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## MONETARY POLICY OF THE SWISS NATIONAL BANK, EXCHANGE RATE OF THE SWISS FRANC AND THEIR IMPACT ON CITIZENS OF BOSNIA AND HERZEGOVINA

#### **ABSTRACT**

Through a historical perspective, the Swiss franc has frequently been accepted as a currency safe haven the investors sought shelter in while trying to avoid the global macroeconomic or geopolitical risks. The unexpected removal of the CHF / EUR exchange rate cap by the Swiss National Bank in January 2015 agitated the global financial markets, with the consequent reaction being an overestimation of CHF of about 30%. Citizens of Bosnia and Herzegovina (B&H) and the entire region also suffered from significant effects of such SNB action. The results of the research of this paper provided for the accomplishment of the primary research mission: to promote knowledge of the monetary policy of the SNB, but also of its impact on the citizens of B&H. The paper details the most important features of the monetary policy, its models, samples and instruments, as well as the monetary policy of the SNB. In the course of writing this article, particular attention was paid to the effects of SNB's monetary policy to B&H citizens, but also to different approaches to solving the problem of loans denominated in CHF. Likewise, a possible future overview of loans denominated in CHF has been elaborated at the very end of the paper.

Keywords: CHF, EUR, SNB, monetary policy, exchange rate

JEL classification: E49, E52, E50

#### 1. INTRODUCTION

The sudden move made by the Swiss – removal of CHF / EUR exchange rate cap, has significantly affected the global financial markets, with a particular shock dealt to individuals in Bosnia and Herzegovina and the region, those that had raised loans denominated in CHF. While the action itself is a result of the monetary policy of

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the SNB, the effects of unblocking the exchange rate are significant. On 15 January 2015, the value of CHF increased by about 30% against the EUR, which is enormous, even though the estimates specify there is a significant overvaluation of the CHF. Based on such exchange rate changes of about 30%, the consequences to individuals who had raised loans denominated in CHF can be perceived.

Given its importance, the paper first refers to the monetary policy of the SNB and its impact onto B&H citizens who had raised loans denominated in CHF. The above represents an inexhaustible topic and a basis for conducting research of the paper, since the importance of monetary policy given in this example can also be seen in practice. Therefore, the aim of the paper is to assess the current problems and phenomena caused by SNB monetary policy and its impact on the B&H citizens. In accordance with the issue, a basic hypothesis has been established: Despite SNB's promises that it would, if necessary, intervene at financial markets to avoid the overvaluation of CHF, the citizens of Bosnia and Herzegovina and of the entire region, greatly suffer not only from the overvaluation of the CHF, but also from the powerlessness of their own country to protect them from the "monetary games" in the world.

Results of the research from this paper should contribute to spreading knowledge on the monetary policy of the SNB, respectively, but also to the further resolution of problems related to loans denominated in CHF, and try to answer the question "Should one convert his CHF loan to EUR loan?"

## 2. Monetary policy& exchange rate

Monetary policy is the process by which the monetary authority of a country controls the money supply and which is often associated with the rate of inflation or with the interest rate in order to ensure price stability and overall confidence in the currency of a country. In addition, the objectives of monetary policy are usually related to the contribution to economic growth and stability, unemployment reduction and maintaining a predictable exchange rate with foreign currencies. The monetary policy can be expansive or restrictive very often, where the expansive monetary policy unusually increases the total money supply in the economy, while the restrictive monetary policy slows down or even reduces the money supply. Expansive monetary policy is traditionally used in fighting unemployment and recession by lowering interest rates in order to encourage the growth of credit business operations. Restrictive policy is aimed at slowing down inflation in order to avoid the resulting disruption and deterioration in value.

Monetary policy is the process by which the government, central bank, or monetary authority of a country controls (i) the supply of money, (ii) availability of money, and (iii) cost of money (or rate of interest to attain the set of objectives oriented towards

the growth and stability of the economy) (Jahan, 2015). In order to develop an optimal monetary policy, it is important to know the monetary theory. The ratio between the interest rate of the economy, which represents the price where the money can be borrowed and the total money supply of the economy represents the foundation of monetary policy. In order to influence economic growth, inflation, exchange rate with other currencies and unemployment, monetary policy utilises different tools to control interest rates and/or money supply. In countries where the issue of currency represents the monopoly by central bank or banks that are related to the central bank, the monetary authorities have the option of changing the money supply, which can affect interest rates in order to achieve the objectives of monetary policy. To achieve a low level of inflation, policymakers must be credible, so if the announcements of policy makers are not credible, the policy will not achieve the desired effect.

