### APPLICATION OF IAS 39 ON REPORTING OF FINANCIAL DERIVATIVES IN CZECH\*+

# APLICAÇÃO DA IAS 39 REFERENTE À EVIDENCIAÇÃO DOS DERIVADOS FINANCEIROS NA REPÚBLICA CHECA

#### Jiří Strouhal

Professor of University of Economics in Prague Department of Financial Accounting and Auditing Address: W. Churchill, Square 4, 130 00 Prague 3 Czech Republic, Europe Phone: +420 224 095 794 E-mail: strouhal@vse.cz

# ABSTRACT

Although in the United States derivatives have been traded since around the middle of the nineteenth century, in the Czech Republic a derivative was an unknown term until lately - or rather a term referring to someplace an un unknown empire. The situation started to change roughly in the second half of nineties, when as part of macroeconomic shocks and government crisis in 1997 when interest rates increased significantly and the Czech crown devaluated from day to day. At that time companies felt first time ever how heavy impact an unexpected and not counted on change of market conditions may have on them. From 2001 to 2004 another unusual phenomenon occurred which shook the business sector; should a prophet has predicted it at the end of the nineties, he would probably be clamed to be crazy. The exchange rate of dollar against crown dropped from over 40 CZK/USD to 20 CZK/USD. Companies that made contracts with their customers in dollars but with suppliers in crowns bore a great exchange rate risk and they frequently paid a lot when dollar dropped. At the moment we also have to mention world prices of oil and oil products which rocketed so high that nobody could have expected it several years ago. This paper focuses on the comparison of reporting of the derivatives using IFRS in comparison with the Czech accounting legislature by the companies listed on the Prague Stock Exchange (PSE). Study draws the attention to check the differences in reporting of derivatives and also compares their qualitative advantages. Results of this study are based on the analysis of annual reports of the companies listed on the PSE. Any of analyzed companies didn't allow all of the requirements of IFRS on reporting of the financial derivatives.

Key words: Financial derivatives. Accounting. Reporting. IFRS.

<sup>&</sup>lt;sup>\*</sup> Artigo recebido em 23.01.2007. Revisado por pares em 30.08.2007. Reformulado em 15.03.2008. Recomendado em 19.03.2008 por Ilse Maria Beuren (Editora). Publicado em 17.10.2008. Organização responsável pelo periódico: FURB.

<sup>&</sup>lt;sup>†</sup> Trabalho apresentado no XI Congresso de Contabilidade e Auditoria, em Coimbra/Portugal, de 16 a 18 de novembro de 2006.

#### RESUMO

Embora derivados sejam comercializados nos Estados Unidos desde meados do século XIX, na República Checa, o termo derivado era desconhecido até recentemente, ou melhor, era uma expressão que se referia um lugar desconhecido num império. A situação começou a mudar na segunda metade dos anos noventa, mais ou menos, quando acontecerem alguns choques macroeconômicos e a crise governamental de 1997, quando as taxas de juros aumentaram significativamente e a coroa checa foi desvalorizada dia após dia. Naquele momento, as empresas perceberam pela primeira vez a grande repercussão inesperada que uma mudança nas condições do mercado poderia causar nas suas operações. De 2001 a 2004, ocorreu um outro fenômeno incomum que abalou o setor empresarial.. A taxa de câmbio do dólar em relação a coroa caiu de mais de 40 CZK / USD para 20 CZK / USD. Empresas que tinham contratos com seus clientes em dólares, mas com os fornecedores em coroas, enfrentaram um grande risco cambial e freqüentemente pagararam muito quando o dólar caiu fortemente. Neste momento, pode-se também mencionar os preços mundiais de petróleo e produtos petrolíferos que aumentaram muito mais do que qualquer pessoa poderia ter esperado. Este estudo apresenta uma comparação entre a evidenciação dos derivados usando IFRS e a contabilidade legisladora checa pelas empresas cotadas na Bolsa de Valores de Praga (PSE). O estudo chama a atenção para verificar as diferenças na apresentação de derivados e também compara as suas vantagens qualitativas. Os resultados deste estudo são baseados na análise dos relatórios anuais das empresas cotadas na PSE. Nehuma das empresas analisadas atendeu a todos os requisitos do IFRS na elaboração de relatórios de evidenciação dos derivados financeiros.

