



PECULIARITIES OF USING RISK HEDGING INSTRUMENTS ON THE RUSSIAN MARKET

Budovich L.S.^{a*}, Nadtochiy Yu.B.^a

^aDepartment of Economics and Innovative Entrepreneurship, Faculty of Economics and Law, MIREA - Russian Technological University (RTU MIREA), Moscow, RUSSIAN FEDERATION.

ARTICLE INFO

Article history:

Received 08 March 2019
Received in revised form
16 May 2019
Accepted 23 May 2019
Available online 27 May
2019

Keywords:

Derivatives market;
Financial risk
insurance; Futures;
Hedging strategies;
Options; Derivative
financial instruments;
Forward contracts.

ABSTRACT

This article discusses the institutional and structural features of investment risk hedging strategies in the Russian market of derivative financial instruments. The state and development of the Russian derivatives market, including the MICEX and NTB exchanges, are analyzed. Identified and justified the need for the development of hedging operations of investment risks in the real sector of the Russian economy. This study The current research results show the importance of the appropriate hedging programs. The current research outcome, therefore, helps as a qualitative and quantitative proof as to what may be considered an effective hedge in an emerging market context.

© 2019 INT TRANS J ENG MANAG SCI TECH.

1. INTRODUCTION

In contrast to the global practice, risk hedging has not yet become widespread in Russia. Thus, according to CJSC Investment Company "Baltic Financial Agency", in 2017 the share of hedgers in the Russian market is not more than 20%.

2. LITERATURE REVIEW

Recently, the government has made several attempts to influence the development of hedging operations in the Russian market among companies in the real sector of the economy. The concept of long-term socio-economic development of the Russian Federation for the period up to 2020, in particular, States "...the formation of the investment resource should be carried out through the development of risk insurance, including the development of the market of derivatives concluded for the purpose of hedging risks", as well as proposed "...expanding the range of derivative financial instruments, while solving the problems of risk distribution between market participants, taking into account the need to ensure the protection of property rights of owners of financial instruments" [1].

Based on the results of the risk review of the financial markets of the Central Bank of the Russian Federation in 2018, we can say that the Russian derivatives market differs from the European one in terms of the structure of the instruments used: the European market is dominated by interest rate derivatives, and the Russian participants often conclude currency derivatives.

The most popular derivatives on the European market (according to the "Annual statistical report of the European derivatives market", published in October 2018 by ESMA (European securities market and financial markets supervision authority) [3] are interest rate derivatives, which are most often used to manage the timing ratio of assets and liabilities of credit institutions. In terms of open positions, such derivatives accounted for 69% of the total derivatives market in 2017. The next most popular were foreign exchange derivatives (12%), while the remaining groups of derivatives (stock, credit, commodity) were less than 5% each. The main market participants (about 95%) are credit institutions and investment companies, which often also act as financial intermediaries for their clients. Foreign exchange and commodity derivatives, which are mainly intended to hedge potential risks of changes in exchange rates and market prices of underlying assets, have the shortest terms compared to other types of derivatives (89% and 91% are concluded for a period of up to 1 year, respectively). In General, contracts with a term of up to 1 year are more popular in the market (61%), and the most long-term derivatives are interest-bearing. The highest concentration is observed in the markets of commodity, stock and credit derivatives, the shares of the five largest participants in these markets amounted to 67, 51 and 40%, respectively. By the number of participants, the foreign exchange market was the largest (more than 1 million participants), and the smallest – the market of credit derivatives (less than 10 000 different participants) [3]. This is due to the fact that credit derivatives are among the most complex and are used mainly only by professional market participants, while foreign exchange derivatives are often used not only by credit institutions and investment companies but also by non-financial organizations. In the commodity and stock markets PFI present 600 000 participants each, and the percentage – about 230 000.

On the Russian market, the most used derivatives are foreign exchange derivatives. Their share was 79% in 2018, and in 2017 it was even higher – 88%. Interest rate derivatives occupy only a small share of the domestic market (about 10%), as do instruments with floating rates in the national currency. The least developed markets in the Russian market are commodity and stock derivatives (9 and 2%, respectively). The share of open positions on interest rate derivatives is small compared to the European market. At the same time, there is a noticeable increase in the share of interest-bearing derivatives compared to the previous year (from 3% in 2017). up to 10% in 2018). The strong interest of the Russian market participants in currency derivatives is related to the significant role of currency transactions and the need to hedge currency risk in the conditions of the current floating exchange rate regime and regulatory restrictions on the banks' open currency position. Interest rate risk hedging is less common at the moment in the domestic market, as interest rate risk management is just beginning to develop [4].