In order to make monetary decisions, monetary policy makers take into account a number of factors which includes: short-term and long-term interest rates, velocity of money (speed of movement of money through the economy), the exchange rate, the quality of loans, bonds and shares, the ratio of the government and the private sector / savings, international capital flows of money, financial derivatives (options, swaps, futures contracts, etc.)(Fernando, 2011, 149).

It has been proven in practice that nowadays the main tool in the implementation of any model of monetary policy is an adjustment or a modification of base money in circulation. Monetary authorities perform the above by purchasing or selling financial assets, which causes either change the amount of money or its liquidity in the open market, if the purchase or sale refers to less liquid forms of money.

Constant market transactions by the monetary authorities modify the supply of currency, which affects the other market variables, such as short-term interest rates and the exchange rate. Depending on the instruments and target variables used by the monetary authorities in order to achieve their goals, various models of monetary policy are applied: Inflation Targeting, Price Level Targeting, Monetary Aggregates, Fixed Exchange Rate, Gold Standard and Mixed Policies (Baiden, 2012).

Table 1. Models of monetary policy including variables

Monetary Policy:	Target Market Variable	Long Term Objective	
Inflation Targeting	Interest rate on overnight debt	A given rate of change in the Consumer Price Index (CPI)	
Price Level Targeting	Interest rate on overnight debt	A specific CPI number	
Monetary Aggregates	The growth in money supply	A given rate of change in the CPI	
Fixed Exchange Rate	The spot price of the currency	The spot price of the currency	
Gold Standard	The spot price of gold	Low inflation as measured by the gold price	
Mixed Policy	Usually interest rates	Usually unemployment and CPI change	

**Source:** (Dangi, 2014, 120)

The different types (models) of monetary policies are also called monetary and exchange rate regimes, therefore, a fixed exchange rate is also an exchange-rate regime. For example, The Gold standard results in a relatively fixed regime of the currency towards the currencies of other countries on the gold standard and a floating regime towards those that are not. Targeting inflation, the price level or other monetary aggregates implies floating exchange rate unless the management of the relevant foreign currencies is tracking exactly the same variables (such as a harmonized consumer price index).

From economics perspective, an expansionary fiscal policy includes higher spending and tax cuts, which encourage economic growth (Sullivan, Sheffrin, 2003, 551). Unlike expansionary fiscal policy, an expansionary monetary policy seeks to increase the size of the money supply, with such inciting of money supply being aimed at lowering the interest rates on purpose to achieve economic growth by increase of economic activity. Conversely, restrictive monetary policy seeks to reduce the size of the money supply. In most nations, monetary policy is controlled by either the central bank or the finance ministry. Although Neoclassical and Keynesian economics significantly differ on defining the effects and effectiveness of monetary policy on influencing the real economy; there is no clear consensus on how monetary policy affects real economic variables (aggregate output or income, employment). However, both economic schools accept that monetary policy affects monetary variables (price levels, interest rates).

## 3. Monetary policy tools

In order to maintain monetary stability, monetary policy uses three main tactical approaches: money supply, money demand and banking risk

The first approach (Money supply) relates to tactic of money supply management. This mainly involves buying or selling government bonds. Buying the bonds provides for expanding the money supply, while selling them enables contracting the money supply, which is known as open market operations in the Federal Reserve System, because the central bank buys and sells government bonds in public markets. Most of the government bonds bought and sold through open market operations are short-term government bonds bought and sold from Federal Reserve System member banks and from large financial institutions (FRBNY, 2015). When the central bank disburses or collects payment for these bonds, it alters the amount of money in the economy while simultaneously affecting the price and the yield of short-term government bonds, while the change in the amount of money in the economy in turn affects interbank interest rates (Abel, Bernanke, 2005, 522–532).

