

ANALYSIS OF FOREIGN EXCHANGE RISK ASSESSMENT WORK FOR CREDIT OF ALL CORPORATE ENTITIES

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ABSTRACT

Exchange rate risk occurs in all businesses that have a currency mismatch between assets and liabilities in terms of more or less floating exchange rate. Due to the nature of the work, the exchange rate risk is most pronounced in businesses that are engaged in foreign trade. Consequences of the operations of the borrower arising due to changes in exchange rates, are important because they may have a negative / positive effect on the creditworthiness of the business of the company, which can be expressed through the two most important aspects. First, the negative / positive impact on the income statement and earnings of companies (net result) through the realized and unrealized negative / positive foreign exchange losses and other negative / positive impact on cash flow businesses through increased / decrease the pressure to have to set aside larger / smaller amounts of money for regular servicing obligations. Sector Risk Management and also its credit analysis department for large, medium and small companies, due to the analysis of the financial statements in its comments that required specific comments relating to the exposure arising from FX risk.

Key words: foreign exchange risk, credit assessment, exchange rates

INTRODUCTION

An integral part of the credit risk, as the most significant risk in the banking business, is the currency risk. As its name implies, this is the risk associated with the currency in which the loan is granted or other placement. Currency risk is inherent in all those banking systems that are commonly referred to as dollarized or evroizovanim systems. Usually, these are systems in which the assets and liabilities of banks (and other financial institutions, and a substantial part of the real sector) mainly denominated in foreign currencies or assets and liabilities denominated in local currency but indexed to a rule, stable and convertible currency such as the dollar or the euro (hereinafter the currency or foreign currency clause).

The main reason is the almost universal acceptance indexed in most of the financial operations of the financial system, the desire to ensure the protection of creditors' claims if there is a sudden drop in the value of the local currency against the value of major currencies (mostly U.S. dollars or euros).

Currency clause has become standard in granting loans and other investments in those countries where the local currency is stable for many years. The reason for such behavior of banks can be found in the fact that the depositors and the bank in the recent past, however, suffered significant losses due to the appreciation of the domestic currency. The depositors, particularly depositors, because of the losses they have suffered are no longer willing to save in local currency, but almost absolutely favored savings and deposit in foreign currency or indexed, even under conditions when the local currency is already stable for many years. In these circumstances, banks have had to adapt to the market and begin to take deposits in foreign currency or indexed, and this is the structure of the sources of funds, along with other factors, contributed to the placement of the funds in foreign

currency or indexed to protect the bank from that part of the currency and credit risks, and also aligned its foreign exchange position.

If there was a significant decline in the value of the local currency, with loans in foreign currency or indexed contacted the currency risk because it would increase the bank's exposure to essentially increase righteousness of these placements denominated in local currency. Currency clause in this case does not provide perfect protection for the bank, but it all depends on what kind of currency structure of assets and liabilities and income and expenses are clients of the bank, pursuant to which it is exposed to credit risk. If customers do not have adequate assets or income in foreign currencies or their claims are also indexed or otherwise protected from the value of the local currency, the bank is to "increase" their claims are indexed consequence, further exposure to credit risk.

In order to avoid possible negative effects of any potential instability caused by the sudden change of the exchange rate of the local currency, it is reasonable that banks are adequately protected by the good credit analysis, but also to provide additional capital for unsecured claims.

CURRENCY RISK MANAGEMENT

Identifying, measuring, monitoring and controlling currency risks and reporting on it are subject to all balance sheet and off-balance sheet items exposed credit risk, which also are subject to weighting for the purpose of calculating capital adequacy. Performing such analysis is required by law. Since the currency risk associated with bank currency risk of their customers, banks should establish a process for assessing, matching client's foreign exchange position. This process should include all clients or groups of connected clients, according to which the banks have claims in foreign currency or foreign currency receivables or where they intend to approve loans and contingent liabilities in foreign currency or indexed.

Macroeconomic aspects of exchange rate changes, ie . reasons for the strong USD (appreciation):

- Insufficient USD liquidity and high short-term interest rates;
- New RSD debt instrument issued by the NBS / Treasury;
- Aggregate demand (slower lending, lower wage growth);
- Effects and falling prices of primary agricultural products, and
- Projected net inflow of foreign investment direktinh.

Macroeconomic aspects of exchange rate changes, ie. reasons for the weak USD (depreciation):

- A deep international financial crisis and political factors;
- The current account deficit;
- Continuously increasing balance of payments deficit;
- Realization of profit by non-residents;
- Ability to rating agencies topple Serbia's credit rating;
- Decrease in interest rates by the NBS;
- Medium-term financial risk (of the privatization, increasing foreign debt);
- Fiscal expansion and Growth regulated prices.

