TACKLING THE COMPLEX PROBLEM OF FOREIGN CURRENCY LOANS AND SYSTEMIC RISK - ROMANIAN CASE STUDY

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Abstract. Foreign currency loans are predominant in Europe and generate a substantial exchange-rate-induced credit risk to European banking sectors. Especially, Swiss Franc (CHF) denominated loans, widespread in Eastern European countries, could cause simultaneous bank failures if depreciation of the domestic currencies prevents unhedged borrowers from servicing the loans. The systemic risk is considerable in the non-euro area, whereas it is relatively low in the euro area. In May 2008, a Hungarian family sued a bank for the way in which the exchange rate is calculated. The contract stated that the Forint was calculated monthly at the rate charged by the bank at the day before each due. Since Swiss Franc has appreciated strongly, the monthly rate has increased considerably. Customers complained that the calculation of the exchangerate was unfair because it allowed the bank to use a different exchange rate than the one used when the loan was granted. The case reached the Supreme Court of Hungary (Kuria), which then requested the viewpoint of the European Court of EU. On April 30^{h} , 2014, the European Court pronounced its decision. The European Court declined to give a clear solution to the problem, saying that it was the attribute of the national courts to decide whether a contractual stipulation was or not abusive. On January 15th, 2015, the Swiss National Bank removed the 1.2 CHF/EURlimit (implemented in September 2011), which had as consequence the instant and considerable appreciation of the Swiss Franc against the Euro, the US Dollar and other currencies. Hence, the CHF appreciation against the RON was inevitable, although the domestic currency had a comparatively stable evolution against the reference currency (Euro). In Romania, this issue triggered the reaction of several stakeholders namely, the clients, the Romanian Association of Banks, the National Bank, and the Government, but they failed to agree on a mutual strategy that would enable the diminishing the effects of this real social problem. This paper attempts to measure the systemic risk in the Romanian banking sector arising from foreign currency loans and the ways to tackle this risk by implementing realistic solutions: a) customized solutions, negotiated between the parties directly involved in the credit agreement (i.e. the credit institution and the borrower) differentiated by specific situations related to client profile (income level, behaviour payment etc.), abnormal credit exposures of banks, such as: maintaining, for a period, of a fixed exchange rate favourable customer (i.e. December 31st 2014); reduction of interest by early application of a LIBOR index values favourable to the borrowers; reducing or eliminating the fees; rescheduling restructuring the loans. b) putting into practice a debt rescheduling scheme, with the award of a compensation by the State, which means a burden-sharing approach among creditors, borrowers and the State, by taking into account three objectives: respecting the free market principles; state support for vulnerable household groups (ex: with gross monthly incomes of up to RON 3,000); the carrying out by the Central Bank of its legal tasks on safeguarding financial stability. Also, the current paper underlines the importance of the financial education for the population that can help people to take the right investment decisions by taking into account the risks of borrowing money in a foreign currency and prevent in the upcoming years the arise of a systemic risk menacing to distress the stability of the national economy.

Keywords: currency risk; systemic risk; Swiss Franc; double-entry accountancy.

Introduction

Historically, the interest for finance and accounting has arisen from immemorial times, together with the subsistence economy within the primitive commune, some of the drawings in the prehistoric caves suggest that they are "calculations" on how many animals were hunted and eaten, how many skins were skinned and how many clothes resulted, as Dragan (2008) argued.

Being extremely advanced in science, fortune and democracy, the Venetian and Genoan medieval traders used of a double entry evidence of the business in foreign currencies they were dealing with other citadels. In order to diminish the foreign exchange risk and also the risk of cash transportation, they enhanced the bill of exchange (ital. cambio = change) as an exchange and debts transferring tool, for thus ceaselessly have capital support.

According to Dunlop (1985), in 1494, namely 2 years after the discovery of America by Columb, *t*he Franciscan monk Luca Bartolomeo di Borgia was writing and offering to the mankind, for a whole eternity, in Venice, a famous mathematics compendium-Summa de Arithmetica, Geometria, Proportioni et Proportionalita (SA), that included a 27-page essay on bookkeeping, Particularis de Computis et Scripturis, which reveals the secrets of the contemporary merchants in following the existence and the movement of the capitals.