In 2018, against the background of the growth in the cost of dollar borrowings, there is a change in the structure of the market of interest rate derivatives using the US dollar, which allows local market participants to effectively hedge the risk of further growth of dollar rates [5].

In 2014, the Government of the Russian Federation issued an order for companies with state

participation to form a single Treasury, as well as to develop and adopt a hedging strategy for financial risk management, for insurance of interest rate, currency, price, and other risks.

3. RESEARCH METHOD

Let us consider in more detail the institutional and structural features of the domestic derivatives market. Since the main reasons and factors of low interest of companies to insurance of financial risks are the limitation and features of the development of the Russian derivatives market, which inhibit the development of hedging as a risk management tool.

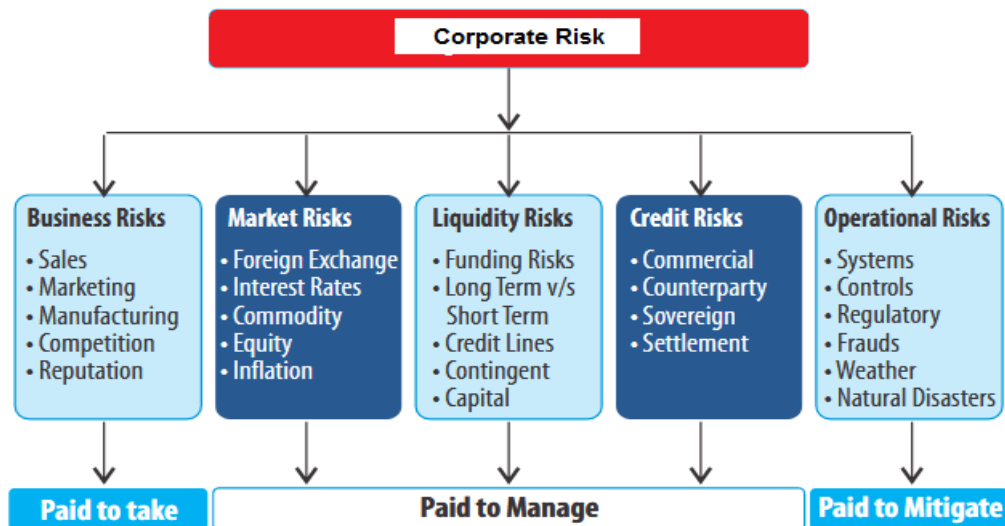


Figure 1: Financial risks.

As market imperfections are more of a norm than the exception, it makes risk mitigation an imperative exercise. The significance of hedging arises due to the omnipresence of various risks faced by all stakeholders. Risks at the microeconomic level can be broadly classified into operating risks and financial risks, which further can be of several types, as depicted in Figure 1. This is the most traditional theory justifying the merit of hedging. Basically, hedging provides insurance against risks arising out of price fluctuations. It manages the risks shown in Figure 1.

4. RESULTS AND DISCUSSION

The main platforms for hedging transactions in Russia are exchanges. The structure of the Russian derivatives market in 2017, according to MICEX, is dominated by currency futures (47% of the volume of all futures), index options (69 % of the volume of all options).

Interest rate derivatives occupy an extremely small share and volume among futures contracts on the MICEX exchange, this is primarily due to the weak spread of floating interest rates in Russia. Russian companies are almost completely deprived of the opportunity to build hedging strategies based on interest rate futures, one of the most common financial instruments in the world.

During 2017, the growth of commodity derivatives is observed due to the increase in the share and volume of futures on precious metals (gold, silver, platinum, palladium).

The Russian market of derivative financial instruments (derivatives) is mainly focused on speculative technologies, as evidenced by the low share of commodity derivatives. The extremely

small volume of options transactions is another significant difference between the Russian market and the Western 24 billion against 264 billion futures. The average share of options transactions in Western markets is 50%, according to the Bank for international settlements.

In the Russian market, futures transactions exceed the volume of options transactions due to the fact that futures are most often used for speculative operations. When using futures, a market participant gets access to greater leverage. Options are also often applied by market participants for the formation of hedging strategies.

Thus, we can conclude that in the Russian market of derivative financial instruments the main share of participants is speculators. This situation exists due to the low popularity of hedging operations and various problems faced by the investor interested in hedging investment risks.

