Currency Induced Credit Risk Management Guidelines

CROATIAN NATIONAL BANK

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Introduction

Currency induced credit risk also represents an integral part of credit risk, which is the most important risk in the banking operation. As its name says, it is a risk associated with a currency in which a loan or another placement is granted. Currency induced credit risk (hereinafter: CICR) is inherent in all the banking systems commonly considered dollarised or euroised systems. These are generally the systems where assets and liabilities of banks (as well as of other financial institutions and a significant portion of the real sector) are mostly denominated in foreign currencies, or where assets and liabilities are denominated in the domestic currency, but indexed to another, generally convertible, currency, such as the US dollar or euro (hereinafter: currency clause).

The main reason for an almost general acceptance of a currency clause in the largest portion of the financial operation of the financial systems which may be considered dollarised or euroised, was an intention to provide protection for creditors, in case of an unexpected fall in the value of domestic currency against the value of the convertible currency (mainly dollar or euro).

A currency clause has also become a standard in granting the loans and other placements in those countries where a domestic currency has been stable for several years. Such behaviour by banks may be accounted for by the fact that both bank depositors and banks themselves have, nevertheless, recently experienced significant losses, as a result of the domestic currency depreciation. More specifically, bank depositors, especially the savers, are no longer willing to save in the domestic currency, as a result of the losses they suffered, rather preferring, almost exclusively, saving and depositing in a foreign currency or with a currency clause, even though the domestic currency has been stable for several years. In such conditions, banks were required to adjust to the market and start to collect deposits in foreign currency or with a currency clause. Such a structure of sources of funds, along with other factors, contributed to the placement of funds in foreign currency or with a currency clause, in order for banks to hedge against this part of currency or credit risk, and to match their foreign currency position at the same time.

If a domestic currency depreciated significantly, currency induced credit risk would occur for loans granted in foreign currency or with a currency clause, as a result of the bank's increased exposure due to an increase in value of these placements expressed in domestic currency. A currency clause, in this case, does not provide a perfect hedge for a bank, but it rather depends on the currency structure of assets and liabilities, i.e. income and expenses, of the bank's customers, in relation to whom the bank is exposed to credit risk. If customers do not have adequate assets, i.e. income in foreign currency, or if their claims are not indexed to foreign currency, or in some other way hedged against the domestic currency depreciation, a bank is additionally exposed to credit risk on the basis of the "growth" in its claims, as a result of the currency clause.

In order to avoid possible negative effects of any potential instability caused by an unexpected change in domestic currency exchange rate, it is reasonable to require from banks to hedge themselves adequately, i.e. to provide additional capital for claims that are not hedged.

The Croatian banking system may be considered stable for several years now, and the macroeconomic environment in which it operates is characterised by a low inflation rate and a stable exchange rate. However, the Croatian banking system is, at the same time, euroised to a large extent: almost two thirds of all the deposits received and loans granted are in foreign currency or indexed to foreign currency (mainly euro). These factors may increase the banking system sensitivity to CICR. Furthermore, this shows that banks, regardless of the system stability, have to be aware of this risk. Accordingly, the guidelines for the successful CICR management are given below.

The primary objective of these guidelines is to stimulate banks to adopt their own policies and procedures which will regulate identifying, measuring, monitoring and controlling of the management of this portion of credit risk, and to enable regular reporting on the unhedged customers, as well as to provide additional capital for the placements to the unhedged customers.

