## FOREIGN EXCHANGE RISK MANAGEMENT IN THE REPUBLIC OF MOLDOVA IN CONDITIONS OF CURRENCY CRISIS

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At the end of 2014 and beginning of 2015, the banking sector from Moldova faced a tough crisis. It was generated by a series of frauds which led to three banks in process of liquidation, three other banks under NBM's supervision and a huge gap in the broad money in the economy. These events severely affected the banking sector from the Republic of Moldova. Thus, the novelty of this paper is to highlight the difficulties which the banks from the Republic of Moldova have faced at managing their FX operations during that period. Also, considering the conditions of the downturn of the financial situation in the national banking sector and in the national economy in general, which followed as consequences of the crisis, this paper has the purpose to explain from theoretical point of view the basic concepts of correct banks' FX operations management. For this, the author applied analytical, logical, bibliographical and synthesis research techniques. The results of the research are identification of the causes of currency crises, presentation of the basic measures taken by the National Bank of Moldova for mitigating the effects of the crisis, as well as exhibition of author's recommendations regarding the main directions which have to be considered by banks in their foreign currency operations management.

Key words: Foreign exchange risk, currency crisis, Central Bank, regulation, bank, management.

La sfârșitul anului 2014 – începutul 2015, sectorul bancar din Republica Moldova s-a confruntat cu o criză dificilă. Aceasta a fost generată de o serie de infracțiuni, care au condus la trei bănci în proces de lichidare, alte trei bănci sub supravegherea BNM și un gol semnificativ în masa monetară din economie. Aceste evenimente au afectat puternic sistemul bancar din Republica Moldova, prin urmare actualitatea acestei lucrări este de a evidenția dificultățile cu care s-au ciocnit băncile din Republica Moldova la gestionarea operațiunilor valutare în acea perioadă. De asemenea, având în vedere condițiile de declin al situației financiare în sectorul bancar și în economia națională în general, care au urmat drept consecință a crizei, această lucrare are scopul de a explica, din punct de vedere teoretic, aspectele de bază ale gestiunii corecte a operațiunilor valutare efectuate de către bănci. Pentru aceasta, autorul a utilizat metodele de cercetare analitică, logică bibliografică și de sinteză. Rezultatele cercetării rezidă în identificarea cauzelor crizei valutare, prezentarea măsurilor întreprinse de Banca Națională a Moldovei pentru ameliorarea efectelor crizei, precum și denotarea recomandărilor autorului cu privire la direcțiile principale, care ar trebui luate în considerație de către bănci la gestionarea operațiunilor lor valutare.

Cuvinte-cheie: risc valutar, criză valutară, Bancă Centrală, reglementare, bancă licențiată, management.

В конце 2014 и в начале 2015-го года, банковский сектор Молдовы столкнулся с жестким кризисом. Он был вызван серией мошенничеств, которые привели к процессу ликвидации трех банков, трем других банков под наблюдением НБМ и к огромной лакуне в денежной массе в экономике. Эти события очень негативно повлияли на банковскую систему в целом, таким образом новизна данной статьи состоит в подчеркивании трудностей, с которыми столкнулись молдавские банки в управлении валютных операций в тот период. Также, имея в виду условия финансового спада банковского сектора и национальной экономики в целом, которые появились в следствии кризиса, данная работа имеет цель объяснить с теоретической точки зрения базовые аспекты правильного управления банковских валютных операций. Для этого, автор использовал аналитический, логический, библиографический и синтеза методы исследования. Результаты

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исследования составляют: идентификация источника валютного кризиса, представление принятых Национальным Банком Молдовы мер для смягчения эффектов кризиса, а также обозначение рекомендаций автора на счет основных направлений, которые банки должны принять во внимание в управлении операций с иностранной валютой.

**Ключевые слова:** Валютный риск, валютный кризис, Центральный Банк, регулирование, лицензированный банк, управление.

JEL Cladsification: E52, E58, E62, F31, J32.

