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THE SYSTEM OF INTERNAL CURRENCY RISK LIMITS OF THE BANK

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Summary. The article deals with scientific and methodical approach to construction of a hierarchical currency risk limits system of the bank, based on integration of dynamic flexible component (enforces observance of basic tolerance to foreign exchange risk) and fixed rigid buffer (helps to create additional

capital reserves in case of exceptional and critical, but probable escalation of risk). The dynamic component has a flexible three-tier structure consisting of limits of realized, unrealized and potential losses. Rigid buffer is represented by positional Stress-limits.

Key words: *foreign exchange risk of the bank, stop-out limits, stop-loss limits, VaR-limits, Stress-limits, currency position liquidity.*

The high level of assets and liabilities dollarization of Ukrainian banks causes the existence of their significant exposure to foreign exchange risk. Management of that risk is complicated by inability to predict correctly the dynamics of exchange rates during the economic recession and political crisis in Ukraine. In such a situation the threat of destabilization of the banking system is compounding and, respectively, the relevance of risk management tools improving is increasing. Therefore, the design of an effective currency risk limits system become the task of high importance as it will allow banks to hold a particular level of risk tolerance, to distribute transactions among portfolios which are homogeneous functionally and in terms of risk, to assess the effectiveness of transactions considering risk, to improve traders' discipline and control over their activities.

The aim of the study is to improve scientific and methodological approaches and develop practical recommendations for construction of hierarchical currency risk limits system of the bank.

It is advisable to build currency risk limits system of the bank on the integration of dynamic flexible component (enforces holding of basic tolerance to foreign exchange risk) and fixed rigid buffer (helps to create additional capital reserve in case of exceptional and critical, but probable escalation of risk).

Therefore, in the beginning of the year the owners and/or managers should establish global annual basic, exceptional and critical limits that restrict the overall currency risk of the bank. Within the global limits the authority limits are defined by which the economic capital (risk capital, operating capital and

risk management budget) is being distributed (allocated) between individual business units of the bank (branches, divisions, departments, divisions, individual workers, etc.).

It is advisable to monitor the holding of basic tolerance to currency risk, that define the boundaries of acceptable risk, using three-level limits at the same time limiting the magnitude of cumulative realized, unrealized and potential losses generated by individual currency positions or by a whole portfolio.

The amount of the cumulative realized losses could be limited by the use of stop-out limits. If the magnitude of losses reaches the limit which is set up for this type of currency position, the decision to ban the opening additional position of corresponding type (attraction/allocation of resources in foreign currency by means of certain financial instruments) is taken.

The amount of unrealized losses, that are caused by actual changes in exchange rates, could be limited by the use of the reaction stop-loss limits. In the case of achievement of a certain size of losses, the currency position is being automatically closed. That allows bank to avoid further losses in earnings and economic capital as the result of unfavorable trends in foreign exchange rates and the desire of dealers to win back in the future on favorable changes that may not occur.

The amount of the potential losses on currency positions due to expected changes in exchange rates with a certain level of probability could be restricted by using VaR, ETL, SRM and DRM-limits. In this case, the automatic closing of position occurs if the level of risk calculated by appropriate methods of stochastic analysis (calculation of value at risk (VaR),

expected tail losses (ETL), spectral (SRM) and deformation analysis (DRM)) reaches established limit.

Limits of the results (losses) of bank's currency risk must be revised dynamically for adequate adaptation to changes in external and internal environment factors. These limits can be integrated with each other using methods of non-revolving, simple or extended revolving limitation.

The size of non-revolving limits is reduced by the amount of cumulative losses and not renewed due to the accumulation of profits. Another option is to establish dynamic revolving limits, the amount of which decreases in the accumulation of losses and renewed by the accumulation of profits. In the case of simple revolving limits the renovation of their size due to profits occurs within their original sizes which were determined at the beginning of the year. On the other hand, the establishment of extended revolving limits provides an opportunity for increasing of their original sizes due to accumulated foreign exchange profits.

Using dynamic limits of bank's currency risk results necessitates the study of the mechanism of limits original size correction. A possible option is a synthesis of technologies of fixed and dynamic limitation. Thus, it is advisable to distribute the initial amount of the annual limit among fixed monthly (or quarterly) limits of the bank's currency risk proportionally or by taking into consideration the seasonal-

ity factor. The sizes of these limits could be reviewed only under conditions of significant changes in the bank's strategy, economic and political trends. Within fixed monthly (or quarterly) limits, daily limits are dynamic (non-revolving, simple or extended revolving) and are revised based on the chosen methods of correction.

Methods of VaR, ETL, SRM and DRM-analysis do not allow to take into account significant and catastrophic losses in bank's earnings and capital due to extreme events. Therefore, we propose to hold exceptional and critical levels of tolerance by establishing stress-limits.

Thus, on the basis of direct stress testing one can assess the potential results of simulated crisis scenarios realization, but through conducting reversing stress tests one can determine exceptional but plausible scenarios that can cause critical and catastrophic losses of bank's earnings and capital. Therefore, taking into account forecasted changes in exchange rates in the planning period, maximum sizes of foreign currency positions, which can lead to these losses, are calculated.

Thus, using the stress-limits, as is the case with basic limits, it is advisable to limit the absolute and relative sizes and periods of current and potential foreign currency positions, taking into account specific character currency risk factors on the medium and long time horizons.

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