Banks need to continuously monitor all developments in the market and to measure the impact of possible changes in exchange rate return on loans and other investments, and in standard, and eventually changed business conditions (especially in terms of potential abrupt change of course).

Therefore should establish the credit analysis system for continuous monitoring of various loan portfolios exposed to currency risk, by which should define detailed procedures:

- Determine the degree of compliance of foreign exchange positions of the client;
- Measurements of the potential impact of sudden changes in the exchange rate on the likelihood of repayment of loans and other investments, as well as the potential loss would thus be incurred and

- Determining the value of the entire loan portfolio exposed to currency risk.

Currency risk management methodology should include detailed criteria and procedures for assessment of conformity foreign exchange position and client procedures to estimate their potential vulnerability to sudden changes in the exchange rate by all loans denominated in foreign currency. The established methodology should provide quality management of currency risk, taking into account the type of portfolio characteristics of individual client or group of connected clients, the importance of security instruments and their appropriateness to protect sales of foreign exchange as well as the currency in which the prominent placement.

Features based on which the bank evaluate the conformity of foreign exchange positions of the client, which should be installed in its methodology are:

- The report on foreign exchange position of the client in a given period;
- Establishing quality sheltered currency positions client collateral;
- Conformity Assessment currency positions based on client foreign exchange cash flows client and
- Other elements defined by the bank itself, provided that the client provides reliable protection against foreign exchange risk.

As for the clients who were found to have unmatched currency position, the bank can assess protection from indexed to the level of individual loans if the credit policies defined methodology for sheltered individual placements.

METHODOLOGY FOR MONITORING CREDIT RISKS ARISING FROM CHANGES IN EXCHANGE RATE (DEPRECIATION/APPRECIATION) AND EFFECTS ON CORPORATE PERFORMANCE

As part of standard processing and credit analysis of the borrower company, at the request of NBS is essential that when making funding decisions based on analysis of borrower financial ratios, banks include risk assessment and the risk of exchange rate fluctuation. Sector risk management due to the analysis of the financial statements In his comments to be sure that a specific comment refers to the exposure arising from FX risk.

Negative aspects of the business by the company that changes in exchange rates may cause in the long run are already involved in making projections, which are working on the basis of assumptions and information received from the client, and the conservative model that prepares the bank and in the preparation of the same (projected) are taken into account exchange rate fluctuations and possible negative / positive implications for the client's business, and therefore the decision on approval means acceptable level of risk that may results from changes in exchange rates.

Consequences that arise on the business of the borrower due to changes in exchange rates, are important because they may have a negative / positive effect on the creditworthiness of the business and the company, which can be expressed through the two most important aspects:

- Negative / positive impact on the income statement and earnings of companies (net result) the realized and unrealized negative / positive exchange rate differences and
- Negative / positive impact on cash flow businesses through increased / decrease the pressure to be allocate larger / smaller amounts of money for regular servicing obligations.

Given the above, the negative / positive aspects of the company's operations at that exchange rate movements may cause in the short term, should be viewed in the following way:

- Rate of finance charge to cover operating result;
- Denomiranog share of debt in foreign currency, together with debts containing Fx klazulu relative to total debt;

- Share purchases / expenses from abroad in total procurement / cost materials;
- Share of sales abroad in total sales;
- Consider whether the purchase contracts include an option for protection against risks that can arise if any increase in prices of inputs, with the possibility of correction invoice (sales) values output up as a cost due to the change of input-a and
- Whether the customer is able to adjusting the prices of their products and services in accordance with the exchange rate changes to address this type of risk.

Indicator rate coverage ratio of financial expenses is crucial in determining exposure to exchange rate risk of the Bank which indirectly arising from business clients with whom the Bank has a credit relationship, because the same can be calculated based on data from the annual financial statements of the company. All other information is qualified as a qualitative and serve only as an indication of the determination and the addition of FX risk, given that they come from management and there is no possibility to determine their validity, and therefore their relevance in establishing the FX risk is lower but not negligible.

The rate of coverage of financial expenses (EBIT / financial expenses) should indicate the capacity and ability of the company (the "cushion of safety") that in the short term can withstand sudden changes in the exchange rate, which can be negative or positive effect on corporate performance, and also on the creditworthiness of the borrower.

Given the regulatory and supervisory request to create two scenarios, which are based solely on the assumption of nominal depreciation of 10% and 15% annually, Fx risk gradation is shown as follows:

- There is no certainty regarding the protection of FX risk (interest rate coverage is $\leq 100\%$);
- A very low level of security in terms of protection against FX risk (interest rate to cover the $< 115\%$);
- Low level of security in terms of protection against FX risk (interest rate to cover the $< 125\%$);
- Average degree of safety for the protection of FX risk (interest rate to cover the $< 150\%$);
- An acceptable level of safety for the protection of FX risk (interest rate coverage is $\geq 150\%$) and
- Good coverage in terms of protection against FX risk (interest rate coverage is $\geq 200\%$).