Palavras-chave: Derivativos financeiros. Contabilidade. Evidenciação. IFRS.

### **1 INTRODUCTION**

The motives why Czech companies started or are string to make derivative businesses are a few. The praiseworthy motive is the control of financial risk, elimination of possible unexpected losses from unpredictable movement of exchange rates, interest rates, commodity prices or other market factors which a company cannot affect in any way. This motive, however, is not the only one. In lots of cases companies conclude derivate trades – although they hardly admit it – simple because they want to try such a business.

And there are also businesses – fortunately only exceptional – when a company agrees derivates that even cannot be determined as hedging and they represent only mere speculation, or an adrenaline game in the market casino. We should also add that such an adrenaline game usually is hidden under the robe of complex models and studies, adding the special tinge of scientific, modern and progressive qualities.

In the Czech business sector derivates are admissible mainly via banks. The access to derivative stock exchange is rather complicated and is related with considerable transaction costs. Some companies, however, are offering the access to derivative stock exchange and it will only take some time before Czech companies start up search for the access actively.

This paper focuses on the comparison of reporting of the derivatives using IFRS in comparison with the Czech accounting legislature by the companies listed on the Prague Stock Exchange (PSE). Study draws the attention to check the differences in reporting of derivatives and also compares their qualitative advantages.

# **2 MAIN TARGETS**

This paper focuses on the comparison of reporting of the financial derivatives using IFRS in comparison with the Czech accounting legislature by the companies listed on the Prague Stock Exchange. Results of this study are based on the analysis of annual reports of 51 companies listed on the Prague Stock Exchange. Currently there are traded 133 securities on the Prague Stock Exchange (see the Table 1).

	Stocks	Bonds	Total
Primary market	8	25	33
Secondary market	25	17	42
Free market	14	44	58
Total	47	86	133

The most important players on the Prague Stock Exchange are definitely the financial institutions and majority of bonds are state bonds. We focus our analysis on corporations listed on the PSE. We will analyse 51 companies (see the Table 2).

Segment of the industry	Analyzed companies
Traffic, communications	3
Timber and paper industry	1
Energetic	20
Chemical industry, pharmaceuticals	5
Trade	3
Services	6
Construction industry	2
Mechanical engineering	3
Textile and clothing industry, leather manufacture	1
Mining	3
Food industry	4
TOTAL	51

# **3 ANALYSIS ASSUMPTIONS**

Defined targets of our analysis focuses on empirical data including their impact on the financial results of analysed companies. The main problem is the fact that management of the companies many of information needed presents quite abstractly because of the very sensitivity character of these information. We will focus our analysis on the data published in the Annual Reports of the companies and their Financial Statements for the period of 2004. All data presented are measured in thousands CZK.

# **4 DERIVATIVE OPERATIONS OF THE CZECH COMPANIES**

# 4.1 Traffic and Communications' Industry

In the industry of traffic and communication the main player is definitely the Český Telecom, the main phone operator in the CR. It is the only company in this industry using derivatives (see the Table 3).

<b>239 926 171</b> <b>15</b> 0 0 15 15 0	0,00% <i>0,00%</i> <i>0,00%</i>
15 0 0 15	0,00% 0,00%
0 0 15	0,00%
0 15	0,00%
15	
	0.000/
0	0,00%
	0,00%
0	0,00%
0	0,00%
0	0,00%
0	0,00%
0	0,00%
0	0,00%
162 485	0,07%
151 295	0,06%
143 620	0,06%
0	0,00%
7 675	0,00%
11 190	0,00%
0	0,00%
11 190	0,00%
0	0,00%
0	0,00%
0	0,00%
0	0,00%
	0 7 675 11 190 0 11 190 0 0 0

#### Table 3 - Traffic and Communications' Industry

The main characteristic of the telecommunication companies is their geographic expansion which is linked with the impact of the changing currency exchange rates as well as the changing interest rates. Usually the companies don't use the commodity derivatives.

