

The Design and Use of Swap-Contracts in the Financial Markets

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Abstract: The proposed model in the SWOP-contract will allow companies of various types of property to improve credit rating and raise relatively cheap foreign investment funds.

Key words: Swap contract • The financial markets • Financial derivatives

INTRODUCTION

According to experts, the emergence and development of the derivatives market is the most important event in the economic life of the last twenty years. Larger shares of the market of derivatives are options and swaps on interest rates.

The emergence of new types and varieties of derivatives due not only to the growing needs of customers in an increasingly sophisticated means of insurance against the risks, but also the continuous improvement of information technology and equipment, pricing mechanisms and risk management models [1, 3]. At the same time develop and improve legal regulations of operations with derivatives, there were new forms of standard contracts.

Empirical Analysis: The Bank of Russia is preparing draft regulations on the introduction of swap (exchange) transactions with precious metals. The essence of such operations is in the mutual exchange of assets to improve their structure. The Central Bank will be able to change, for example, gold from its reserves to the banking platinum, palladium or silver and vice versa [2]. The ratio between the prices of metals will be fixed by agreement. According to bankers, the introduction of 'metallic' swaps primarily allows the Central Bank to get rid of the multi-ton silver reserves. Exchanging it for gold bank, the Bank of Russia will replenish foreign exchange reserves, without the issue. The innovation will undoubtedly increase the liquidity of the precious metals, particularly platinum and palladium. However, everything will depend on the pricing system, which will offer a central bank and how the government will behave in the market platinoids

The swap agreement requires each side to make regular payments to the other party under the terms of the agreement, which determines the value of payments in relation to the various indicators, change of position, termination and transfer of rights to the swap operation.

Swaps are traded on the stock market as well as over the counter. At the signing parties do not exchanges swap on any financial flows. Financial calculations occur during the term of the swap agreements on a regular schedule. When entering into swaps, credit risk arises because one of the parties may refuse to comply with its obligations under the contract.

As the swap market in Russia is still predominantly OTC, transactions are intermediaries (banks, either directly or through information brokers), who for a fee guarantees each of the parties to the agreement have a share of payments under the swap. Introduction to broker an agreement to reduce the potential risks of non-fulfillment of obligations for the participants simplifies the process of harmonization of conditions and ensure the confidentiality of the transaction. In addition, the intermediary is possible to operate a large pool of customers, which gives the opportunity to operate with different amounts of loans and different interest rates.

For example, the need for currency swap operations is due to the fact that in most countries, foreign companies can obtain loans from a local bank on terms less favorable than the local company [6]. In order to minimize the cost of servicing the loan, the company entered into between the currency swap agreements, that is, the exchange of long-term credit obligations in one currency to equal obligations in other currencies.

From the 26 September 2002 the Bank of Russia has put in place a mechanism of refinancing credit institutions using transactions "currency swap". This solution is aimed at the development of short-term liquidity management instruments authorized banks and maintaining the stability of the Russian money market. In transactions "currency swap" Bank of Russia buying dollars for Russian rubles term "today" according to the official exchange rate of the USA dollar against the Russian ruble (base rate) with their subsequent sale for a period of "tomorrow" at a rate equal to the specified base rate, increased by Swap the difference. The minimum amount of the transaction is equal to three million dollars of the USA. The introduction of the Central Bank of the new tool in the financial market-the "currency swap"-will allow the Central Bank effectively solve the problem of a periodically recurring shortage of ruble liquidity in the interbank market.

Swaps are widely used in the gold market. It comes to selling gold on the spot conditions (according to prevailing at the time of the transaction price) with a simultaneous reverse forward transaction. However, in most cases, the gold, in effect, acts as collateral, under which the owner takes the credit. Metal thus is abroad on temporary customs export. In addition, such a contract must pay interest and margin requirements.

Over 90% of all operations with derivatives today fall to the share of the off-exchange market and it constantly grows. This growth is due to several advantages of this instrument compared with others, especially with exchange derivatives. Although the latter are more liquid instruments that have no risk of default, but they do not provide the necessary flexibility and do not cover the term of the contracts.

The most active players in the derivatives market-the major investment and commercial banks. It is not surprising, therefore, that the OTC market is mainly hedged interest rate fluctuations (76.7%) and exchange rates (18.7%). The increase of the global economy depends on the unregulated OTC derivatives market is a cause for serious concern. Failure to comply with one major participant may lead to a crisis of many others in the chain.

Problems with the use of derivatives that emerged in the 90's, has led to major changes in the derivatives market. There is growing more complex financial instruments that may limit the potential benefits in any way. At the same time, corporations prefer to use the simpler schemes. Thus, the lion's share of all swaps done by the standard procedure.

However, the operations of Russian banks in the derivatives market are not intended reallocation of risk between the banking and real sectors of the economy and are aimed at managing the risks arising from the activities of the participants of the system.

International banks offer their customers a variety of financial swaps to manage currency, interest rate and market risk in the medium term. Such as swaps, for example, foreign exchange not only eliminates the currency risk that may arise in direct lending to the parent company of a foreign branch, they also eliminate the credit risk associated with a parallel loan. In turn, interest rate swaps to manage risk for a variety of interest periods in the future.

In general, the use of swaps can be divided into two classes: the swaps associated with the assets are used to change the characteristics of the income stream investors, swaps related liability, are used to change the cash flows of the borrower.

The Model: Following financial scheme shows how the use of swap contract may reduce the credit risk and access to international capital markets.