The need for financial risk insurance among companies in the real sector of the economy is currently quite high. First of all, methods of hedging investment risks can be in demand among domestic producers who want to insure unfavorable changes in prices for manufactured products. For this purpose, in the world practice, supply futures and forward contracts for the underlying asset are most often used. At the same time, commodity exchanges in our country are still in the process of formation. Since March 2017, the national Commodity Exchange joint Stock Company has been organized in Russia. JSC NTB is a part of the Moscow exchange. Currently, the national Mercantile Exchange conducts organized trading in the purchase of grain, in particular: wheat, barley, corn and forage soybeans, sugar Derivative financial instruments presented on the exchange are standardized, it is deliverable forward contracts providing for the settlement of transactions from 3 to 180 days and deliverable SWAP contracts with the use of trading and clearing system.

The total volume of trading forward contracts in the grain market in 2017 amounted to 8.5 thousand tons in the amount of 55.2 million rubles. The trading volume of forward contracts in the sugar market in 2017 amounted to 8.5 thousand tons of sugar in the amount of 227 million rubles.

The total volume of trading in supply swap contracts on the grain market in 2017 amounted to 5.2 billion rubles.

As we noted earlier, the volume of transactions with commodity derivatives in the Russian market is significantly inferior to the volume of transactions with currency derivatives, and the share of commodity futures is extremely small compared to oil and gold futures. For this reason, farmers, as well as companies that buy agricultural products, often leave their risks uninsured. Another significant obstacle to the use of risk hedging among enterprises is the limited choice of production financial instruments. One of the priority directions of JSC NTB for 2018 this is the development of the market of supply swap contracts for grain and sugar, as well as the expansion of the line of basic assets.

According to the study of the SRO "national financial Association" conducted in 2016, the number of active participants in the derivatives market is still limited to a narrow range of banks and professional participants. In 2016, the share of international banks in the Russian market in the volume of Bank derivatives transactions and derivatives cardinally decreased by more than 90%, this is due to the termination of operations of Western banks in the Russian market and the departure of major players, such as, for example, Doyche Bank. The survey presented by the SRO "national financial

Association", which was attended by 22 large and medium-sized banks and professional partners, whose total share in the total turnover of transactions with derivatives exceeds 95%, revealed that the share of risk hedging transactions is 43%, the share of trading accounts for 57% of the Russian market of derivative financial instruments [6]. The researcher notes that even the transition of monetary policy of the Bank of Russia to inflation targeting and rate management, as well as observed at the end of 2014 and further in 2015. The high volatility of ruble interest rates (a sharp increase in the key rate to 17% and its subsequent decline) did not lead to the realization of the need to hedge ruble interest rates risk neither by the majority of banks (except for the most advanced) nor by the majority of their clients: the share of client transactions in the total volume of interest-bearing derivatives was only 19% in 2016 compared to 28% in 2015 [7].

The total amount of transactions with futures and options contracted in 2016 primarily owing to the decrease in the volume of trades in the stock segment of the futures market (Figure 2) largely because investors were seen to withdraw their funds from the Russian equity market and its futures segment during most of 2016. As a result, the share of the segment of stock futures in the total volume of exchange trades in derivatives fell to 65 percent in 2012 from 75 percent in 2015.

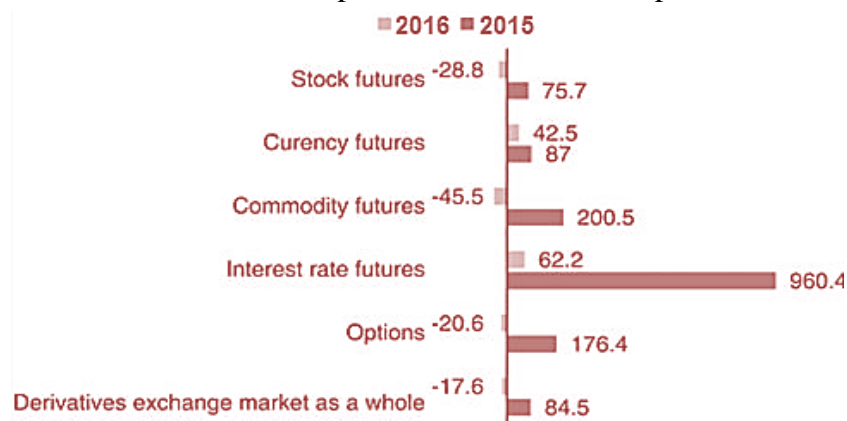


Figure 2: Annual growth rate in turnover on Russian derivatives exchange market (%), 2015/2016.