The second tactic manages money demand. Like demand for most other things, money demand is sensitive to price, but in this case, the price is the interest rates charged to borrowers. Setting banking-system lending or interest rates (such as the London Interbank Offer Rate, or Libor) in order to manage money demand is a base tool used by central banks. Ordinarily, a central bank conducts monetary policy by raising or lowering its interest rate target for the interbank interest rate. However, if the nominal interest rate is at or very near zero, the central bank cannot lower it further. Such a situation, called a liquidity trap, can occur, for example, during deflation or when inflation is very low (Billi, Kahn, 2015, 5-28).

The third tactic involves managing risk within the banking system, since banking systems use fractional reserve banking to encourage the use of money for investment and expanding economic activity. In order to handle actual cash needs, banks must keep banking reserves, but they can lend an amount equal to several times their actual reserves. The money lent out by banks increases the money supply, and too much money (whether lent or printed) will lead to inflation. Central banks manage systemic risks by maintaining a balance between expansionary economic activity through bank lending and control of inflation through reserve requirements.

These three approaches or tactics are the "normal" methods used by central banks to ensure an adequate money supply to sustain and expand economic activities and to manage or limit the effects of recessions and inflation.

## 4. The Swiss national bank & monetary policy strategy

The Swiss National Bank (SNB) is the central bank of Switzerland. It is responsible for Swiss monetary policy and for issuing Swiss franc banknotes (CHF). Most of its shares are owned by public institutions like cantons and cantonal banks, while the remaining shares are mostly owned by private individuals, except that the state of Switzerland is neither a shareholder nor a co-owner of SNB. At the end of 2014, about 52% of the shares were in the property of the cantons and cantonal banks and the main shareholders were the Canton of Bern with 6.63% (6,630 shares), Theo Siegert (Düsseldorf) with 6.49% (6,490 shares) Canton of Zurich with 5.2% (5,200 shares), the Canton of Vaud with 3.4% (3,401 shares) and the Canton St.Gallen with 3.0% (3,002 shares) (SNB, 2014, 122).

As an independent central bank, the SNB conducts the country's monetary policy (FCSC, 2015). However, it is obliged by the Constitution and its Article of Incorporation to act in accordance with the interests of the country as a whole. Its primary goal is to ensure price stability, while taking due account of economic developments. In doing so, it creates an appropriate environment for economic growth.

Price stability is an important condition for growth and prosperity. Inflation and deflation impair economic activity and lead to misallocation of labour and capital, which complicates decision-making by consumers and producers. Likewise, they result in income and asset redistributions, and put the economically weak at a disadvantage. Through price stability, the SNB assists in creating an ambient for utilisation of economic production potential, thus making the goal of SNB monetary policy to ensure mid- and long-range price stability. As Switzerland is a small open economy, similar to the economies struck by the violent fluctuation of the Swiss franc, it is particularly exposed to periodic fluctuations in prices, which the SNB cannot completely prevent. By influencing interest rates and recalibrating them with the current economic situation, the SNB ensures the price stability as one of the basic operations of its monetary policy. Low interest rates promote the supply of money and credit economy, which leads to an increase in demand for goods and services, which often leads to a weakening of the currency, which increases export demand, which could result in a shortage of production capacities, thus also leading to the growth in price levels. In contrast, the high interest rates lead to a shortage in the supply of money and loans, often in combination with currency appreciation, thereby maintaining aggregate demand. Use of production capacities drops thus weakening the pressure placed on prices.

Given that Switzerland is significantly integrated into the global economy, the exchange rate of the Swiss franc has a significant impact on production and price levels, thus causing interest rate and exchange rate to form the monetary situation in the economy together. Since 1970, Switzerland has moved to a flexible exchange rate2. The SNB has not directly affected the exchange rate, but it managed to steer monetary targets via its own monetary targets, and since 2000 through its interest rate policy. If interest rates are close to zero, it is difficult to have them lowered further, so the SNB must refer to other unconventional measures if it wants to mitigate its monetary policy further, with the most important unconventional measure of SNB being the establishment of a minimum exchange rate of 1.20 Swiss francs for 1 Euro in September 2011, which had been in force until January 2015.