Český Telecom implemented centralised risk management of the parent company (Movistar) and also implemented the hedge accounting. The fair value of the derivatives operation of the company is loss. Impact of the using the derivatives instrument on the Balance Sheet is absolutely insignificant.

### 4.2 Mechanical Engineering

In the engineering industry in the main Czech player Škoda Auto, member of the Volkswagen Group (see the Table 4).

	MECHANICAL ENGINEERING	Impact on the Balance Sheet
ASSETS	74 465 814	100,00%
Derivatives (receivables)	666 333	0,89%
currency derivatives	666 333	0,89%
FX forward	666 333	0,89%
FX swap	0	0,00%
FX options	0	0,00%
interest rate derivatives	0	0,00%
FRA	0	0,00%
IRS	0	0,00%
IRO	0	0,00%
commodity derivatives	0	0,00%
embedded derivatives	0	0,00%
other (non specified)	0	0,00%
Derivatives (payables)	238 031	0,32%
currency derivatives	192 538	0,26%
FX forward	186 030	0,25%
FX swap	6 508	0,01%
FX options	0	0,00%
interest rate derivatives	45 427	0,06%
FRA	0	0,00%
IRS	45 427	0,06%
IRO	0	0,00%
commodity derivatives	0	0,00%
embedded derivatives	0	0,00%
other (non specified)	66	0,00%

#### **Table 4 - Mechanical Engineering**

As well as in the Český Telecom also Škoda Auto implemented Volkswagen's system of the risk management and therefore the impact of the derivative operations on the financial results of the company are alike Volkswagen. Fair value of the derivative operations was significantly positive.

Opposite to other companies Group presents many details about their risk management and about the derivative operations. One quarter of the hedging operations was non-effective. Impact of the effective part of the derivatives on the balance sheet was however less than 1 %.

# 4.3 Energetic Industry

For the companies of the energy industry is typical the tendency to speculate on the price of the oil. Paradox the Czech companies are the exemption of this trend and they don't use derivatives for the speculation. The main players of this industry are the power-station giant ČEZ and the gas holding RWE (see the Table 5).

	ENERGETIC		Impact on the Balance Sheet
ASSETS		339 736 676	100,00%
Derivatives (receivables)		159 335	0,05%
currency derivatives		0	0,00%
FX forward		0	0,00%
FX swap		0	0,00%
FX options		0	0,00%
interest rate derivatives		0	0,00%
FRA		0	0,00%
IRS		0	0,00%
IRO		0	0,00%
commodity derivatives		0	0,00%
embedded derivatives		0	0,00%
other (non specified)		159 335	0,05%
Derivatives (payables)		4 200 138	1,24%
currency derivatives		0	0,00%
FX forward		0	0,00%
FX swap		0	0,00%
FX options		0	0,00%
interest rate derivatives		25 365	0,01%
FRA		0	0,00%
IRS		25 365	0,01%
IRO		0	0,00%
commodity derivatives		0	0,00%
embedded derivatives		0	0,00%
other (non specified)		4 174 773	1,23%

#### **Table 5 - Energetic Industry**

Companies from the holding RWE don't use derivative operations anymore. The ČEZ Group is the leader of the Czech stock market. However the information given in the Annual Reports about the risk management and their derivative operations are very incomplete. There are given only the aggregate sums for the fair values of the derivatives used for the fair value hedge and the cash flow hedge. The Group is unable to give the information about the types of the derivatives it uses (all derivatives of this Group are published in the item "other (non specified)"). ČEZ have many loss derivatives, but their impact on the balance sheet is less than 2 %.

# 4.4 Chemical Industry and Pharmaceuticals

Unipetrol Group is the leading company of the Czech chemical industry. The Group don't use the derivative operations for the speculation but only for the economic hedging of their risks. The risk management of the Group is decentralised. From the Financial Statements of the Group we can see tiny impact of the derivative operations on the financial results of the Group, but the fair value of the derivative operations was negative (see the Table 6).