Industrial and mining corporations, participants in foreign economic activity, in General, the real sector of the economy very rarely use strategies and operations to hedge their investment risks in particular currency risk. At the same time, the issue of currency risk insurance is particularly relevant in conditions of the high volatility of the exchange rate, after the currency crisis of 2014 and a strong devaluation of the ruble [8]. According to the NFA study, the main reasons for the low interest of Russian enterprises in hedging operations include: insufficient level of financial literacy, the majority of enterprises are not familiar with hedging instruments, the complexity of tax and accounting, imperfection of the legal framework, lack of understanding and risk assessment, low economic activity in the Russian market, limited choice of derivative financial instruments in the Russian market. These reasons become an obstacle to the popularization and active development of hedging operations among large enterprises in the derivatives market, changes in the situation in the direction of greater interest of market participants in the use of production financial instruments not only for speculative purposes, but for insurance of investment risks will help market development, increase the volume and liquidity. The role of financial regulators and legislators in education and creation of favorable conditions, modernization of tax and accounting is important, all this should encourage market participants to use hedging operations for insurance of financial risks.

5. CONCLUSION

The state is aware of the importance of developing hedging operations, especially in conditions of high market volatility, and establishes requirements for risk insurance in companies with state participation. For the development of hedging operations of investment risks in the real sector of the Russian economy, it is extremely important for the state to participate in the creation of a transparent, safe and regulated market of derivative financial instruments, as well as to conduct a set of activities and programs that are educational in nature and eliminate the lack of necessary knowledge about the risks and their hedging among market participants.

6. DATA AVAILABILITY STATEMENT

This study, no data, models, or code were used or generated.

7. REFERENCES

- [1] Piskulov D.Yu. The Russian Derivatives Market in 2016: The Results of the NFA Study. *Money and Credit*. 2017. 3. P. 25-32.
- [2] The concept of long-term socio-economic development of the Russian Federation for the period up to 2020 (Approved by the order of the Government of the Russian Federation of November 17, 2008 1662-p) [Electronic resource]. *ATP Consultant Plus: Legislation*, Version Prof. <http://base.consultant.ru>
- [3] CBRF. *Review of risks of financial markets*. Informational and analytical materials of the Central Bank of the Russian Federation. Moscow. 2018, 7(27). https://www.cbr.ru/collection/collection/file/10409/orfr_2018-07.pdf
- [4] Central Bank: the Russian financial market has stabilized. *Vesti. Economics*. URL: <https://www.vestifinance.ru/articles/108451>
- [5] Scherbina T.A. Analysis of the Russian and world practice of hedging. *New Science: Development Strategies And Vectors 2017 Part 1 AMI LLC*. 2017: 202-209.
- [6] Struchenkova T.V. *Currency risks: analysis and management*. Moscow: Knorus, 2010.P. 216.
- [7] Tumin V.M., Kostromin P.A., Vikhrova A.S. Foreign and domestic practice of managing the sustainable development of industrial enterprises on the basis of increasing the informational transparency of doing business. *Russian Technology Journal*. 2016, 1(10): 71-85. <https://www.mirea.ru/upload/medialibrary/7b0/10.pdf>
- [8] Rogova, V.A. Personnel problems of high technology development in Russia in the mirror of the Global innovation index. *Rossiyskiy tekhnologicheskii zhurnal (Russian Technological Journal)*. 2018; 6(4): 105-116. (in Russ.) https://rtj.mirea.ru/upload/medialibrary/f3d/RTZH_4_2018_105_116.pdf.



Budovich Lidiya Sergeevna is an Associate Professor at Department of Economics and Innovative Entrepreneurship, Faculty of Economics and Law, MIREA - Russian Technological University (RTU MIREA), Moscow, Russia. She is a Candidate of Economics. Her interests include Marketing, Marketing in Industries and Fields of Activity, International Marketing, Global Marketing, Marketing in the XXI century.



Dr. Nadtochiy Yuliya Borisovna is an Assistant Professor at Department of Economics and Innovative Entrepreneurship, Faculty of Economics and Law, MIREA - Russian Technological University (RTU MIREA), Moscow, Russia. Her interests include Consumer Behavior, Psychology of advertising, Business correspondence, Business Rhetoric, Business Communication, Quality Management, Total Quality Management, and ISO standards.