The SNB's monetary policy strategy meant to fulfil the SNB's legal obligation involves the following three elements: a definition of price stability, a medium-term (three-year) conditional inflation forecast, and target range for a reference interest rate, which is the Libor for three-month investments in Swiss francs. From 6 September 2011 to 15 January 2015, the minimum exchange rate of the Swiss franc against the euro was applied. SNB monitors and aligns the price stability with the

<sup>2</sup> Flexible exchange rate is a monetary system enabling the determination of the exchange rate based on supply and demand.

growth of the national consumer price index, to a level of less than 2% per year. Deflation, or a long-term decline in price level is also considered a breach of price stability, and with such definition of price stability, the SNB aims to achieve a slight increase compared to the medium-term prices of goods and services consumed by an average Swiss household. Consequently, the SNB assumes that the inflation rate cannot be precisely managed, and that the consumer price index tends to mildly exaggerate the inflation.

SNB publishes its inflation forecast on a quarterly basis, which serves as the main indicator for monetary policy decision-making and as the key element of communication. By focusing its monetary policy on inflation forecasts for the next three years, the SNB informs the public about its long-term intentions in the conduct of monetary policy. In addition to the inflation forecasts, the SNB takes into account the large number of indicators of domestic and international economic and monetary developments and financial stability when making decisions on monetary policy. Forecasting inflation is based on the assumption that the reference interest rate would remain unchanged in the following three years. Therefore, it is a conditional forecast showing the SNB expectations on the development of consumer prices in the event that the interest rate remains unchanged.

SNB's monetary policy is based on fixing the target range of a reference interest rate for a three-month Swiss franc Libor, where Libor is located in the middle of the target range. Since the beginning of the financial crisis reduced the interest rate almost to zero, the position of Libor was gradually narrowed down, causing a targeted range of 0.0 - 0.25% to be applied since 2011. After the introduction of negative interest rates on account balances of deposits, the SNB expanded the target range onto -0.75% to 0.25%, thus restoring it to the regular 1% range.

The interest rates used (Libor) correspond to current interest rates at the interbank market in London, but due to the manipulation that was discovered in the summer of 2012, at the beginning of 2014 this interest rate (Libor) was placed under the administration of Intercontinental Exchange - ICE), the SNB has included all the national and international efforts to restore the integrity of the reference interest rate, simply because the SNB must be able to rely on the integrity of the reference interest rate.

Additional operational objective of the SNB in the conduct of its monetary policy is the fixing of the minimum exchange rate against the Euro, which was in effect from 6 September 2011 to 15 January 2015, which was introduced in extraordinary circumstances, and in the period of the significant overvaluation of the Swiss franc and high uncertainty in the global economy and financial markets in general. During this period, the appreciation of the Swiss franc has presented a risk to the entire Swiss economy, threatening with a deflationary development, which represented an

important instrument for preventing undesired tightening of monetary conditions for the SNB. However, despite this, the application of the minimum exchange rate entailed substantial purchases of foreign currencies and a huge expansion of the SNB balance.

In order to support the minimum exchange rate against the Euro, the SNB announced the introduction of interest rate of -0.25% on deposits of banks and other financial institutions with the SNB on 18 December 2014, which was a measure to reduce the pressure imposed onto the Swiss franc.

# 5. Suspension of application of the minimum exchange rate against the euro

During 2014 there had been an increased number of indications that the end of a relaxed monetary policy of the United States is inevitable. On the other hand, in the Euro area witnessed evidence of a further relaxation of monetary policy, which led to the situation that the euro weakened significantly against the USD, consequently causing the Swiss franc to weaken against the US dollar as well and to gradually approach the minimum exchange rate CHF – EUR of 1.20:1. However, the minimum exchange rate came remained free of pressure for a certain amount of time, although the last few weeks of 2014 evidenced the distancing of the monetary policies of the two currency areas. The crisis in Russia also represented an additional source of uncertainty, and in order to maintain the minimum exchange rate against the euro, the SNB had to make significant interventions, causing it to introduce a negative interest rate on deposit account balances on 18 December.