It was a synthesis of the mathematical knowledge of his time and contained the first published description of the method of bookkeeping that Venetian merchants used during the Italian Renaissance, acknowledged as the double-entry accounting system. He explained the use of journals and ledgers, and warned that "a person should not go to sleep at night until the debits equaled the credits". He explained how accounts worked and the significance of assets, liabilities, capital, income, and expenses (Sangster, Stoner & McCarthy, 2008 p.111-134).

His advice that nobody should remain with unpaid debts, as the debts create troubles and fights, is valid more than always. Regrettably, some of the contemporarians were not aware of this advice and got indebted over their refund limit and accepted risks unknown to them. For this reason, we would like to connect the history of sciences and the father of accounting on one hand and the way in which, after one half of a millennium, by not admitting or deliberately ignoring the foreign currency risk, lead many people to higher debts than the ability to pay back.

In this paper we will focus on analyzing the facts in their historical evolution and to state opinions and optimisation proposals concerning the foreign exchange rate risk management, can could be useful to the decision makers (the regulation institutions, Parliament, Government, banks, public, etc) but also to the students, the tomorrow's professionals.

The exchange rate risk management measures of the Swiss National Bank in 2011 and 2015. Reactions of the European Union authorities to tackle the systemic risk

On September 6, 2011, in a press release, the Swiss National Bank announced the setting of a minimum exchange rate at CHF 1.20 per euro, aiming for a significant and sustained weakening of the Swiss franc (Swiss National Bank, 2011). The reasons for this decisions were: -the fact that the Swiss franc was substantially overvalued -threats to the Swiss economy -the risk of a deflationary development.

This exceptional and temporary measure protected the Swiss economy from serious harm, but it affected other economies and, especially borrowers.

On January 15, 2015, the Swiss National Bank removed the 1.2 EUR/CHF floor, having as result the instant and noteworthy appreciation of the Swiss franc against the euro, the US dollar

and other currencies. The explanations given by the Swiss national bank where that "euro has depreciated considerably against the US dollar and this, in turn, has caused the Swiss franc to weaken against the US dollar. In these circumstances, the SNB concluded that enforcing and maintaining the minimum exchange rate for the Swiss franc against the euro is no longer justified." (Swiss National Bank, 2015).



Figure 1. Fluctuation of exchange rates of main currencies in January 2015 (Bloomerg, 2015)

The decision of Switzerland's central bank led to the Swiss currency appreciating considerably against the currencies of Central Europe. Instantly, the Croatian kuna has lost 14% of its value against the Swiss franc; the Bulgarian lev, 13%; the Polish zloti and the Romanian leu, 12%; and the Hungarian forint, 10%. The Leu, the Romanian currency, has appreciated drastically (from 3.7415 Leu/CHF in January 2014 to 4,3287 Leu/CHF), even if the domestic currency had a fairly constant evolution against the reference currency (euro).



Figure 2. Fluctuation of RON/CHF exchange rates in January 2015 (European Central Bank)

Unwarranted foreign currency lending can generate noteworthy systemic risks for the Member States of the European Union and cross-border spillover effects especially because of the potentially affected asset prices, of the market risk for all unhedged borrowers, with increased instalments caused by negative developments of the exchange rates. Risks are amplified sometimes, by the dependence of local branches to the parent banks that are affected by the foreign currency swap markets evolutions and foremost by the high level of integration of financial groups. There are at least three types of risks that can affect the banking systems of the countries activating in E.U.:

- 1) exposure to credit, liquidity and market risks;
- 2) excessive foreign currency credit growth;
- 3) asset price bubbles.

Many theoreticians and practitioners have tried to warn stakeholders in 2007 and 2008 about the dangers that global financial system will face in the future years, but they were not listened. But what is systemic risk anyway? We can define it in many ways, but perhaps a good explanation would be that the systemic risk the risk of fall down of an whole financial system, as contrasting to risk associated with any one individual entity, or constituent of a system, that can be restricted therein without damaging the entire caused different risk components accelerated system, bv and because of *interlinkages* and *interdependencies* in a system, where the malfunction of a single entity or group of entities can cause a cascading failure. In fact, George Kaufman warned as early as in 1997 that "a sharp depreciation in exchange rates may trigger defaults by private borrowers, including banks, and by sovereign governments on their foreign-currency-denominated debt and even on their domestic currency debt, if the costs of their foreign currency debt increase sufficiently." (Kaufman, 2013, p.10).