Guidelines for the Implementation of Currency Induced Credit Risk

1 COMPREHENSIVE CURRENCY INDUCED CREDIT RISK MANAGEMENT	**Banks should establish and maintain a comprehensive system of an on-going identification, measuring, monitoring and controlling of CICR and reporting on it, within the framework of credit risk management as a whole**. Banks should adopt the strategy, policy and procedures for CICR management within the framework of the internal credit risk management and should improve them on an on-going basis. Banks should also establish the system of an independent on-going assessment process of the CICR management. All balance sheet and off-balance sheet items exposed to credit risk are subject to identification, measuring, monitoring and controlling of CICR and reporting on it. They are also subject to risk weighting requirement for the purpose of capital adequacy calculation. Since the banks' CICR is related to the currency risk of their customers, banks should establish a process of assessment whether the customer's foreign currency position is matched. This process should include all the customers, or groups of peer customers, on whom banks have claims in foreign currency or claims with a currency clause, i.e. to whom they intend to grant placements, as well as contingent liabilities in foreign currency or with a currency clause. In defining their business policy, target market and credit risk management as a whole, banks should take into account all the factors relating to CICR management. The bank's management board should therefore adopt and periodically review the CICR management strategy and policy, as an integral part of the credit risk management strategy. Senior management (which is directly accountable to the management board) should implement the CICR management strategy and policy, which were approved by the management board, and should develop the policy and procedures for identifying, measuring, monitoring and controlling of CICR and reporting on it. This includes establishment and maintenance of the appropriate functions and processes. Banks should introduce the system for an on-going management of its portfolio exposed to CICR and should ensure the appropriate internal control procedures over the functioning of that system. The assessment of functions related to CICR should be included in the

	annual internal audit plans.
2 **GRANTING OF PLACEMENTS**	**Banks should establish a reliable system of granting placements and should clearly define the criteria for granting the loans and other placements denominated in foreign currency and indexed to foreign currency.** Banks should grant loans and other placements denominated in foreign currency or indexed to foreign currency only after it has assessed the currency position of a customer and a degree of its potential exposure to the associated CICR. For this purpose, banks should collect sufficient information from the customers, in order to assess whether the foreign currency position is matched, as well as to assess a customer or a group of peer customers currency risk management. Relative to the type of customers and type of exposure, the following additional factors should be taken into account when granting loans and other placements denominated in foreign currency and with a currency clause: • customers' risk profile, especially their currency risk management, • purpose of a loan or other placement and foreign currency sources of repayment, • customers' sensitivity to a possible change in the economic and market operating conditions, especially from the aspect of possible exchange rate fluctuations, • adequate collateral requirements for loans and other placements to customers sensitive to possible exchange rate fluctuations. Banks should incorporate additional elements in the procedure of granting loans and other placements denominated in foreign currency or indexed to foreign currency for any target group of customers or products. Exceptionally, in granting loans and other placements the recovery of which is secured by a pledged foreign currency deposit denominated in the same currency, such loans, or other placements, may be considered as not being exposed to CICR, up to the amount of the pledged deposit. The above stated also holds true for a subsequent assessment of that loan or some other placement.
3 **PLACEMENT'S PRICE RELATIVE TO RISK**	**Banks should manage adequately the price of loans and other placements exposed to CICR relative to the associated risk.** It would be reasonable for banks to include the placements exposed to

	CICR, in an appropriate manner, in their policy of setting the prices of loans and other placements relative to the associated risk. Banks should therefore review the impact of risk arising from any granting of loans or other placements in foreign currency or indexed to foreign currency on the setting of prices of these loans or other placements.
4 ON-GOING MONITORING SYSTEM	**Banks should establish an on-going system of monitoring CICR and incorporate it into their credit policies and procedures, both at the level of an individual customer, a group of peer customers, and at the level of the overall credit portfolio exposed to CICR.** Banks should develop and incorporate into their existing credit policies and procedures, the elements of an on-going CICR assessment. In that regard, banks are recommended to establish a system of an on-going monitoring of the currency position of customers, or groups of peer customers, in order to identify in a timely manner the changes in a degree in which foreign currency position is matched. Banks are also recommended to measure the impact of a possible change in the exchange rate on the loan and other placements repayment, both in normal and in possibly altered business conditions (especially in the condition of a potential unexpected change in the exchange rate). Accordingly, banks should continuously monitor all the market developments, especially the exchange rate changes, and identify their effects on loans and other placements exposed to CICR. A credit analysis and a system for an on-going monitoring of different loan portfolios exposed to CICR should be established, by means of which detailed procedures should be defined: • identifying a degree in which the customer's foreign currency position is matched, • measuring a potential impact of an unexpected change in the exchange rate on the loan and another placement repayment probability, as well as on a potential loss that could be incurred, • identifying a value of the entire loan portfolio exposed to CICR. The objective of the CICR monitoring system, established in this manner, is an on-going identification whether a customer's foreign currency position is matched, i.e. classification of customers into the following categories:

	• customer with a matched foreign currency position, • customer with an unmatched foreign currency position, or classification of bank placements into the following categories: • placements hedged against CICR, • placements that are not hedged against CICR.
5 METHODOLOGY	**Banks should develop the appropriate methods of CICR management, and should incorporate these methods into their credit policies and procedures.** Banks should define in their credit policies and procedures the methodology on the basis of which they will determine the degree in which the foreign currency position of customers or group of peer customers is matched. The CICR management methodology should contain detailed criteria and procedures for assessing whether the customers' foreign currency position is matched, as well as the procedures for assessing their sensitivity to potential unexpected changes in the exchange rate with respect to all the placements denominated in foreign currency. The established methodology should ensure a high quality CICR management, taking into account the type of portfolio, characteristics of individual customers or groups of peer customers, characteristics of hedging instruments and their adequacy to hedge the placement against the CICR, as well as of the currency in which the placement is denominated. Elements on the basis of which a bank assesses whether the customers' foreign currency position is matched, and which should be incorporated in its methodology, are the following: • report on the customer's foreign currency position in a particular period (the content of the report is defined by the bank for that purpose), • determining the quality of hedge of the customer's foreign currency position by hedging instruments (IAS 39), • assessing whether the customer's foreign currency position is matched, on the basis of the customer's foreign currency cash flows, • other elements defined by the bank itself, provided that they provide customers with a reliable protection against the currency risk.

	As regards the clients for whom an unmatched foreign currency position has been established, a bank may assess the hedge against CICR at the level of individual placements, if it has defined by its credit policies the hedge assessment methodology for individual placements. Elements on the basis of which a bank may define a hedge against CICR of its individual placements must comply with the following conditions: • should be denominated in the same currency as the placement, • its value is equal to or exceeds the amount of placement, • its maturity is adjusted to the maturity of the placement. In that regard, the hedging instruments for individual placements against CICR may be the following: • pledged foreign currency deposit in the same currency in which a placement granted in foreign currency or with a currency clause is denominated, • hedging instrument which directs foreign currency inflow to the bank, in the same currency in which a placement is denominated, • other hedging instruments complying with the previously indicated conditions.
6 **CONDUCTING STRESS TESTING TO POSSIBLE UNEXPECTED EXCHANGE RATE CHANGES**	**Banks are encouraged to develop stress testing in order to assess the risks associated with the possible unexpected exchange rate changes for currencies in which loans and other placements are denominated.** The stress testing should take into account the relationship between the exchange rate movements and an increase in the burden of repayment, measured by a ratio of total payments (both principal and interest) and income. Furthermore, in developing the stress testing scenario, the probability of broader macroeconomic effects of the exchange rate change should be taken into account, including the weakening of the economic activity, increased unemployment and a reduced value of assets pledged as collateral (such as real estate prices and market value of movables). Stress testing should always be forward-looking. It is the way for a bank to prepare for possible unexpected exchange rate changes. Although it is useful to take into account the largest exchange rate fluctuations observed in the resent Croatian past, the scenarios should not be restricted only to the Croatia's past experience. When carrying out the testing, banks should take into account a possibility that

	unexpected exchange rate rises, which occurred in other countries, could happen in Croatia as well. Banks should, therefore, conduct testing involving even larger exchange rate fluctuations than those experienced by Croatia, in the period when the current domestic currency has been in use.