After a brief stagnant period, the pressure on the minimum rate increased significantly in the first half of January 2015, with the expectations rising that there would still be a significant relaxation of the monetary policy of the Euro-zone, causing the Euro to decrease in value. It became clear that the minimum rate could only be maintained by intervening at the foreign exchange market, which would lead to the uncontrolled expansion of the balance. At an extraordinary session of the SNB it was concluded that the minimum exchange rate of CHF 1.20 to the euro has become untenable, and therefore no longer justified from the standpoint of monetary policy. Therefore, on 15 January, the SNB decided to stop maintaining the minimum EUR/CHF exchange rate. At the same time, the target three-month Libor of was lowered by 0.5% and set in the range of -1.25% to -0.25% with the negative interest rates on deposits account balances set to -0.75%, in order to mitigate the effects of interruptions to the minimum rate, and reducing the attractiveness of investment in the Swiss franc. However, the SNB announced that it will continue in the future to take into account the situation with the exchange rate when formulating its monetary policy and continue to be active in the foreign exchange market.

Thus, maintaining the minimum rate would lead to an abnormal increase in purchases of foreign currency, which would mean that the SNB risks losing control of its balance in the long-term. For that reason, simply because of changing international conditions, the execution of the minimum exchange rate was no longer justified. Had the SNB continued to maintain the minimum exchange rate EUR/CHF, the long-term fulfilment of its mandate would be endangered. Due to speculation in the market, a rapid action was required, because the subsequent breakup of the minimum rate due to the turmoil in financial markets would lead to astronomical losses in the balance sheets of the SNB, and the cost of maintenance would not have been proportionate to the benefits for the Swiss economy.

600.000.00 500.000.00 400.000.00 300.000.00 200.000.00 100.000.00 2005 2006 2010 2011 2012 2014 2007 2013 2015 2015 2015 01 02

Figure 1.SNB investment into foreign currency

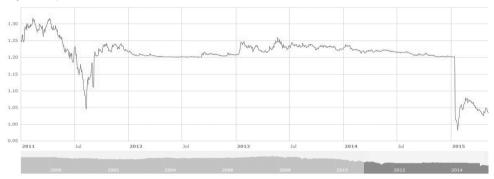
**Source:** (SNB, 2015a)

As it can be seen from the chart, the SNB investment in foreign currencies in the period from 2005 to 2015 increased from CHF 46,585.5 million in 2005, to 531,911.4 million CHF in March 2015. The structure of the investment at the end of 2014 amounted to EUR 46%, USD 29%, 8% JPY, GBP 6%, 4% CAD and other currencies 7% (SNB, 2014, 79).

In order to temporarily affect the Swiss franc trade, the decision of 15 January 2015 should have been published without previous notice, in the form of a surprise, but immediately after the announcement there was a sudden instability, which gradually stabilised as the day progressed. Therefore, at the time of publication, the SNB was aware that the discontinuation of the minimum rate would lead to turmoil in financial markets and to overvaluation of the Swiss franc. The date for such removal of exchange rate cap (15.1.) was also selected to ensure that the market participants would adapt to the new situation as quickly as possible, since there was a high level of liquidity and market presence. The removal of the minimum exchange rate cap on the working day reduced the risk of placing certain market participants at a disadvantage

to a minimum. It was also very important that there was no signal on the termination of the minimum rate and that no information about the time of such termination would be available outside of the SNB (SNB, 2014, 42-43).

**Figure 2.** EUR vs. CHF exchange rate fluctuations (from 01 January 2011 to 08 May 2015)



**Source:** (ECB, 2015)

The chart shows that the SNB in the period from 6 September 2011, when the first increase in CHF value occurred, maintained a stable exchange rate over three years, i.e. until 15 January 2015. However, it should be noted that the SNB accounted for different participants in the financial markets, without considering the citizens of the entire Central and Eastern Europe who took loans linked to CHF.

## 6. The effects of SNB's monetary policy & loans linked to CHF in B&H

Referring to the last fifteen years, the value of the Swiss franc has increased significantly, both in relation to the euro and in relation to the US dollar. Factors such as the European monetary crisis and Accommodative monetary policy of the US Federal Reserve have strengthened the franc further.