**Introduction.** In banks' activity at international level, the currency type of risk emerged relatively recent. It occurred as a result of the breakdown of the Bretton Woods monetary system and the subsequent exchange rates system evolution from fixed rates to floating ones. Due to banks' holdings and large number of operations in foreign currencies, performed by banks every day, they are constantly exposed to the currency risk, so its management is vital for accomplishing banks objectives, ideally avoiding losses or at least keeping them at minimum levels [1]. In this way, the currency (or Foreign Exchange – FX) risk can be defined as the potentially negative result of the banks foreign currency operations and occurs as a consequence of currency rates fluctuations.

Generally speaking, banks are exposed to the foreign exchange risks both directly and indirectly. The direct effect results from banks' assets (or liabilities) with net payment streams denominated in a foreign currency. Foreign exchange rate fluctuations alter the domestic currency values of such assets. This explicit source of foreign exchange risk is the easiest to identify, and it is the most easily hedged. The indirect sources of risk are subtler but just as important. A bank without foreign assets or liabilities can be exposed to currency risk because the exchange rate can affect the profitability of its domestic banking operations [5].

FX operations management, key approaches. The main function of the foreign exchange risk management is monitoring the levels of the risks the bank is exposed to and taking proper position through setting limits for each hedging instrument and benchmarking for monitoring the hedging performance [2]. In the currency risk management, banks basically use strategies built on similar principles and procedures. Thus, an initial step taken by the bank is determination of the type of risk and measurement of the associate risk exposure. This step consists from gathering information of the operation that has to be done, such as the type of operation, its duration, volume, currencies involved in the operation, rates volatility, etc. [3]. Then, based on the information, it develops the risk management strategy on the operational level, including the execution process of currency hedging, the hedging instruments to be used, and the monitoring procedures of currency hedges. The third step is execution of exchange rate hedging. This means forecasting exchange rates, hedging approach mechanisms, determining the costs of currency hedging, and the establishment of benchmarks for measuring the performance of currency hedging. After all the measures have been taken, the treasury department or the chief dealer controls the evolution of the level of the exchange rate risk and ensures fast and timely reaction in unforeseen situations [2]. However, foreign exchange risk is not regulated at the banks level only. Central Banks elaborate their own sets of regulations in order to reduce currency risks and maintain control over them at national level, for example, in the legal framework related to banking activity in the Republic of Moldova, the risks associated with currency operations of the banks, are regulated by the Regulation on banks open foreign exchange position, approved by the DCA of the no. 126 of November 28, 1997. These regulations set the ratio limits for open foreign exchange positions, the rules for calculating and managing open currency positions, as well as the procedure of reporting FX positions, in this way Central Banks regulate banks foreign exchange activity to such an extent so they would not generate a shortage of currencies through opening large positions with a high degree of risk, thus potentially generating a currency (Foreign Exchange) crisis.

Currency crisis. Evolution of the currency crisis in the Republic of Moldova. A crisis is any event that is, or is expected to lead to, an unstable and dangerous situation affecting an individual, group, community, or whole society [9]. Therefore, we can define the currency crisis as the evolution in time of the foreign exchange value of a currency that either results in a sharp depreciation or forces the authorities to defend the currency by selling foreign exchange reserves or raising domestic interest rates. A currency crisis is considered as a nominal depreciation of the national currency of at least 30 percent that is also at least a 10 percent increase in the rate of depreciation compared to the year before [7]. In a fragile banking sector, a currency crisis can occur if speculators assume that regulatory organs would prefer to cease

exchange rates stability in order to avoid bankruptcies and further strains on the banking sector rather than endure the costs of defending the domestic currency. A possible reverse chain of causality, from currency crises to the onset of banking crises, is also well recognized. If banks hold significant holdings of unhedged foreign liabilities, a currency crisis shock can adversely alter the banking sector directly by causing a deterioration of bank balance sheets as currency depreciation raises the domestic currency burden of these liabilities [8]. In any of this cases, the effects of the currency crises on economies are imposing affecting the economy in several potential ways. While, a depreciation of the national currency that may enlarge the tradable goods sector and spur growth by correcting an overvalued currency or by making the exchange rate more competitive, it may also be conflicting by increasing the reimbursement costs of external debts expressed in foreign currencies, particularly in dollars.