For these reasons, on 21 September 2011, the European Systemic Risk Board *issued first* recommendations on lending in foreign currencies for setting onward measures that would ensure borrowers can repay their debts. (European Systemic Risk Board, 2011). The recommendations included: (i) increasing borrowers' awareness of risks of foreign currency lending, by guaranteeing that they are given enough information; and (ii) ensuring that new foreign currency loans are extended only to borrowers that are creditworthy and able of resist severe shocks to the exchange rate. Therefore, the recommendations for national authorities was to closely supervise and, if needed, consider imposing limits on funding and liquidity risks associated with foreign currency lending. Another requirement was to hold adequate capital, under the Second Pillar, for foreign currency lending due to the non-linear relationship between credit and market risks.

A press release of the Court of Justice of the European Union (2014), reveals that on 29 May 2008, a Hungarian couple concluded a contract for a mortgage denominated in a foreign currency with a Hungarian bank. The bank granted the borrowers a loan of 14 400 000 Hungarian Forints (HUF) (approximately €47000). The contract specified that the fixing in Swiss francs of the amount of the loan was to be made on the basis of the buying rate of exchange of that currency applied by the bank on the day the funds were advanced. Hence, the amount of the loan was fixed at CHF 94 240.84. Yet, under the contract, the amount in Hungarian forints of each monthly instalment to be paid was to be determined, on the day before the due-date, on the basis of the rate of exchange applied by the bank to the sale of Swiss francs. Customers complained that the calculation of the course is unfair because it allows the bank to use a different course than the one used for loan repayment grant. The case reached the Supreme Court of Hungary (Kuria), which then requested the views of the European Court. On 30 April 2014, the European Court has pronounced its decision (Court of Justice of the European Union, 2014). This decision was important including for customers in Romania. In addition, the European Court has given some further clarifications with regard to the context in which courts can change exchange contracts:

- Consideration of an unfair term should not weigh the price / remuneration of services. But the difference between the exchange rate used to sign the contract and used to repayment cannot be regarded as remuneration for a service rendered by the bank;

- A term which defines the main object of the contract cannot be considered an abusive clause, when presented in a clear and understandable language. If the deletion of an unfair term renders the contract unenforceable, the European directive does not preclude the national court from substituting the contested term with a supplementary provision of national law.

So, the national courts have to judge whether the average consumer may realize – by reading the promotional materials made available by the bank and contractual terms - that the rate of credit will differ from the exchange rate used for loan repayment.

The issue of CHF-denominated loans in Romania

In Romania, the reference currency is euro, because of the strong trade ties with EU states, the status of membership of the European Union and objective to adopt the euro as soon as possible. Therefore, the CHF/RON exchange rate is set indirectly, since CHF/RON exchange rate is determined indirectly depending on the EUR/RON and EUR/CHF exchange rates. Romania has no means of control over the CHF, because the developments in the EUR/CHF exchange rate are interconnected with the foreign currency demand and supply between the euro area and Switzerland.

The principal factor of success for the CHF lending during 2007-2008 is in close was the fact that CHF borrowing costs were inferior at the credit agreement date in comparison with credits denominated in other currencies, and this fact encouraged both borrowers with lower income, and higher income borrowers to access larger loans. Unfortunately, given the unfavourable exchange rate of CHF versus Leu, has had after 2009 a bad impact on debtors, who, growingly, failed to repay the loans. It is true that the number of CHF borrowers declined in 2015 with approximately one third in comparison to 2008, thanks to loan reimbursement and loan conversion into another currency.

Between 2007 and 2008, 11 banks granted loans in CHF in Romania, when the Swiss Franc registered considerable lower interest rates in comparison with those in Euro. This kind of credits were appealing for people with very small salaries, who had, otherwise, little chance to get a credit in Euro or RON. Unfortunately, after 2008, the CHF rate increased sharply while the reference interest rates abruptly decreased, for all currencies. Over 75,000 individuals have loans in Swiss francs and 95 % of loans are concentrated in six banks. In total, 14 credit institutions granted credits in Swiss francs. Of all borrowers with loans in francs recorded in banks' balance sheets , almost a third (32%) are found at Bancpost , 24% at Volksbank , Piraeus Bank 20% , 11% to Raiffeisen , 7% and 2% Romanian Bank to OTP Bank. One third of the loans in Swiss francs (35 %) were allocated to purchase housing, 58 % were consumer loans with mortgage and other 7% were other consumer loans.

