

12) FEATURES OF FOREIGN CURRENCY RISK MANAGEMENT

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Abstract

The basic approaches to the concept definition of "risk" are considered and the author's vision of the risk essence is proposed. It has been researched that the risk is caused by the existence of uncertainty, which is an integral part of the market conditions. Risk concepts are associated with the likelihood of underreporting, loss or additional expense, or the aggregate of favorable or unfavorable outcomes, and any deviation from the desired outcome. The study found that the bank's currency risk management is considered as a system of developing, making and implementing decisions on the impact on currency risk in order to prevent, limit or minimize its associated losses. Banks mainly use hedging currency risk in managing currency risk and currency position. The concept interpretation of the hedge method establishes that it is a method of entering into forward contracts and agreements, which allows to account for probable changes in the future exchange rates and provides the opportunity to avoid the adverse effects of such changes. The advantages of using hedging tools have been analyzed and the most appropriate tools, which are summarized in the table, have been identified in the real world. It is concluded that futures and stock options are the most suitable instruments. This choice was made due to the properties of these derivatives: the highest availability (stock exchange instrument, all agents equal access), flexibility (possibility of early exit), availability of data (daily quotes), high liquidity and reliability (no risk of failure of the transaction).

Keywords: risk, currency risk, currency risk management, hedging

Introduction

Nowadays the foreign exchange market is one of the most important elements of a market economy. Since the early 1970s, the fixed gold standard has been abandoned, and most countries have switched to floating exchange rates, which has led to an increase in exchange rate volatility and a rapid increase in foreign exchange transactions. There is a necessity to obtain a reasonable assessment of currency risk and to choose effective methods of managing it under such circumstances.

The topicality of the currency risk management problem is firstly due to the fact that many banks are entering the international market. In the context of an increase in the volume of transactions in foreign currencies, banks need to pay special attention to these operations, since the financial results of their operations depend to a large extent on exchange rate fluctuations. Thus, there is a need to justify an effective method of managing currency risk of commercial banks.

Material and Methods

The article uses general scientific and applied methods: mathematical statistics, for the analysis of currency exchange rate volatility, empirical research methods, including observation for purposeful study of currency risk management strategies and methods.

Results and Discussion

Existence of risk is conditioned by the existence of uncertainty, which is an integral part of market conditions, as well as the source of various variants of events that we cannot predict with absolute precision, resulting in risk.

Three main approaches were identified to determine the nature of “risk” in the process of analyzing domestic and foreign literature: firstly, the idea of risk as a probability of income shortfall; secondly, the consideration of risk as losses or additional costs; thirdly, the synthesis of approaches where risk is defined as the set probability of favorable (obtaining additional profit) and unfavorable (occurrence of losses, additional costs) results, that is any deviation from the desired result (Korvat & Shapovalova, 2017; Botvina, 2016; Andrushko & Kinieva, 2016).

Given the existence of different perspectives, we consider the second approach to be the most common, since the risk is the likelihood of losses or additional costs. Market subjects, when faced with risk, often associate it with unexpected adverse events. We believe that risk sometimes includes the likelihood of a successful outcome, subject to the action of favorable factors.

Currency risk arises when conducting operations in foreign currency and represents an opportunity to change the value of assets (liabilities, monetary requirements and liabilities) in foreign currency, in the tendency for losses due to unfavorable changes in exchange rates. In today’s market conditions, the change in the exchange rate is continuous, in connection with this currency risk always exists (Korvat & Shapovalova, 2018).

The commercial banks are noted to be exposed to currency risk not only in full volume of their currency operations, but only in the amount of open currency positions. In general, the foreign exchange position reflects the difference between the requirements and liabilities (assets and liabilities) in a specific foreign currency and arises on the date of the agreement on the purchase or sale of foreign currency and other currency values, as well as the date of crediting income (expenses) in foreign currency. These dates also determine the date in which the relevant changes in the open currency position (GDP) are reflected in the accounts.

Using the concept of “open currency position”, it becomes possible to define currency risk as an opportunity to obtain a lower than expected financial result, due to the unfavorable change in the currency in which the open currency position is existed.

Currency risk management has become especially relevant as the volatility of major currencies (US dollar, euro) has increased significantly in recent years (The Official Hryvnia Exchange Rate For Foreign Currencies According To The NBU). Thus the volatility of major currencies was insignificant until 2014. However, after the well-known events that changed the history of Ukraine and affected its economic situation, the exchange rates began to change more and more, and the banks’ propensity for currency risk increased significantly, which actualized the need for risk management.

