

## **CURRENCY RISK IN THE ROMANIAN BANKING SYSTEM**

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### **Abstract**

*Banking activity is permanently subject to risks and the management of each of them is one of the main concerns of the banking management, alongside the concern to maintain a satisfactory profitability. One of the risks that affect the banking activity is the currency risk, which is especially present in the developing economies, as is the Romanian economy. We are currently witnessing significant fluctuations in the exchange rate that affect the economy as a whole and the banking system in particular. In this article I intended to analyze the currency risk at the level of the Romanian banking system as a whole, but also at the level of the first three banks in the system. The purpose of the analysis is to reflect the level of exposure to currency risk in Romanian banks, both individually and comparatively.*

**Keywords:** currency risk, exchange rate, fluctuations, foreign currency position

**JEL classification:** E59, G21, G29

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### **1. Introduction**

Developing economies are frequently subject to fluctuations in the exchange rate, which, depending on the meaning, the entity's amplitude and position in relation to the foreign exchange transaction, can generate both gains and losses. In such an economy, as in Romania, all entities are subject to currency risk, from individuals, companies, banks and other financial institutions to the state. Banks, due to their role as intermediaries between currency holders and those in need of foreign currency, position themselves as the main players on the foreign exchange market, but also as the main entities that can record losses due to exchange rate fluctuations. Therefore, measurement, management and coverage against foreign exchange risk are of particular importance to Romanian banks. The analysis I made in this article starts from the concept of foreign exchange risk and the indicators of

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measuring the foreign exchange risk, then the placement of banking activity in the current context of exchange rate fluctuations, so that in the last part I analysed the level of risk exposure currency of 3 banks in the system to highlight the level of risk at the individual but also compared to the main competitors. The choice of the first 3 banks in the system is based mainly on the fact that they (BCR, Transilvania Bank, BRD) hold together 42.3% of Romanian banking assets (Ziarul Financiar, July 4, 2017), which means that it manages almost half of its foreign currency assets; thus producing the currency risk at the level of the first three banks can certainly destabilize the whole Romanian banking system.

## **2. Literature review**

The currency risk that is part of the category of financial risks, namely of the market risk category, although very important in view of the impact that its manifestation may have on the banking activity, is not very often debated in specialized literature. Thus, the currency risk can be defined as the probability of recording losses caused by the unfavorable evolution of the bank's reference currency exchange rate affecting the bank's assets in foreign currency and, of course, the profitability of the bank (Badea, L., Socol, A., 2010). Exchange rate fluctuations may adversely affect the banking patrimony, but may also generate speculative gains when exchange rate fluctuations are favorable. In view of this aspect, the management of currency risk and its adequate coverage, using term contracts with derivatives, is essential to maintaining banking profitability.

The importance of currency risk is also confirmed by the fact that in 1996 this risk, as a component of market risk, was taken into account by an amendment to the Basel I Agreement, and then taken over by subsequent agreements, Basel II and Basel III (Stancu I., Bălu, F., 2006).

Vasile Dedu considers that the manifestation of foreign exchange risk is based on a multitude of factors, from factors related to the patrimonial management of elements in the foreign currency balance sheet, to complex factors, such as: domestic and international situation of that country, economic cycles and country preference for pro-cyclical or anti-cyclical measures. (Dedu, V, 2008). In this paper, the author considers that currency risk should be interpreted from different perspectives, namely: **the transaction risk**, determined by the impact of the changes in the exchange rate on the bank's foreign exchange operations, which can generate both gains and losses; **the**

**translation risk** determined by the positive or negative differences that may occur when the bank's balance sheet items are converted from the currency in which they are formed in the national currency of that bank; **the economic risk** that shows the long-term impact of the exchange rate on the bank's profitability. Considering the diversity of the asset and the liability in terms of the currency in which it is denominated, the currency risk management must be carried out on each currency, i.e. it must aim at establishing the currency position on each currency, in compliance with the provisions of Regulation no. 4 of April, 1<sup>st</sup> 2005, entered into force on September, 6<sup>th</sup> 2007, with subsequent changes to the currency regime. Thus, according to the regulations, the adjusted currency position is the individualized position corrected with the equivalent in lei of the capital, subscribed and paid in foreign currency, and the issue premiums paid in foreign currency, calculated according to the respective exchange rate difference, and the total of the individual foreign exchange positions adjusted must not exceed 10% of own funds, and the total foreign currency position may not exceed 20% of the bank's own funds at the end of the day.