The depreciation of the Republic of Moldova national currency started in the late 2014. It was an outcome of a series of frauds covered by high corruption at top governmental levels, which were executed on behalf of a group of three banks from Moldova, namely CB "Unibank" JSC, CB "Banca Sociala" JSC and BC "Banca de Economii" JSC. The situation developed as follows: in the beginning there was issued a large amount of doubtful credits to suspicious companies. These companies embezzled the received capital, transferring it on bank accounts out of the country, in this way creating a shortage of foreign currency in circulation, which according to the law of supply generated a spontaneous increase in the value of the good, i.e. of the foreign currencies, while due to underperforming credit portfolios, these banks have lost their liquidity and the National Bank of Moldova, based on the Moldovan Parliament's decision, was forced to classify their activity as violation of the legislation on banking activity, and decided on their forced liquidation.

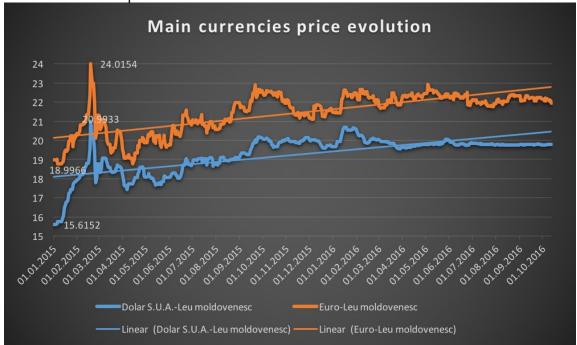


Chart 1. The evolution of the USDMDL and EURMDL in the period of 2015-2016 Source: Authors' representation based on the data of the National Bank of Moldova [4].

In the graph shown above, we can follow a rapid increase in price of the reference currencies (EUR and USD) related to the national currency MDL in an extremely short period of time. In the beginning of January 2015, the MDL was rated at 15,6152 per 1USD and 18,7699 per 1EUR, as, already on 18<sup>th</sup> of February, 1USD was appreciated at 20,9933 and 1EUR at 24,0154. This means a depreciation of the national currency in relation to the USD by 34,19% and by 27,94% compared to the EURO. Then, The National Bank of Moldova reacted with a large sale of foreign currency reserves in order to artificially maintain the currency rate, which followed by a rapid drop in price to a value of 17,7729 for 1USD and 20,121 for 1EUR by 25.02.2015 due to the surplus of foreign currency entered in the country and was demanded to be exchanged, this time creating a shortage of national currency in the exchange offices.

Generally speaking, in attempts of stabilizing the national currency, the National Bank of Moldova applied a series of basic measures which included sales in large amounts of foreign currency reserves, and calling international credits for covering the gap generated by the fraud. These measures were efficient for a short term, helping to steady the steep fluctuations of the national currency, which obviously was again followed by an inevitable subsequent depreciation on the background of the reference currencies. In time, the environment grew highly unstable, due to high currency rates volatility and periodic fluctuations, subsequently exposing banks to a high degree of currency risk. These events had very tough consequences for all the levels of the economy, leading to a chain of events like problems with portfolios of deposits and credits in foreign currency of the banks due to clients' inability to pay the rates, an almost 3 times inflation increase from 4.6% at the beginning of the year to 13.6% by the end of the year and a base interest rate increase from 8.5% to 19.5% in the same period [4].

Reactions to the currency crisis in the Republic of Moldova. Having given this conditions, the crisis had to be dealt with at each level using specific methods and tactics. At the banks' level, the internal policies regarding foreign exchange operations were updated and adjusted to the conditions on the market, whereas at the upper level, the NMB decided to fight the situation through regulatory policies. In this way, on June 10, 2016 the Law no.94 of May 13, 2016 for amending and supplementing the Law on foreign exchange regulation no.62-XVI of March 21, 2008 was published in the Official Monitor of the Republic of Moldova no.157-162.