	CHEMICAL INDUSTRY,		Impact on the
	PHARMACEUTICALS		Balance Sheet
ASSETS		91 727 434	100,00%
Derivatives (receivables)		0	0,00%
currency derivatives		0	0,00%
FX forward		0	0,00%
FX swap		0	0,00%
FX options		0	0,00%
interest rate derivatives		0	0,00%
FRA		0	0,00%
IRS		0	0,00%
IRO		0	0,00%
commodity derivatives		0	0,00%
embedded derivatives		0	0,00%
other (non specified)		0	0,00%
Derivatives (payables)		58 069	0,06%
currency derivatives		0	0,00%
FX forward		0	0,00%
FX swap		0	0,00%
FX options		0	0,00%
interest rate derivatives		58 069	0,06%
FRA		0	0,00%
IRS		58 069	0,06%
IRO		0	0,00%
commodity derivatives		0	0,00%
embedded derivatives		0	0,00%
other (non specified)		0	0,00%

#### Table 6 - Chemical Industry and Pharmaceuticals

Very important company of the pharmaceutical industry is the Czech leader Zentiva. This company is the very successful player of the Prague Stock Exchange. Zentiva uses derivative operations very temperately. Surprisingly the company decided to not use the hedge accounting. Zentiva uses the derivative operations for managing the currency risks and all their operation are reported as derivatives for trading. The risk management of the company is centralised. The fair value of the derivative operations in 2002 and 2003 was negative and the using of these operations in Zentiva went down. As at 31 December 2004 the company didn't have any derivative operation. Impact of these operations on the balance sheet is therefore null.

### 4.5 Other Industries

Quite interesting is using of the FX option by the spa company Lázně Teplice v Čechách. This option was reported as a derivative operation held for trading. The fair value of this option was expressively positive, but the impact on the financial results of the company was only about 2 % (see the Table 7).

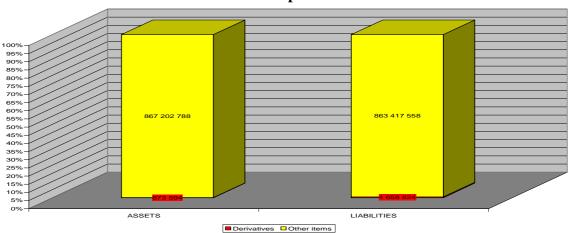
	SUMMARY		Impact on the
			Balance Sheet
ASSETS		868 076 382	100,00%
Derivatives (receivables)		873 594	0,10%
currency derivatives		675 099	0,08%
FX forward		666 333	0,08%
FX swap		0	0,00%
FX options		804	0,00%
interest rate derivatives		0	0,00%
FRA		0	0,00%
IRS		0	0,00%
IRO		0	0,00%
commodity derivatives		0	0,00%
embedded derivatives		39 160	0,00%
other (non specified)		159 335	0,02%
Derivatives (payables)		4 658 824	0,54%
currency derivatives		343 934	0,04%
FX forward		329 751	0,04%
FX swap		6 508	0,00%
FX options		7 675	0,00%
interest rate derivatives		140 051	0,02%
FRA		0	0,00%
IRS		140 051	0,02%
IRO		0	0,00%
commodity derivatives		0	0,00%
embedded derivatives		0	0,00%
other (non specified)		4 174 839	0,48%

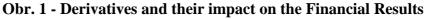
The traditional player of the Prague Stock Exchange is the leader of the tobacco industry Philip Morris ČR. Company operated with the FX option, but this derivative operation had positive fair value with the null impact on the balance sheet.

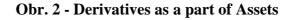
There are industries with no using of the derivatives operations, such as trade, timber and paper industry and the construction industry. The Czech leader of the textile industry Slezan Frýdek-Místek uses the FX forwards, but their impact on the financial results was null.