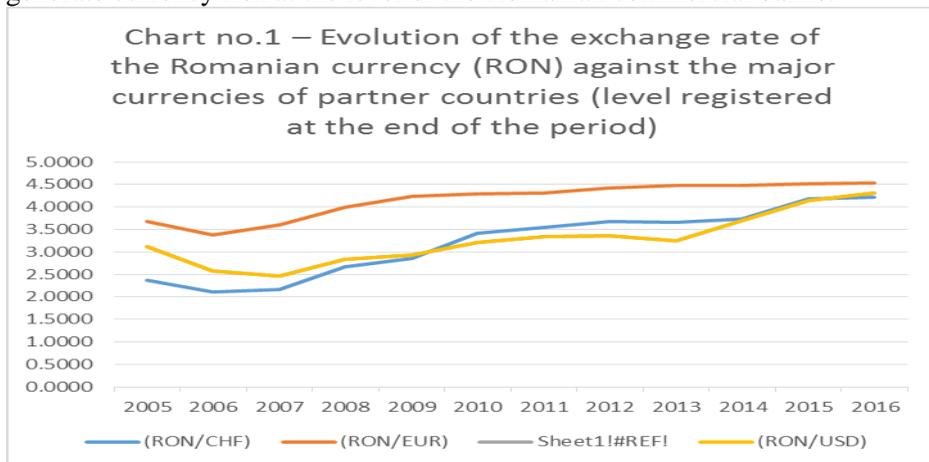
In this context, the foreign currency exposure is measured by the following indicators:

- The individual currency position, calculated as the difference between total assets and total liabilities denominated in a given currency, and is calculated for each currency. Depending on the relationship between assets and liabilities denominated in foreign currency, the bank may have at the end of a period a short foreign currency position (when the total assets are less than the total foreign currency liabilities; this position is disadvantaged by the depreciation of the domestic currency and advantageous appreciation of the national currency) or a long-term foreign currency position (when the total assets are greater than the total liabilities in that currency, this position is favored by the depreciation of the national currency and disadvantaged by the appreciation of the national currency);
- The global currency position that collects all individual foreign exchange positions and translates them into national currency. Although this indicator provides a synthetic picture of the bank's exposure to currency risk, it is not considered to be relevant, as currency risk management has to highlight the situation on each currency. (Badea, Socol, 2010).

In view of this, I will highlight the individual currency positions for each currency at the level of the first 3 banks in the system, to reflect the degree of exposure to foreign exchange risk.

### 3. Placing the subject of research in the current context

The context in which the economy of Romania has been over the last 10 years has been marked by many events, from those that have generated opportunities for the economy, such as the liberalization of the capital account in 2006 and the accession to the European Union in 2007, to those that have represented threats to the economy, such as the 2008 international financial crisis and multiple political and fiscal changes. These aspects have put Romania's economy on an upward trend until 2008, or on a downward trend since 2009 and have had repercussions on the national currency against the main international currencies. The fluctuations of the exchange rate of our local currency against the major currencies, highlighted in Chart no. 1, generate currency risk at the level of the Romanian commercial banks.



Source: processing according to the data from the interactive database of the National Bank of Romania, <http://www.bnr.ro/Baza-de-date-interactiva-604.aspx>

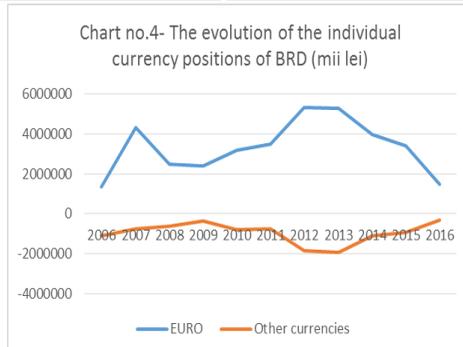
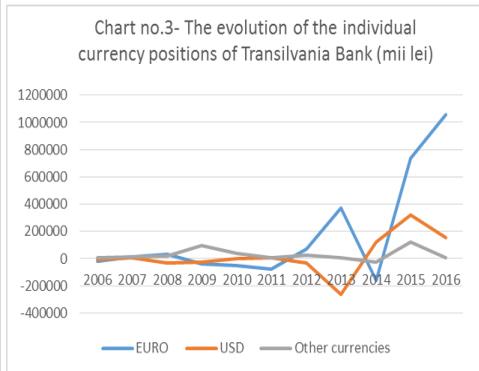
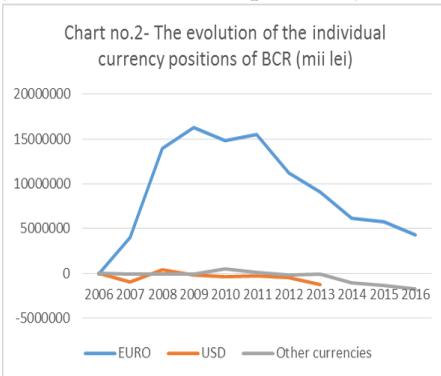
The choice of these three currencies to reflect the banking sector's market context over the past 10 years is based on the following: evolution of