EURIBOR, the index for EURO, reached close to 0,05% in present, whereas LIBOR for CHF reached negative levels, of almost -1%, after The Central Bank of Switzerland has decreased the reference interest rate to -0,75%, just the once they gave up on the fixed exchange rate that determined the hasty appreciation, with 20%, of the CHF. This situation leads to negative interest rates that the Romanian banks apply for the credits in CHF, because they are determined pending on the LIBOR index for CHF plus a fixed margin adjusted once in 3 or 6 months; for instance, if a loan has a fixed margin of 3 % plus LIBOR CHF (-1%), then the interest rate will be 2%.

Up till now, when we are elaborating this paper, the 11 banks in Romania apply the old value of the LIBOR index, valid for the end of 2014, of about 0%, and maintain the clients' interest rates high. Even so, the interests paid by the Romanian clients with loans in CHF are currently higher than the ones in RON. For instance, at Raiffeisen Bank, that has almost 9.000 loans in Francs, amounting 360 million EURO, the average interest for these loans is of 6%.

Incongruously, the average interest rate for the mortgage loans in RON is 4,9% according to BNR, whereas the annual effective interest rate (DAE), that also includes the commissions, is of only 5,25%. Therefore, in order to have solvent clients, the banks should diminish the interest rates for loans in CHF, because they are already very affected by the depreciation of the RON towards the CHF with 20%.

In Romania, the population have loans in Swiss Francs of about 10 billion RON, out of which 3,5 billion are loans for houses (35%), the rest being either consumption loans, or for other destinations. As the Credit Bureau reveals, the delays of more than 30 days for the loans in CHF loans amount 1,6 billion RON (16% from the total CHF loans), in a noteworthy decrease comparing with the 2,4 billion RON amounted the last year.

In January and February 2015, Romanians with loans in Swiss francs protested in front of Parliament and five other cities. They requested a legislative solution from the Parliament. The parties involved in the "Swiss franc crisis" had opposite positions. Customers wanted a law that would have given them the possibility to convert foreign currency loans in lei at the rate valid at the time when the loan was taken plus maximum 20% (Mediafax, 2015).

On the other hand, banks and the National Bank raised the lack of constitutionality ground of such a measure, and also the potential of collapse for the credit institutions. In turn, customers complain that the solutions offered by the banks were only declarative, whereas in reality the submitted variants that are to the disadvantage of the debtors, triggering additional costs for the whole service debt. Moreover, some credit institutions have demanded additional guarantees for converting customers credit in lei, given that the value of real estate brought as collateral has depreciated by almost half compared to the moment when the loan was taken. The clients were supported by the National Authority for Consumer Protection.

The reaction by policymakers was restrained. Despite street protests by debtors, finance minister ruled out forced conversion and said government measures would be limited to widening tax credits for borrowers. The Parliament members also debated the franc loans issue in several meetings of the Budget- Finance and Banking Commission together with all parties concerned, without reaching a conclusion.

In May 2015, Gorj Court decided as a family that has a loan in Swiss francs contracted in 2008 to pay exchange rates on the date of signing the contract. The court decided freezing the CHF exchange rate; the judges ordered the calculation and payment of the loan repayment at the value of the Swiss franc in lei valid on the date of concluding the contract. This decision could become in Romania a juridical milestone in the issue of the loans in Swiss franc.

The analysis of the alternatives of the various CHF loans "stakeholders" in Romania

We will try to analyse the alternatives that stakeholders have in Romania, in order to reduce the negative effects of the CHF exchange rate increase towards RON. For tackling the complex problem of foreign currency loans, one can imagine several alternatives:

a) Customized solutions, negotiated between the parties directly involved in the credit agreement (i.e. the credit institution and the borrower) differentiated by specific situations related to client profile (income level, behaviour payment etc.), abnormal credit exposures of banks, such as: maintaining, for a period, of a fixed exchange rate favourable customer (i.e. December 31st 2014); reduction of interest by early application of a LIBOR index values favourable to the borrowers; reducing or eliminating the fees; rescheduling / restructuring the loans as an agreement between the bank and the borrower. The clients advocate for the loans' conversion to RON, at the exchange rate that was valid at the date of signing the lending contract. The outcome would be that the 11 banks that granted loans in CHF would book in their accounts a loss of the equivalent of 950 million EURO. The value in RON of the 75.000 loans in CHF is at present of 2 billion RON. The majority of the loans can be found in Bancpost (32%), Volksbank (24%), Piraeus Bank (20%), Raiffeisen Bank (11%), Banca Romaneasca (7%) and OTP Bank (2%), and the rest of 4% are with the other 5 banks. The National Bank of Romania has not imposed any relief measures on the banks and did not apply populist administrative measures, for working out the problem of the CHF loans, an approach that, otherwise, we also share. Instead, NBR encouraged banks to negotiate individual solutions with the clients. This approach was also supported by the Ministry of Finance. However, since CHF appreciation which made the loans in Swiss currency very expensive, many politicians have continued to advocate for adopting a law for conversion at a convenient rate for the borrowers, for populist reasons. After the pressure of many clients and lawyers, the Government takes into account a law project meant to save the clients that deal with exchange rate risk: the contract holder should have a maximum income of 3.000 lei, while the maximum amount of credit provided after conversion should not be higher 300,000 lei.

b) *Sharing the burden between the bank, State and the borrower*, which means putting into practice a debt rescheduling scheme, with the award of a compensation by the State, which equivalents with a burden-sharing approach among creditors, borrowers and the State, by taking into account three objectives: respecting the free market principles; state support for vulnerable household groups (ex: with gross monthly incomes of up to RON 3,000); the carrying out by the Central Bank of its legal tasks on safeguarding financial stability.

This implies a conversion of the ongoing loans for a rate of approximately 3 RON for a CHF, rate placed somewhere in the middle, between the rate of 2 RON at the moment of granting the loans, in 2007 - 2008, and the one that exceeds 4 RON for a CHF, currently. The European Directive regarding the loans specifies that bankers cannot agree with the conversion at another rate than the current one for the day when the conversion is done. In the Directive, there is clearly stipulated that. The states can make changes, but as long as they do not apply retroactively.

Some politicians support the so-called "electo-rate", by which the banks will support a Governmental program for loans restructuring, that aims to reduce the monthly instalments for a period of 2 years. This is accomplished by granting a salary tax exemption, but only for the ones with monthly incomes under a certain amount (2200 RON or 3000 RON, the amount has not been settled yet). Since banks started to face the misfortune of non-performing loans, they had to adjust their policies to the reality and offer their clients more convenient payment conditions. For instance, Volksbank Romania and its parent group, Banca Transilvania, finalised in the first semester of 2015 the biggest loan conversion program in Romania. The two banks persuaded approximately 15,000 borrowers to switch from Swiss franc (CHF)-denominated loans to other currencies, namely RON or Euro, in order not to lose them or face a long series of trials. The campaign lasted three months. The offer provided a 22.5% discount for those who accepted to convert their loans in Swiss francs into Romanian currency or euro.

Many people, including financial analysts, politicians and, surely, borrowers, believe that this solution would be efficient because it can help costumers to have extra-money for consumption, that can help the economy, or to help those who are really needy, having small incomes, because the burden is easy to be carried when it is shared by three parts (debtors, banks and State).

Taking into account the discrepancies between categories of borrowers, it is impossible to adopt one solution valid for all borrowers' that encounter debt-servicing problems. There are different individual specific circumstances that impose customized solutions. Therefore, it is essential for bank regulators not to harm the financial and banking system stability, that is a precondition for economic growth, job creation triggering higher household income for the credit repayment and, foremost, maintaining depositors' confidence in the banking sector. According to a press release of NBR, "credit conversion at the historical rate + 20% would generate losses worth around lei 4.5 billion for the entire banking sector, while three credit institutions would see their solvency ratio fall below the minimum regulated threshold. The solvency ratio across the banking sector would diminish from 17.1% to 14.6%." (Isărescu, 2015). In the same press release, the NBR advocated the implementation of customised and realistic solutions, negotiated between the parties directly involved in the credit agreement. Among the alternatives envisaged by NBR, the one that was seen as recommended was implementing a debt rescheduling scheme, with the award of compensation by the State.

