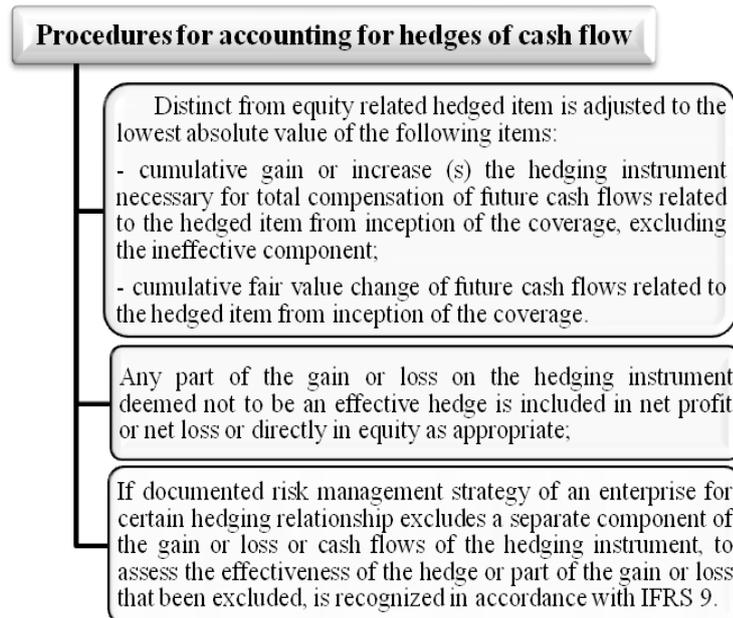
The hedge accounting of cash flow amended by the adoption of IFRS 9 in that, to cover cash flows generated by a forecast transaction that results in the recognition of an asset nonfinancial apply hedge accounting fair value, the carrying amount that element must be adjusted by gains or losses recognized directly in equity. There is a choice between carrying out the method described above or maintaining gains or losses accumulated in equity and reclassified into the profit or loss.

Recording in accounting the cash flow hedging operations involves the use of some procedures synthesized in Figure nr. 2.

Recording in accounting the cash flow hedging operations is based on the principle that the efficient component of an operation is recognized in equity until the hedged item affects the net result of the financial year.

Termination of the hedge accounting occurs in of the following situations:

- a financial instrument expires, is sold, matures or is exercised;
- a hedging operation no longer meets the conditions to be classified as such.



Source: on projection of IAS 39 and IFRS 9

**Figure 2. Accounting of the cash-flow hedging operations**

### c. Hedging operation of a net investment in an external entity

An external entity is a branch, subsidiary or associate that operates in a country or foreign currency and net investments in a foreign entity are represented by the reporting entity's interests in its net assets (CECCAR, 2006).

In accordance with the requirements of International Standards, hedging operations of a net investment are accounted similarly to hedging of cash flows using the following procedures:

- Recognized directly in equity gain or loss on the financial instrument used for hedging generated by effective component of the hedge;
- Whether the hedging instrument is a derivative instrument is recorded immediately in net profit or loss, gain or loss on financial instrument coverage generated by inefficient component of the hedge;
- Whether the hedging instrument is not a derivate instrument (rare situation), is recorded directly in equity gain or loss on the hedging instrument generated by inefficient component of the hedge.

We believe that the current hedge accounting model stipulated by the International Accounting Standards raises some *major issues*.

- **valuation differences** arising as a result of the current model of evaluation, which uses different methods for evaluating financial assets and financial liabilities. Putting it more simply, when a firm is confronted in its shares for sale or purchase, with two changes / adjustments of price that compensate each other perfectly, but are measured differently - one at cost, another at market price - the situation presented in balance sheet and profit and loss account or in the income statement will not reflect that the impact of these changes is zero from economic point of view.;
- **recognition differences** arising from the so-called selective appreciation present in the current accounting model and related to the selection of elements to be hedged and designation of financial instruments for hedging. The problems emerge in the situation when an enterprise has to deal with two price adjustments that compensate each other perfectly, but one appears in the company' financial report, while the other does not;
- **anticipation differences** or the so-called *differences of existence*. These differences arise when a firm adopts a hedging strategy and anticipates that there will be some price adjustments in the future which compensate each other. The cause of this difference comes from the action of firms to look beyond the simple transactions that any model of accounting attempts to record.

Hedges are often ineffective. In Their effectiveness may result from the occurrence of terms critics (such as payment dates, the notional amount, reference rates of interest, type of currency) in hedged and the hedged item that does not fit or if there are significant fees included in the price of derivatives.

#### 4. CONCLUSION

Overcoming effectiveness of hedging transactions can be achieved by proper designation of the hedging relationship and create appropriate method to demonstrate hedge effectiveness.

In conclusion, the objective of hedge accounting is to recognize as achievements any changes in price, exchange rate or interest rate, arising in connection with one or more positions (assets and liabilities) and is related to a market factor and the management of company deemed them to relate to one another. This target is an exception from the current objectives, on which are based the transactions that do not assess property / assets or liabilities / receivables at fair value and record the effects of price changes only when they actually occur.

In our opinion, hedge accounting may apply some evaluation criteria (e.g. historical cost or market price) in assessing both the property risk and any risk related to the evaluation of derivatives. If both are recorded at historical cost and the company capitalizes on the derivatives, hedge accounting seeks to delay the revenue recognition until the patrimonial risk materializes and only then the resulting difference (loss or gain) from the compensation of those two is recognized.

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