the Romanian currency against the US dollar is relevant as it is the leading currency in international currency transactions (Triennial Central Bank Survey Foreign exchange turnover in April 2016) and the second as a weight in the commercial banks' balances after the euro, and the evolution of the Swiss franc is relevant as it is the main currency in which the Romanian commercial banks have exposures, after the euro and the dollar. If we analyze the exchange rate of the Romanian currency, we notice that it behaves like any exchange rate of a currency in a developing economy, which is generally attractive for investments during the growth period, investments that have a certain speculative character, which is why it repatriates rapidly in the context of the crisis, affecting the stability of the exchange rate. Thus, we note that with the start of preparations for EU membership and capital account liberalization, the Romanian currency is on the rise as a result of general economic growth and an increase in the supply of the euro, but, from 2008 onwards, the Romanian currency began to depreciate, giving a frequent response of a weak currency in the context of crisis or post crisis. The reasons for the depreciation are numerous, so that in the last years, the depreciation occurred on the background of economic growth, generally based on wage increases and consumption, which led to an increase in the demand for goods and services, which, being mainly imported, of currency. Tax changes, uncertain political climate, the emergence of street movements are other causes that have also contributed to the depreciation of the Romanian currency. We thus notice significant depreciation of the Romanian currency, the exchange rate doubled against CHF in 2016 as compared to 2007, and compared to the other two currencies, the increase in the exchange rate does not have such large amplitude but is continuous and affects the banking activity. Such a context is a foreign exchange risk generator, and banks have to find the best ways to hedge against this risk. If we take the situation of a 300 euro loan, this meant for a Romanian resident at the end of 2007, 1083 lei, and at the end of 2016 1362 lei, about 26% more. The situation of the loans in Swiss francs became even more pressing for the Romanian borrowers who contracted such loans, so an average rate of 300 francs at the end of 2007 meant 652 lei and by the end of 2016, 1267 lei which reflected almost a doubling of the amount paid in national currency. This was reflected in the significant increase in non-performing loans, from 2% of total loans in 2004 to 19.8% by the end of 2016 (NBR - Financial Stability Report, 2016). The non-performing loans situation after the granting currency also reflects a worrying

situation regarding the depreciation of the Romanian currency against the Swiss franc, as the share of non-performing loans in francs (19% in 2014) is clearly higher than the share of non-performing loans in euro (10.5% in 2014), given that for both currencies the rate of non-performing loans was around 6% in 2010 (NBR - Analysis of loans granted in Swiss francs, 2015).

#### 4. The individual currency position at the level of the first 3 Romanian banks

As we have seen before, the Romanian banks have been subject to currency risk in the last 10 years, which has mainly affected their profitability, both in the direction of growth and in the sense of decreasing, depending on the direction of exchange rate fluctuations. Next, I will analyze the exposure of the first 3 banks in the system to the currency risk, using as an indicator of analysis the individual currency position, which I will present both evolutionally, in order to observe the situation of the banks in the last 10 years, as well as comparatively for the three banks (Charts no 2, 3, 4).



Source: processing after the consolidated financial statements from 2006-2016 of BCR, Transilvania Bank, BRD available on the websites: [www.bcr.ro](http://www.bcr.ro), [www.bancatransilvania.ro](http://www.bancatransilvania.ro), [www.brd.ro](http://www.brd.ro)

Note: For BCR, the reporting of currency risk was made in the period 2006-2013 for the euro, dollars and other currencies, after which the reporting was made only for the euro and other currencies.

