

**THE ANALYSIS OF DERIVATIVES USAGE
IN THE NON-FINANCIAL ORGANIZATIONS**

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PANKOV Pavel*Polotsk State University. Belarus, Novopolotsk, Blokhina str. 29**Email: pankovpa@yandex.ru*

Summary: *Practice usage and management the derivative instruments on the example of non-financial organizations is analyzed in the article. In particular, the issues related to the purpose of application and selection of specific instruments in these organizations. The main types of risks that can be managed with the help of derivatives are also considered in the article. And one more example, when derivative instrument as a risk management tool become a source of actual losses, has been demonstrated and analyzed.*

Keywords: derivatives, hedging, market risk, currency risk.

JEL Classifications: G32, M41, O16.

Introduction

Derivatives in some cases may be an effective instrument for managing the company's market risk (i.e. hedging instrument) or a tool for obtaining additional profit from speculative operations. At the same time, the usage of derivatives in non-financial organizations, for which derivative instruments are rather often considered excessively complex and risky, requires the construction of an effective system of their management. It should be noted that in the Republic of Belarus derivatives are used minimally by non-financial organizations for a number of reasons, in particular they are the lack of a clear understanding of management, what derivatives can give their company, and what risks are associated with it.

The purpose of this research is to review practical aspects of managing derivatives in large non-financial organizations of the Russian Federation (as in the Republic of Belarus the usage of these instruments is almost minimal) and to identify common trends and problematic aspects in this field. This work is a part of a full-fledged scientific research conducted by the author in the field of management the derivatives in non-financial organizations, but it has a complete form and ends with a full withdrawal part.

The main part

The practical issues of management the derivatives in the organizations, which are considered in this paper, include the purpose of their usage and the choice of a specific instrument. Non-financial organizations are more likely to use derivatives for hedging rather than to profit from speculative operations. And if the speculative operations are aimed at making profit from changes in market variables and clear to both the company's management and any expert in the economic sphere, hedging transactions are often connected with a number of questions, which requires some clarification below.

In the current activities non-financial companies face with the different types of risk, in response to which it is necessary to take appropriate management actions to ensure the neutralization or reduction of these risks to an acceptable low level. If the activity of the company depends on market variables (e.g. exchange rates, commodity prices, the size of interest rates), then we can say that the organization is exposed to market risk (including currency risk, risk of changes in commodity prices, interest rate risk). To these types of risk will be exposed companies, that are engaged in export-import operations or connected with exchange traded commodities, as well as organizations, which borrow

loans and credits at floating or fixed rates. The hedging method can be used to manage this type of risk.

Hedging (from the English hedge – to protect, to insure yourself against possible losses) – futures (forward) transaction for insurance against the possible fall of price when making long-term deals. And hedge, accordingly, – the position, which is used as a temporary replacement for the future position in another asset (obligation) or to protect the value of the current position of the asset (obligation), while this position may not be eliminated [1, p. 200].

Next it is necessary to consider in what cases non-financial organizations use derivatives on the example of a number of Russian companies. For that reason the statements of non-financial companies according to IFRS related to derivatives and risk management will be summarized in table 1.

Table 1. The usage of derivatives to manage market risk by Russian companies in 2016