The combination of commodity swaps, bank loan and sales contract. The first time such a financial mechanism was applied in 1989 by the New York branch of the bank "Paribas» for lending to Mexican copper corporation. The fact is that after a default by the Mexican government in 1982, Western financial institutions have stopped all financial transactions in the Mexican market. At the same time, the Mexican producer of copper for the refinancing of the debt was necessary to attract credit. Domestically, the loans were worth quite expensive, so it was necessary to enter the international capital market [5].

To overcome the negative credit rating a Mexican company, a consortium of banks organized a complex financial transaction that allowed Mexican corporations to raise external funds to the extent necessary. The financial scheme included a combination of

Table 1: Conditions of the loan agreement

#	Name	Input
1.	Organizer	International Bank (IB)
2.	Borrower	aluminum producer (PA)
3.	Lender	consortium of international banks (CIB)4.
	Nominal loan	463 million dollars
5.	Credit term	3 years
6.	Interest rate	three-year LIBOR + 2.0%
7.	Payments of interest	6 semi-annual payments
8.	Payment of nominal loan	6 equal semi-annual payments
9.	Providing credit	the company's revenue from the sale of 120,000 tonnes of aluminum annually

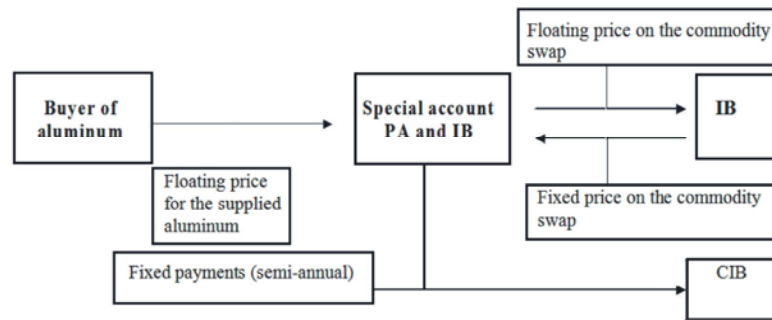


Fig. 1: Scheme of financial flows on a swap contract for aluminum

international loan contract for a certain amount of copper Mexican producer of one of their clients and product swap. All three financial transactions were carried out simultaneously.

Note that since the credit risks of the Russian Federation are high enough, therefore, for the Russian companies access to global capital market is difficult. Therefore, the financial scheme's funding Mexican copper corporation is relevant for Russian companies and can be used to improve their credit rating and obtain relatively low-cost foreign loans.

We now show how the aluminum company can get an international loan, using a combination of bank credit and commodity swap contract for the sale of aluminum. Assume that the international bank arranges for such a deal. Enterprise to provide a loan of 463 million dollars for a period of three years.

Assume that the three-year LIBOR at the time of signing the loan agreement is 2.0% per annum, therefore, the company has attracted a loan at a fixed rate of interest equal to 4.0% per year.

To lenders have the assurance that the company pay back the loan, you should arrange two additional transactions:

- The contract for the sale of aluminum to one of the company's customers. The contract amount should be sufficient to pay interest on the loan and its face value. Assume that the company enters into a contract with one of its customers, for which it is for the next three years will be to sell aluminum at a market price of 120 000 tonnes per year. The contract for the sale ensures that within three years the company get for the supplied aluminum equivalent amount of aluminum sold multiplied by the market price of aluminum. However, as the market price for the next three years is unknown, therefore, its change in an unfavorable direction can affect the ability of the enterprise to pay the loan. Therefore, the next contract is a product swap.

- Commodity Swaps allows you to record revenues of the company in the long run. International Bank enters into swap contract with the manufacturer of aluminum, in which over the next three years the bank has to pay the company a fixed price for the metal and in return receives floating. Bank fixes the price and the amount of aluminum in the semi-annual swap contract, which is enough to cover both the loan and interest. In our example, such a price is 1450 USD. / T. and semi-annual volume of 60,000 tonnes of aluminum.

Also at the beginning of the financial scheme bank and the company create a special account where the funds are accumulated from the sale of aluminum and the settlements on the swap. The buyer pays money for aluminum aluminum supplied in a special account. The price of aluminum is defined as the average price on the LME during the period prior to delivery. Buyer Aluminum Division 6 semi-annual payments. According to the swap contract, the international bank allocates a fixed amount of money in a special account and removes the floating amount every six months for three years. And finally, the payment of interest and nominal consortium of banks made ??from a special account (Figure 1).

RESULTS

Thus, the total amount paid with interest identical to the sum accumulated in a special account. Therefore, the combination of bank credit and commodity swap is a contract for the supply company guarantees payment of the loan and can be used to attract funding and improve the credit rating of the company.

In the above scheme is the production of financial risk-the risk that an entity will not be able to generate the required amount of aluminum for three years. In the analysis of the production risk pay attention to the proportion that the amount of aluminum is supplied under

the contract, compared to the total aluminum production at the plant. The smaller the amount of aluminum to be delivered under a contract for sale, the total output, the lower production risks. In addition, operational risks are not as dangerous as market and are usually easy to eliminate the internal forces of the enterprise.

In some cases, funding only allowed to sign two agreements: the loan agreement and the swap. The contract for the sale of products of the enterprise may not be necessary in the event that the company has a long-term contract to supply and a steady income from the sale of a certain quantity of goods.

CONCLUSIONS

Thus, from the examples above use of swap contracts to manage the various risks are seen all his benefits. Due to the flexibility of the tool, they can be designed for special needs of the client. Due to their diversity, in terms of constant fluctuations in interest rates, exchange rate and price swap contracts are an indispensable 'helper', allowing not only to manage emerging risks, but also to make a profit.

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