Our opinion, as authors and neutral analysts, is that in the matter of loans in CHF, changing the law and applying it retroactively, would be absolutely unconstitutional, against any juridical principle, and would also infringe the European Directive regarding the loans, would create an unbalance towards other currencies. As a consequence, it would cause the so called moral hazard, as it is not moral that a solidarity fund or all the contributors in one country to pay part of the goods of personal use that some of the banks' clients got CHF loans for. At least in Romania, the case that we have studied more closely, usually, the contractual clause regarding the foreign currency risk was not negotiated between bank and borrower, the signed contract being a pre-formulated standard contract. In fact, there was an unequal position for the advantage of the bank and the in the client's disadvantage, the latter representing the weaker contracting party, breaking the fairness and trustfulness principle. In the period of time when the majority of loans were granted (2007-2008), the Romanian Civil Code from 1864 was still in force. In the Art. 1578 in what the lending concerns, the "nominalism principle" was stated; accordingly, the debtor must pay back the nominal received amount, regardless its variation.

Conclusions, opportunities and solutions for circumventing in the future years the negative circumstances generated by the foreign exchange rate risk

The surprising announcement of the National Bank of Switzerland to remove the minimum level of the EURO/CHF exchange rate, caused significant financial losses for especially for the families that borrowed money for buying a house or an apartment. The authors of the present paper consider that, access to information and financial education are crucial and that we, as members of the academic community, have to advocate for rising the awareness of the public about the exchange rate risk.

Opportunities and Solutions for circumventing in the future years the negative circumstances Generated by the Foreign Exchange Rate Risk:

1. Transposing the Directive of the European Parliament and of EU Council no. 17/2014 regarding the loan contracts into the Romanian Legislation, represents a very good occasion to legislate in this field. In Chapter no. 9, art. 23, the Directive obliges the member states to adopt an appropriate framework, and to allow "limiting the foreign exchange rate risk the client is exposed to, as a result of the credit contract", by converting the loan into an alternative currency or by establishing another mechanism for adapting the contract, applicable only in future.

2. All the players on the financial and foreign currency market have to be acquainted with and apply the protection instruments towards the foreign exchange rate risk and towards the interest rate risk. The foreign exchange risk and the interest rate risk act jointly as, buying or selling foreign currency at term, generates foreign exchange rate risk, and placing the thus obtained capital, also generates the interest rate risk. For instance, a client who buys foreign currency at present for paying its future instalments that are payable next month, generates foreign exchange rate risk. The use of this amount, until the due date, for the lending process in foreign currency, is a fact that generates the interest rate variation risk (Treapăt & Gheorghiu, 2015). Surely, risks cannot be entirely eradicated, but, they can be diminished by the diversification of the portfolio of assets and liabilities in foreign currency and also using certain techniques for reducing the risk, techniques that were developed on the derivatives market, by using some hedging instruments for compensating the risk. The derivate instruments action as FORWARD, FUTURES, OPTIONS, SWAP, FRA operations, t are used both as hedging instruments against the interest rates risk and also against the foreign exchange rate risk. The authors of this paper who acquainted with banking practice, that these protection instruments against the risk were almost unknown and not used prior to the methodological framework took place in Romania, and they started to be used more after the issuing of the norms regarding the derivate financial instruments, as it is shown by Treapat (2011, pp.39-40). Once more, we underline that, it should be a commitment for scholars or practicians in the field of the financial management to promote, these protection instruments towards the risk: the hedging, the forward/future contracts, the SWAP, the Currency Options (call/put), etc.

3. Individuals will have to be more resolute when negotiating with the banks for neutralizing the negative effects of the foreign exchange rate risk, by asking for some more favourable contractual clauses to be introduced in the loan contract. In the credit-boom period, the loan contract clauses were imposed to the borrowers by the banks in the form of a standard contract, by following the "take it or leave it" principle. 4. Introducing or broaden the curricula of economic sciences, of general management, of risk management, audit, entrepreneurship, finance, accounting, etc, in the Romanian education institutions not only with economical universities but also for technical ones or with other profiles, both for pre-university and university courses. These subjects have to be studied, in order to raise for the future generations their awareness about the opportunities but also risks

involved by credits. The consciousness of the importance of financial education has to lead to the growth of the number of tailored national strategies for financial education.