Following the analysis of both individual foreign currency positions and comparatively between the three banks, we can see both similarities between BCR and BRD and differences between these two banks, which for almost 15 years were the first two positions in the banking hierarchy, and Transilvania Bank, which only in 2011 entered the top 3, and from 2015 it became the second bank in the system by value of the assets. As regards the exposure to currency risk, we can see the caution in managing foreign currency claims and liabilities in the case of Transilvania Bank until 2013, when foreign exchange positions were very low, after which we see a record of a long foreign exchange position on the euro and its significant increase between 2014 and 2016. This position is favorable to the bank from its own perspective as it implies a higher level of receivables in euro, and may remain positive as long as customers can pay rates and interest rates which, converted into national currency, are higher than when the loan was contracted because the Romanian currency depreciated. Another aspect to note for Transilvania Bank is the recording of long foreign exchange positions on currencies other than the euro and the dollar, which reflects an opening of the bank towards lending in other currencies, although, as previously presented, the default rate was much higher for Swiss franc loans.

The situation of foreign currency positions at BCR and BRD is more similar and reflects similar approaches from the perspective of foreign exchange risk management. We note that both banks faced the long-term foreign exchange positions on the euro, advantageous as we know of the depreciation of the Romanian currency and generally negative foreign currency positions, and much smaller in absolute value for other currencies compared to those in euro. What is also noteworthy is the trend of decreasing the value of foreign currency positions on the euro, which seems somewhat paradoxical given that the Romanian currency is in a continuous depreciation and the bank could have collected more if it converted the receivables from foreign currency into national currency. The explanation for this is related to

the negative effect of the depreciation on borrowers who have difficulties in keeping up with the increasing amounts they have to pay in lei for interest rates and rates expressed in euro, for financing in the national currency. The situation can also be explained by the repeated warnings by the NBR regarding the risk of foreign currency lending, which led to the decrease of the balances of loans granted before the crisis and the granting of new ones in much smaller proportions. (NBR - Analysis of loans granted in Swiss francs, 2015). In the case of BCR and BRD, the significant decrease in foreign currency positions may also be the result of the sale of credit portfolios of banks experiencing repayment problems, and loans granted in foreign currency.

## **5. Conclusions**

This article addresses the issue of foreign exchange risk from the perspective of indicators that reflect the level of exposure to this risk, both theoretically and in an applicative way at the level of the first three banks in the Romanian banking system. The research is part of one of my broader concerns for banks' exposure to all financial risks, and will be continued in terms of ways to hedge against currency risk.

The analysis carried out started from the emphasis on the significance of the currency risk and the placement of the research subject in the current context of the ongoing depreciation of the main currencies. This fluctuation can be seen as a positive aspect for banks registering foreign currency claims higher than foreign currency and long-term foreign currency positions. But the advantage or disadvantage that the sign of a foreign currency position generates in a situation of monetary appreciation or depreciation is thought only from the bank's perspective, for example: a long foreign currency position, i.e. assets larger than foreign currency liabilities are favorable from the perspective of the bank in the situation in which the Romanian currency depreciates because the amounts collected in foreign currency will mean more to the bank at the time of their conversion; but this is considered to be a limiting one, as the impact that the depreciation has on the debtor must be studied, as well as the increase in the interest rate expressed in national currency due to the depreciation of the Romanian currency, which can become so burdensome that to turn a good payer into a bad credit payer. In the analysis, I highlighted the significant impact that the depreciation has on foreign currency loan holders, which we correlated with the significant

increase in non-performing loans, especially in terms of those expressed in Swiss francs.

The collection, processing and highlighting of the foreign exchange positions for the first 3 banks in the Romanian banking system allowed me to conclude both on the individual situation of each bank in the choice of different strategies, namely BCR and BRD point to a decrease in net foreign currency positions in euro, while Transilvania Bank, with Volksbank taking over, reports rising foreign currency positions. This can also be explained by the extent to which the three banks have been affected by the crisis. Thus, as we have seen in other articles that are being published, BCR and BRD have recorded significant increases in non-performing loans, which they had to sell because they could not recover them. Transilvania Bank, a prudent bank before the crisis, had asset portfolios that did not have such a high risk of default, which is why we notice a lower credit appetite for BCR and BRD and a rising appetite for increased exposure, including those in foreign currency in the case of Transilvania Bank. Thus, the registration of long foreign exchange positions on the euro places the first 3 banks in a favorable context due to the depreciation of the Romanian currency, which, however, may turn into an unfavorable one if some of the borrowers will not be able to repay their foreign currency loans, which might affect the profitability of banks.

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