Although the SNB decision to remove the CHF / EUR exchange rate cap has led numerous borrowers repaying loans related to CHF, both in Bosnia and Herzegovina and in the region, into a difficult situation, the question of what the governments, Central Banks and monetary authorities have done in certain countries to protect their citizens, still remains. Although almost every country in the region was affected by the given problem in a similar way, the share of these loans in the total loan portfolio of countries is not the same.

Country	Amount in Billion	% share in total loans
Croatia	35.9billion EUR	10%
Czech Republic	42.0 billion EUR	0.019%
Hungary	1.7billion EUR	-
Poland	30.42billion EUR	14.64%
Romania	-	6-8%
Serbia	23.5 billion RSD	8.5%
	Source: (Reuters, 2015)	
Bosnia and Herzegovina	339.79 million BAM	2.5%

Table 2. Share of loans indexed in CHF in the region

Source: (Kozarić, 2015)

**Table 3.**Overview of the effect of exchange rate change onto CHF indexed loans

Date	CHF Loan - Principal amount	Exchange rate	BAM Loan - Principal amount
02.09.2008	30,000.00	1.217524	36,525.72
03.09.2011	25,963.06	1.756944	45,615.64
23.01.2015	20,737.35	1.967042	40,791.24
09.05.2015	19,984.21	1.883322	37,636.70

2

**Source:** *author's own calculations* 

As can be seen from the table, the user has raised a loan of 30,000 CHF in September 2008, which was the equivalent to 35,525.72 BAM. After payment of 80 annuities and 65% of the total interest due, the amount to be repaid equals to 19,984.21 CHF, or 37,636.70 BAM, when converted into local currency (BAM).

Therefore, given the fact that the currency of Bosnia and Herzegovina is BAM, which is used as the only payment currency, and regardless of the fact that the borrower duly repaid 80 annuities, he is still required to return the amount which is higher than the original principal amount applicable on the date of raising the loan.

**Table 4.** Effects of exchange rate changes on total debt on loans with a currency clause in B&H

Date	Amount of outstanding principal of loans in CHF	Exchange rate	Amount of outstanding principal of loans in BAM
31.12.2014	294,063,177	1.626064	478,165,546
23.01.2015	294,063,177	1.967042	578,434,620

**Source:** the author's calculation based on data from the Central Registry of Credits of Legal Entities and Physical Entities in Bosnia and Herzegovina as of 31.12.2014, and based on the exchange rate list of CBB&H

The above examples demonstrate that the monetary policy of the SNB affected citizens who have taken out loans denominated by foreign currency clause to CHF. Regardless of the fact that the SNB still claims that it is ready to intervene again and to fix the CHF rate, the consequences that this policy has on the individual citizens of Bosnia and Herzegovina and the region are immeasurable. So, the SNB's initial intention of a surprise and avoidance of turmoil in the financial markets, completely neglected the "little people", borrowers who put their trust in CHF. However, it should be noted that the above is not happening solely because of CHF, but also because of the instability of EUR, which continuously records losses in the financial markets, while EU politicians continue requesting weakening of the euro in order to encourage growth in the euro area.

Thus, it is clear that, in a matter of merely few days, the citizens of Bosnia and Herzegovina become additionally indebted in the amount of 100,269,074 BAM, which by no means is a minor amount, and the country that should have taken care of its citizens had not taken any practical measures to do so.

# 7. Different approaches to solution of loans denominated in CHF in the region

The governments in the region reacted differently in resolution of the given problem. Therefore, the Croatian Government has fixed the exchange rate CHF / EUR to 6.39 HRK at the expense of its financial institutions. Such "freezing" was established for the period of one year, which leaves sufficient time to financial institutions to reach an agreement on how to find a solution for tens of thousands of Croatian citizens.

Polish authorities have provided their recommendation to credit institutions to find a solution in order to reduce the costs of borrowers through an expedited process (NBP, 2015), and the Ministry of Economy proposed to the banks to provide their clients with the option of converting their loans into local currency at the exchange rate valid on the day of taking out their loan, at no extra cost.

The Serbian government has provided support to the commercial banks to assess the condition of their debtors, and to find adequate solutions suitable to particular situations and cases, since there is no solution that would satisfy everyone (NBS, 2015).