Accounting policies / type of risk	Table of contents of the accounting policies section / Method of risk management
PJSC LUKOIL and its subsidiaries (together, the «Group»)	
Derivative instruments	The Group’s derivative activity is limited to certain trading operations with oil and petroleum products and hedging of commodity price risks. Currently this activity involves the use of futures and swaps contracts together with purchase and sale contracts that qualify as derivative instruments. The Group accounts for these activities as not intended for hedging and doesn’t use hedge accounting. The Group accounts for these activities at fair value. Resulting realized and unrealized gains or losses are presented in profit or loss on a net basis. Unrealized gains and losses are carried as assets or liabilities in the consolidated statement of financial position.
Currency risk	The Group is subject to foreign exchange risks since it operates in a number of countries. The exchange rate of the Russian ruble to the US dollar produces the greatest impact on transaction results, since the Group’s export proceeds are denominated in dollars, while the major costs are incurred in Russia and are denominated in Russian rubles. ... In a number of cases currency risks at trading floors are minimized due to the financial derivative operations conducted as part of the corporate dealing process. Moreover, to mitigate its foreign exchange risks, the loans to Group companies are granted in local currencies as part of inter-group financing ...
PJSC Rosneft Oil Company and its subsidiaries (collectively, the «Company»)	
Currency risk	The Company undertakes transactions denominated in foreign currencies and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the U.S. dollar and euro. Foreign exchange risk arises from assets, liabilities, commercial transactions and financing denominated in foreign currencies. A portion of future monthly export revenues expected to be received in U.S. dollars over the period from January 2015 through December 2020 was designated as a hedged item. To the extent that a change in the foreign currency rate impacts the fair value of the hedging instrument, the effects are recognized in other comprehensive income or loss and then reclassified to profit or loss in the same period in which the hedged item affects the profit or loss.
Gazprom Neft PJSC (the «Company») and its subsidiaries (together referred to as the «Group»)	
Derivative instruments	Derivative instruments are recorded at fair value on the Consolidated Statement of Financial Position in either financial assets or liabilities. Realized and unrealized gains and losses are presented in profit and loss on a net basis, except for those derivatives, where hedge accounting is applied. The Group applies hedge accounting policy for those derivatives that are designated as a hedging instrument (currency exchange forwards and interest-rate swaps). The Group has designated only cash flow hedges – hedges against the exposure to the variability of cash flow currency exchange rates on a highly probable forecast transaction.
Currency risk	The Group is exposed to currency risk primarily on borrowings that are denominated in currencies other than the respective functional currencies of Group entities, which are primarily the local currencies of the Group companies, for instance the Russian Ruble for companies operating in Russia. The currency in which these borrowings are denominated in is mainly US Dollar. The Group’s currency exchange risk is considerably mitigated by its foreign currency assets and liabilities: the current structure of revenues and liabilities acts as a hedging mechanism with opposite cash flows offsetting each other. The Group applies hedge accounting to manage volatility in profit or loss with its cash flows in foreign currency and hedges predominantly its borrowings.
Interest rate risk	Part of the Group’s borrowings is at variable interest rates (linked to the Libor or Euribor rate). To mitigate the risk of unfavorable changes in the Libor or Euribor rates, the Group’s treasury function

	monitors interest rates in debt markets and based on it decides whether it is necessary to hedge interest rates or to obtain financing on a fixed-rate or variable-rate basis.
PJSC «Russian railways» and its subsidiaries (the «Group»)	
Derivative instruments	The Group uses derivatives, such as forward currency contracts and interest rate and currency swaps. Such derivatives are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative. Starting 2015, the Group designates certain financial instruments as hedging instruments and applies hedge accounting (cash flow hedge and hedging of the net investment in a foreign operation).
Currency risk	The Group is exposed to currency risk on selected receivables, payables and borrowings that are denominated in a currency other than the Group companies' functional currencies. The currencies in which these transactions are denominated are primarily Swiss Francs, US dollars, Pounds Sterling and euros. The Group aims at maintaining a neutral open currency exchange position through offset of outflows in a foreign currency by inflows in corresponding currency. As at 31 December 2016, hedged item (in hedging relationships according to IFRS) is represented by forecasted Swiss Francs denominated revenue for cargo transit through Russia. Hedge accounting is applied in respect of total revenue for cargo-in-transit transportation steadily forecasted for the period from October 2016 to November 2026 and considered to be highly probable. The exchange rate fluctuations of ruble against Swiss Francs are hedged in this hedging relationship.
PJSC Aeroflot - Russian Airlines and its subsidiaries (the «Group»)	
Derivative instruments	Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The group designates certain derivatives as hedges for a highly probable forecast transaction (cash flow hedge). The Group analyses and assesses the fair value of derivative financial instruments on a regular basis for the purposes of consolidated financial statements or when so requested by management. For risk management purposes the Group uses the following derivatives: a) cross-currency interest rate swaps with a fixed interest rate; b) fuel options; c) currency options.
Currency risk	The Group is exposed to currency risk in relation to revenue as well as purchases and borrowings that are denominated in a currency other than rouble. The currencies in which these transactions are primarily denominated are Euro and US Dollar. The Groups analyses the exchange rate trends on a regular basis. The Group uses long-term lease liabilities nominated in US Dollars as hedging instrument for risk of change in US Dollar exchange rate in relation to revenue.
Price risk	The results of the Group's operations are significantly impacted by changes in the price of aircraft fuel. In 2012, 2013 and 2014 the Group entered into agreements with a number of Russian banks to hedge a portion of its fuel costs from potential future price increases. Given as at 31 December 2016 and 31 December 2015 the deals were matured, change in value of underlying asset as at the reporting date would not have any significant impact of financial results and equity of the Group.