The main purpose of the modifications and completions to the Law on foreign exchange regulation is to improve the regulatory background regarding the foreign exchange activities, considering the commitments of the Republic of Moldova assumed together with the Moldova-EU Association Agreement. These amendments also improve functionality of the national currency market as they follow the developments of the international financial, monetary and foreign exchange markets, as well as the upgrades which came as consequences of the global financial crisis.

These supplements of the law are intended to gradual elimination of administrative implications towards residents carrying out foreign exchange operations; improvement of the operations efficiency on the domestic foreign exchange market; stimulating the competition between the participants of the market; strengthening the protection of consumer rights in respect of clients of foreign entities; improving the procedures related to licensing, functioning and control over the activity of foreign exchange entities; upgrading the regulations on the non-bank foreign exchange operations payment services providers, with regards to banks intermediary role in most of these operations.

The most considerable supplements to the Law on foreign exchange regulation relate to:

- 1. Liberalization of some foreign exchange operations, which were subject to the NBM authorization (operations with foreign financial instruments carried out by licensed banks and entities whose activity is regulated and supervised by the National Commission for Financial Markets; granting of financial loans to non-residents by the licensed banks; import into / export from the Republic of Moldova by non-resident banks of cash in foreign currency; import into / export from the Republic of Moldova by resident banks and non-resident banks of cash in national currency in the amount not exceeding MDL 100 000; a series of capital foreign exchange operations of residents in the amount up to EUR 10 000);
- 2. application of the notification regime at the NBM on external loans/credits received by residents within operations related to direct investments, as well as exemption from the notification regime of loans / credits and guarantees received by residents from non-residents, the amount of which does not exceed EUR 50 000;
- 3. extending on non-bank payment service providers of the provisions regarding the rights and obligations of licensed banks related to foreign exchange operations;
- 4. reducing the use of cash within the foreign exchange operations (e.g., the right of resident legal entities to receive from non-resident individuals cash in foreign currency as loans/credits was excluded, and for some cases the amount of an operation related to receipt by resident legal entities from non-residents of cash in foreign currency was limited up to EUR 5 000):
- 5. stipulation of the right (not an obligation) of the NBM to apply a new safeguard measure in the event of a systemic financial crisis, namely the possibility to prohibit or limit cash and non-cash withdrawals in foreign currency from the accounts in foreign currency opened with resident payment services providers, allowing only withdrawals of national currency. If in case of systemic financial crisis, depending on a specific situation, such a safeguard measure will be considered strictly necessary, it will be applied by the NBM in consultation with the Government (with immediate information of the Parliament)

and only during a limited period of time (up to 6 months). Such mechanism would allow state authorities to act urgently in order to avoid worsening the systemic financial crisis situation [10].

There is also a substantial part of the amendments is aiming to amend the conditions for licensing and functioning of foreign exchange entities. The most important amendments relate to:

- 1. cancellation of the obligation of the licensed banks to provide at the beginning and during the working day the amount of MDL 100 000 for each foreign exchange bureau;
- 2. cancellation of the requirement for foreign exchange offices to ensure at the beginning and during the working day the minimum amount at the equivalent of MDL 400 000 for performing the operations with individuals. However, the requirement for foreign exchange offices to hold circulating cash assets (consisting of pecuniary contributions to equity capital) in the amount of MDL 500 000, including for each branch, has been maintained:
- 3. setting the unlimited term of validity for the license of foreign exchange office and that of hotel holding foreign exchange bureau (hotel), while increasing the license fee for the foreign exchange office up to MDL 12 000 and MDL 6 000 for the hotel;
- 4. allowing to perform foreign exchange operations in cash with individuals through automated foreign exchange devices;
- 5. establishing the right of foreign exchange entities to change the currency exchange rates during the working day (in accordance with elaborated internal procedures), along with the NBM right to establish the frequency of change in currency exchange rates during working day, as well as specifying the obligations of foreign exchange entities to establish bid and ask rates of US dollar, Euro, Pound sterling, Romanian leu and the Ukrainian hryvnia with two decimal places, and the Russian ruble three decimal places;
- 6. establishing the right of the foreign exchange entity's client to request revocation of the operation performed through the operational window within 30 minutes after its completion.