The Bank’s currency risk management is considered as a system of development, adoption and implementation of decisions on the impact on currency risk in order to prevent limit or minimize its associated losses.

To carry out risk management, it is necessary to choose the right strategy that will determine the methods of risk management. In our opinion the choice of currency risk management strategy depends on the characteristics of the bank, so it is important to take into account the individual characteristics of each particular bank. Table 1 is presented to select the type of risk behavior of the bank

Table1. The choice of currency risk management strategy depending on the characteristics of the bank.

Characteristics of the bank	Currency risk management strategies			
	Avoiding risk	Saving risk	Limitation of risk	Transfer of risk
1	2	3	4	5
Scale of activity (by asset size):				
Small bank (from the 1st to the end of the rating - assets less than 1bn UAH)	+	-	-	-
Medium Bank (ranked from 1 to 10 billion USD)	+	-	+	+
Big Bank (top 80 - assets over 10 billion UAH)	+	+	+	+
Financial result (net profit) based on the results of the last reporting period:				
Damage (from 40th place in the rating)	+	-	+	-
Profit (up to 40 places in rating)	+	+	+	+
Existence of a separate risk management unit				
There is	+	+	+	+
There is not	+	-	-	+
The Bank is engaged in foreign currency transactions				
On behalf of customers	+	+	-	+
On your own behalf and on behalf of customers	+	+	+	+
Financial condition of the bank (according to NBU methodology):				
Good / Satisfactory	+	+	+	+
Doubtful / unsatisfactory	+	-	-	-

Source: compiled by the authors based on - Top 50 banks: the most asset-intensive; Approval of Methodological Recommendations on the Procedure for Preparing Notes to the Financial Statements of Ukrainian Banks Resolution of the National Bank of Ukraine (2018); Approval of the Regulations on the assessment of the stability of banks and the banking system of Ukraine. National Bank of Ukraine Resolution (2017).

According to Table 1, we can conclude that a risk avoidance strategy, which involves balancing assets and liabilities for each currency, is a universal strategy for banks of any type.

Banks mainly use an asset and liability balancing strategy to eliminate currency risk. So banks are trying to keep long GDP in strong currencies (if the rate is expected to increase) and short GDP - in weak currencies. The NBU supports this regulatory strategy at the regulatory level and recommends that it also use other currency risk management techniques, such as hedging.

Hedging is considered as a method of entering into forward contracts and agreements, which allows to take into account the probable changes in the future exchange rates and provides an opportunity to avoid the adverse effects of such changes (Esh, 2011). The current financial market offers a number of hedging instruments, including forward, futures, options and swaps. The choice of the most effective currency risk mitigation tool depends on the hedging tactics: the hedging instrument, the stock exchange or over-the-counter transaction, and when the transaction is concluded. Table 2 shows the comparison of derivatives by major criteria. This is necessary to identify the most appropriate hedging instrument in the real world.

Table 2. Comparison of hedging instruments.

Criteria for comparison	Names of derivatives				
	Forward	Futures	Option		Swap
1	2	3	4	5	6
Trade	OTC trading	Stock trading	OTC trading	Stock trading	OTC trading
Contract Amounts	any	Standard	any	Standard	Significant (over \$ 5 million).
Typical expiration dates	Any (3-24 months)	Standard based on quarterly cycle	any	Standard	Any (1-10 years)
The possibility of early withdrawal from the contract	no	yes	yes	yes	no
Accessibility	Not publicly available	Equally available	Equally available	Equally available	Public (if acceptable rating)
Additional requirements	Credit lines	Guarantee deposits	None	Guarantee deposits	Guarantees
Calculations	On the date of termination of the contract	daily	On the date of termination of the contract	daily	Periodically, on fixed dates
Costs	Periodically, on fixed dates	Stock, brokerage, commission payments	Optional premium	Optional premium	Fees, about 1%
Liquidity	Low or absent	High	Average	High	Low or absent
Risk of delivery failure	There is a risk	There is no risk	There is a risk	There is no risk	There is a risk

Source: compiled by the authors based on Khall (2007); Prymostka (2004).

Conclusions and Outlook

Thus, we can conclude that the most effective tool for reducing currency risk are futures and stock options. This conclusion was reached due to the properties of these derivatives: the highest availability (stock exchange instrument, all agents equal access), flexibility (possibility of early exit), data availability (daily quotes), high liquidity and reliability (no failure risk of the transaction).

In our opinion, the most optimal instrument for hedging currency risks is a currency futures contract. The foreign exchange rate denominated in national currency (USD / UAH, EUR / UAH) or the foreign exchange rate denominated in another foreign currency (EUR / USD) may serve as the base asset for the currency futures.

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