Participation debts / obligations denominated in foreign currency, together with the obligations that contain Fx clause in total liabilities should be viewed from two perspectives:

- Dependence on external sources of financing, and that portion of obligations with respect to total liabilities is subject to change due to negative exchange rate changes and
- Share of purchases from abroad in total procurement.

For point under number one criteria for risk assessment are as follows:

- $<10\%$ (Very low participation - the negative effects caused by the borrower's business promonom course are minor);
- $<20\%$ (Low participation - the negative effects caused by the borrower's business promonom rate is meaningless);
- $<30\%$ (Acceptable part - the negative effects caused by the borrower's business promonom course are important but do not threaten liquidity);
- $<40\%$ (High participation - the negative effects caused by the borrower's business promonom course important with the ability to threaten liquidity) and
- $>40\%$ (Very high participation - the negative effects caused by the borrower's business promonom course are important and can lead to problems with liquidity and credit standing of the customer).

For point number 2 under the criteria for risk assessment are as follows:

- <5% (Very low risk);
- <10% (Low risk);
- <15% (Exchange rate risk is present but insignificant);
- <20% (Exchange rate risk is present in the boundaries of acceptability);
- <25% (Exchange rate risk is present and significant);
- >30% (Exchange rate risk is present and high) and
- >50% (Exchange rate risk is present and very high).

Table 1:FX Risk Analysis

	The date of the last annual report	Date of submission of loan application
FX Risk	<u>31.12.2012.</u>	dd-mm-yy
The total amount of debt denominated in foreign currencies at the last annual report and at the date of loan application (to take into account long-term loans, lease liabilities)	ask the client	ask the client
The total amount of debt denominated in foreign currencies at the last annual report and at the date of loan application (to take into account long-term payables from abroad)	ask the client	ask the client
The total amount of debt denominated in foreign currencies at the last annual report and at the date of loan application (to take into account short-term loans)	ask the client	ask the client
The total amount of debt denominated in foreign currencies at the last annual report and at the date of loan application (to take into account short-term loans)	ask the client	ask the client
The total amount of debt initially approved in dinars but contains a clause revaluation / adjustment in accordance with the change of the exchange rate at the date of the last annual report and at the date of loan application (to take into account long-term loans)	ask the client	ask the client
The total amount of debt initially approved in dinars but contains a clause revaluation / adjustment in accordance with the change of the exchange rate at the date of the last annual report and at the date of loan application (to take into account short-term loans)	ask the client	ask the client
Total		
Total / total debt (the sum of long-and short-term liabilities)	%	%
The total amount due on the date of the last annual report and at the date of loan application (long and short) to overseas customers	ask the client	ask the client
The total amount due on the date of the last annual report and at the date of loan application (long and short) to overseas customers / Total current assets	%	%
The total amount of purchases (cost of materials / cost of goods sold) from abroad for the reporting period	ask the client	ask the client
	%	%
The total amount of sales abroad	ask the client	ask the client
The share of sales abroad in total sales	%	%
Is there a possibility of upward adjustment policies contracted sales value of output as a result of changes in the cost of inputs	ask the client	ask the client
Whether the client is able to change the price in accordance with changes in exchange rate	ask the client	Ask the client

Source table: Razvojna banka Vojvodine, 2012.

CONCLUSION

As part of standard processing and credit analysis of the borrower company, at the request of NBS is essential that when making funding decisions based on analysis of borrower financial ratios, banks include risk assessment and the risk of exchange rate fluctuation. If there was a significant decline in the value of the local currency, with loans in foreign currency or indexed contacted the currency risk because it would increase the bank's exposure to essentially increase righteousness of these placements denominated in local currency. Currency clause in this case does not provide perfect protection for the bank, but it all depends on what kind of currency structure of assets and liabilities and income and expenses are clients of the bank, on the basis of which it is exposed to credit risk. If customers do not have adequate assets or income in foreign currencies or their claims are also indexed or otherwise protected from the value of the local currency, the bank is to "increase" their claims are indexed consequence, further exposure to credit risk.

In order to avoid possible negative effects of any potential instability caused by sudden changes in the exchange rate of the local currency, it is reasonable to adequate protection of banks and to provide additional capital for unsecured claims, as well as establish a constant monitoring system of currency risk and incorporate it into your credit policies and procedures, both at the level of individual clients, groups of connected clients and the level of the entire loan portfolio exposed to currency risk.

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