The law also amended certain provisions on foreign exchange control over the activity of foreign exchange entities and the application of sanctions to them. These amendments are intended to contribute to improving the sanctions regime applicable to foreign exchange offices and hotels, as well as to increase the level of responsibility of administrators and shareholders/associates of the foreign exchange offices for compliance with licensing and functioning conditions [10].

The implementation of the changes and amendments for NBM has specific benefits on the banking sector, namely:

- establishing the legal framework in line with the commitments in the context of the Association Agreement with the European Union
- offering the possibility of obtaining statistical information on private external debt of the country and forecasting private external debt servicing payments of the country, and to draw the balance of payments of Moldova;
- offering more effective sanctions to be applied to breaches of the law by exchange offices and hotels
  - promoting cashless payments in currency operations.
  - For consumers:
- Strengthening consumer rights protection because the customer of an exchange office will be entitled to request the revocation of foreign exchange transaction under certain conditions;
- increasing the level of competition in the market of foreign exchange operations in cash with individuals due to exchange offices' right to change working hours during the exchange rates applied.

However, their implementation has some negative impacts, such as:

- 1. The need of adjustment exchange offices' activity in the context of changing exchange rate throughout the day.
- 2. Providing by resident legal entities to notification of the NBM loans/credits received from non-residents in transactions related to direct investments.

**Summing up.** Theoretical aspects described above emphasize the importance of academic approach to the practical problems faced at foreign currency operations management of the commercial banks. Also, these aspects are directly linked with the causes and effects of the currency crisis which arose in Moldova at the end of 2014 and beginning of 2015, that is why it is acutely necessary to be analyzed.

The conditions of high degree of instability of the basic economic indicators, which further contributed to amplified foreign currency rates and volatility raised concerns about associated risks and

their effects on the safety and soundness of banks and overall financial stability. These conditions were stimulated by poor national regulation of the banking sector. However, even though the consequences of the currency crisis from 2014-2015 are still being felt through risen economic indicators indexes (inflation level, basic interest rate and foreign currency exchange rates, etc.), we consider that it had an extremely important contribution for the development of the national banking sector – it forced those banks, which remained on the market to upgrade their management strategies, to adapt to the new internal policies and be better prepared for such critical events in the future. It also forced the National Bank of Moldova to implement new amendments to the Law on Foreign Exchange Regulation no 62-XVI of 21 March 2008 which have the purpose of gradual elimination of those effects, which the currency crisis had and still has on the national economy.

In this way, considering the chain of events which took place during the peak of the crisis and the evolution of the economic situation until now we can underline the following recommendations:

## **Banking sector administration:**

Application of a thorough strategy of banks' supervision. NBM has to change its approach mechanism to banking sector supervision and adjust it to the conditions of potential further attacks on banks and banking sector overall. It has to establish a maximum degree of risks at which are exposed to, monitor banks assets and make monthly analysis of their value changes so it would completely eliminate further fraudulent credit granting and subsequent embezzlements of the money on off-shore accounts.

Updating and improving anti money-laundering legal framework. This has to be done at the governmental level with direct participation of NBM in this process. This would result in a better monitoring of doubtful transactions and gathering complete information about the final beneficiaries of these transactions, thus helping commercial banks minimize risky credit portfolios.

## Improving banks' internal regulations:

Improvement of FX operations management strategies. Considering the overall banking sector's conditions, it means adopting a cautious strategy in banks' foreign exchange risk management so the profits made in some operations could cover losses resulted from other operations. Also, an appropriate management of the currency operations in Moldova includes reviewing net situation of every currency and modifying it according to the overall conditions on the national and international markets. This can also be achieved through a better training of the currency dealers or the treasury department staff, who are responsible for performing FX operations.

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