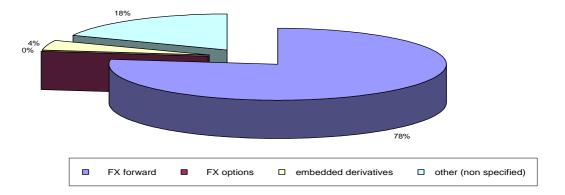
## **5 OPENED PROBLEMS OF REPORTING OF THE DERIVATIVES**

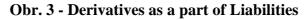
The main problem of the reporting about the derivative operations is the very low level of the information about derivatives. Moreover the companies are in this way non-uniform although they should meet the requirements of IAS 32 and IAS 39. Therefore the data are very difficult to compare and interpret.

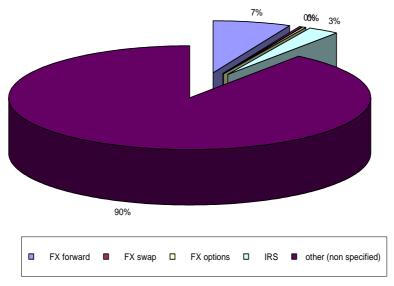












Information about the structure of the derivative operations, their nominal and fair values, types of the derivative instruments are crumbled on whole length of the annual report. For example company reports the nominal values for each type of the derivative instrument, but the fair value of these instruments is aggregated only for the types of the financial risks.

Other problem is the reporting of cross currency swaps. Some companies reports CCS as a part of the currency risks, other companies as a art of the interest rate risks.

Majority of the companies didn't report the information about their hedging strategies. The shareholders of these companies therefore have no information about the fact which part of the sum could be classified as a fair value hedge and which part as a cash flow hedge. There were reported no information about the measurement of the efficiency of the hedge accounting. Companies only cribbed the Act about derivatives.

*To sum up:* information given in the companies' annual reports is formal, non-uniform and without any polished system.

Majority of the companies reported, that the derivative operations are not used for speculation. Therefore the companies which didn't mention this fact demonstrably use derivative operations for the speculation. We assume that the companies are nowadays more cautious in using these operations than in previous years. But we should realise that the very low level of the information about the derivative operations have the negative impact on the possibility of making fair financial decisions because of the information asymmetry. Another problem is the measurement of the fair value in the Czech OTC derivative market.

# **6 CONCLUSION**

The main conclusion of this analysis is the fact, that the impact of using derivative operations on the financial results of the companies is very low. If the company has the positive or negative result of these operations, their impact on the balance sheet was less than 2%.

As for the derivative typology, the companies in Czech prefer in the management of currency risks the FX forwards much more than FX options. In the way of interest rate derivatives, companies prefer interest rate swaps. The quite surprising fact of our analysis is that the Czech companies listed in Prague Stock Exchange don't use commodity derivatives.

### REFERENCES

FITCH RATINGS. Available at: <http://www.fitchratings.com>.

GANDY, B.; MERRITT, R.; OLINE, M.; MANN, W. *Hedge accounting and derivative study for corporates*. Available at: <www.fitchratings.com>, 2004, 13 pages.

GRIFFITHS, A.; GANDY, B.; MANN, W. Adjusting for fair value of debt and related derivatives in corporate analysis. Available at: <www.fitchratings.com>, 2006, 6 pages.

IFRS/IAS. Available at: <http://www.iasplus.com>.

INTERNATIONAL ACCOUNTING STANDARDS BOARD. Available at: <a href="http://www.iasb.org">http://www.iasb.org</a>>.

PRAGUE'S STOCK EXCHANGE. ANNUAL. Reports of the companies listed on Prague's Stock Exchange. Available at: <a href="http://www.pse.cz">http://www.pse.cz</a>>.

STROUHAL, J. Accounting of financial derivatives. CP Books, Brno 2005, ISBN: 80-251-0754-X, 117 pages.

STROUHAL, J. *Financial and accounting aspects of financial options*". Dissertation Work, University of Economics, Prague 2005, 178 pages.