5. All actors of the financial environment need to demonstrate responsibility in decision making. Accordingly, shareholders of banks need to cautiously select talented and savvy managers, train highly qualified personnel, and implement corporate governance principles, internal procedures based on separation of the board of directors and bank management. The board should supervise the management activity and ensure its correct reporting to shareholders and implement coherent, operational policies and ensure the proper functioning of banks. Audit committees and auditors (both external and internal ones) should assess the banks' control systems, principally in accounting and information technology domains. For specific risk management, international banks have to set up risk management committees, to settle on a certain risk profile and to institute objectives and strategies for each significant risk, including for the outsourced activities. Bank's risk management strategy ought to establish the best possible s balance between risk and profit. Undoubtedly, the public should anticipate the effects of investment decisions they make and properly assess their degree of solvency they have. (Gheorghiu, 2011, p.255)

References:

- Bartov, E., Bodnar, G.M., and Kaul, A. (1996). Exchange Rate Variability and the Riskiness of U.S. Multinational Firms: Evidence from the breakdown of the Bretton Woods System. *Journal of Financial Economics*, 42(1), 105-132.
- Bloomerg (2015). Foreign Exchange Rates and World Currencies. Retrieved from http://www.bloomber g.com/markets/currencies.
- Court of Justice of the European Union (2014). Press Release No 66/14 Luxembourg. Retrieved from http://curia.europa.eu/jcms/upload/docs/application/pdf/2014-04/cp140066en.pdf.
- Dragan, C.M. (2008). Initiere in contabilitate [The First Steps in Accounting]. Retrieved from: http://www.contacafe.ro/topic11110.html.
- Dunlop, A.B.G. (1985). Biographical Notes on Five Copies of Pacioli's Summa (1494) in Scotland. *Abacus*, 21(2), 149-173.
- European Central Bank (2015). Euro exchange rates. Retrieved from https://www.ecb.europa.eu/stats/ exchange/eurofxref/html/eurofxref-graph-usd.en.html.
- European Systemic Risk Board (2011). Recommendation of the European Systemic Risk Board of 21 September 2011 on lending in foreign currencies (ESRB/2011/1). Retrieved from https://www.esrb.europa.eu/pub/pdf/recommendations/2011/ESRB_2011_1.en.pdf? 110a62127212a17ec67ca377bd90f578.
- Gheorghiu, A. (2011). Risks and vulnerabilities of the lending process. In Proceedings of the International Conference on Econophysics, New Economy and Complexity (pp.253-263). Bucharest: Victor Publishing House.
- Isărescu, M. (2015). Issue of CHF-denominated loans. Presentation by Mr Mugur Isărescu, Governor of the National Bank of Romania, in front of the Budget and Finance Parliamentary Commission, Bucharest, 10 February 2015. Retrieved from www.bis.org/review/r150217b.pdf.
- Kaufman, G.G. (2013). Banking and currency crises and systemic risk: Lessons from recent events. Retrieved from http://web.archive.org/web/20031006100654/http://www1.worldb ank.org/econom icpolicy/managing%20volatility/contagion/documents/3qep2.pdf.
- Mediafax (2015). Românii cu credite în franci elvețieni protestează în fața Parlamentului și în alte cinci orașe [Romanians with loans in Swiss francs protest in front of the Parliament and in five other cities]. Retrieved from http://www.mediafax.ro/social/romanii-cu-credite-in-franci-elvetieni-protesteaza-in-fata-parlamentului-si-in-alte-cinci-orase-13809646.

- Sangster, A., Stoner, G., and McCarthy, P. (2008). The market for Luca Pacioli's Summa arithmetica. *Accounting Historians*, 35(1), 111-134.
- Swiss National Bank (2011). Communication of the SNB September 6. Retrieved from: http://www.snb.ch/en/mmr/reference/pre_20110906/source/pre_20110906.en.pdf.
- Swiss National Bank (2015). Communication of the Swiss National Bank January 15. Retrieved from:

http://www.snb.ch/en/mmr/reference/pre 20150115/source/pre 20150115.en.pdf.

- Treapăt, L.M. (2011). *Managementul si asigurarea riscurilor bancare [The Management and the Assurance of the Banking Risks]*. Bucharest: Economica Printing House.
- Treapăt, L.M., and Gheorghiu, A. (2015). The Story of CHF or How to Lose Your Sleep and Money by Ignoring the Foreign Currency Risk. In *Proceedings of the International Conference "Risk in Contemporary Economy"*, Dunarea de Jos University of Galati, Romania, Faculty of Economics and Business Administration. Retrieved from http://www.rce.feaa.ugal.ro/index.php/2014-02-04-19-50-49/rec2015.