Source: author's elaboration based on [2, 3, 4, 5, 6]

Thus, it can be noted that Russian companies actively use derivatives to hedge their risks. Basically, it is hedging of risks associated with cash flows nominated in foreign currency, to a lesser extent – hedging of interest rate risks and risks of commodity prices volatility. In the considered reporting the information about financial results on derivatives is included in the indicators of financial income or expenses or profit or loss on the net basis, while the detailed data on derivatives was provided only in the hedging relationships description, when a special accounting procedure is applied (i.e. hedge accounting). Accordingly, this reporting does not fully assess all aspects related to derivatives and gives a general vision of the situation in this area.

At the same time, it should be noted that operations with derivatives, especially the usage of their complex combinations, are associated with the high level of risk. For example, if we consider the reporting data of PJSC «Transneft» from 2013 to 2016, the position of profit (loss) from operations with derivative instruments will look like it is shown in table 2.

Table 2. Profit (loss) from operations with derivative financial instruments of PJSC «Transneft» and its subsidiaries in 2013 – 2016

Indicator	2013	2014	2015	2016
Net profit (loss) from operations with derivative financial instruments, million RUB.	(52)	(75 289)	(5 088)	3 388

Source: author's elaboration based on [7, 8]

As we can see, in 2014 PJSC «Transneft» got a significant loss from the usage of derivatives. Briefly the conditions in which the loss was obtained can be described as follows.

In January 2017 the transport monopoly has submitted the claim to the Sberbank, requiring the Bank to return 67 billion rubles, which the company lost on derivative financial instruments due to the collapse of the ruble in 2014. The execution of the agreement occurred if the exchange rate exceeds 45 RUB/\$. Then this barrier was changed to 50,35 RUB. But by the end of 2014 exchange rate of dollar against the ruble reached 56,65 RUB. As a result «Transneft» received 75.3 billion RUB of loss due to the execution of conditional transaction. «Transneft» asserted that the Bank failed to warn it about all the risks. In its turn, Sberbank claimed that «Transneft» was a qualified investor with all the ensuing consequences. In June, the Moscow Arbitration court satisfied the claim of «Transneft». The Bank filed a complaint, and in August 2017 the appellate court refused to «Transneft» in the claim. At the end of November 2017, Transneft and Sberbank decided to conclude an amicable agreement on this litigation [9].

Conclusions

According to the results of the analysis of the practice management the derivatives in non-financial organizations it is possible to identify the following trends. Firstly, all reviewed companies use derivatives to a greater or lesser extent, while the main instruments are foreign currency forwards and interest rate swaps. Secondly, in the considered reporting information on specific hedging strategies is disclosed only for the transactions in respect of which hedge accounting under IFRS is applied, while the results of usage other derivatives are presented in the financial statements in general. Accordingly, the operations with derivatives are not fully presented in the considered reports, the information on them is not detailed. However, IFRS requires disclosure of information about the risk management associated with financial instruments on the basis of which derives the third position: derivatives are used as instruments for managing market risk (which includes currency risk, interest rate risk, commodity risk). And fourthly, derivatives as a risk management tool may be a source of increased risk, the underestimation of which is closely related to serious losses.

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