By the submission of the Governor of the Central Bank of Bosnia and Herzegovina, Kemal Kozaric on 12 March 2015, the B&H Parliamentary Assembly was informed that, on the basis of legal authority of the CBBH, which is responsible for maintenance, defining and controlling the implementation of monetary policy of Bosnia and Herzegovina, there were no instruments that could have been used to possibly influence the contracting services provided by the financial intermediaries in B&H,

which include loans denominated in CHF.

After careful consideration of the problem, CBB&H concluded that no specific actions were to be made towards the banks, since the CBBH had no legal jurisdiction in the supervision of bank operations and of the adoption of by-laws governing the operation of banks. Thus, the Standing Committee on Financial Stability only had the option to provide their recommendation, which had been done several times when referring to loans denominated in CHF. The final opinion of the CBB&H Governor and the Central Bank was that the loan agreement represents the will of the two parties, and that the rights and obligations of the contractual relationships between the bank and the client are subject to the Law on Obligations, so the optimal solution for the given situation, i.e. a loan denominated in CHF, should constitute an agreement between the bank and its client, with the competent court of jurisdiction being the ultimate authority for dispute resolution (Kozarić, 2015).

## 8. The prospect of credit debt denominated in CHF

Although Switzerland is concerned about the overvaluation of the Swiss franc whose value was increased again in April 2015, due to difficulties in negotiations of creditors with Greece, the EUR/CHF exchange rate came closer to 1.02, meaning that there is a possibility that the SNB has already intervened to prevent a further overestimation of CHF. The author's opinion is that if the Swiss franc starts to rise again, the SNB will intervene in the foreign exchange market and will probable reduce interest rates even further towards the negative value. However, it should be noted that the world's major financial institutions, including Bank of America and Head of Foreign Exchange, predict that the EUR/CHF exchange rate would reach 1.00. Therefore, in order to achieve a new equilibrium, i.e. to balance the currency, a certain period is necessary.

However, the most important opinion is the opinion of the SNB, which claims that CHF has been significantly overstated and that it should gradually weaken over time. It should also be noted that European officials are calling for the weakening of the EUR in order to boost the economy of the region. This situation can be very easily turned into a tug-of-war over the EUR/CHF exchange rate between the Swiss National Bank and European Central Bank.

Thus, high-level monetary policy and monetary strategies are imposed onto the already poor people of Central and Eastern Europe, including the people of Bosnia and Herzegovina, who unfortunately do not have a country ready to intervene on behalf of their citizens, since the above situation still refers to political games played by big players.

#### 9. CONCLUSION

SNB's decision from January 2015, to remove the CHF/EUR exchange rate cap has provoked strong reactions throughout the global economy, but has been particularly emphasized in parts of Central and Southeast Europe, including Bosnia and Herzegovina. On one hand, the ECB and the EU politicians are calling for the weakening of the EUR. The SNB is struggling with overvalued Swiss franc against the euro, which can be characterized as a tug-of-war, where both policy makers try to enforce their own ideas at the cost of the other party. However, removal of the CHF / EUR exchange rate cap can be defined as the capitulation of the Swiss National Bank, since such action caused massive losses for the SNB, with the exchange rate changing for about 30% in a single day.

Due to high-level monetary policies and monetary strategies, significant losses resulting from such SNB's action have been forced onto the already poor people of the region who had borrowed loans denominated in CHF, causing the debt of certain individuals to rise by 30% in a single day. Likewise, what should also be noted are the situations where the clients who raised such loans orderly managed to return the annuities throughout eight years period, and in January 2015 the principal amount of their load surpassed the actual amount raised eight years ago. Also, the citizens of Bosnia and Herzegovina became indebted to an additional 100 million EUR only during the first few days of 2015.

So, what is to be expected in the future and how should the citizens of Bosnia and Herzegovina and the region react? It should be noted that, as far as the region is concerned, only the Croatian Government intervened in order to protect the interests of its citizens by transferring the exchange rate losses onto the financial sector, which has not been the case in B&H. As for the citizens of B&H as well as the citizens of other countries in the region who had raised loans denominated in CHF, the best chance would be to hope that the SNB would, to benefit the interest of the Swiss, again have to intervene in the financial markets and set a CHF/EUR exchange rate cap, thus providing them with sufficient time to convert their loans into loans denominated in local currency, which in the case of Bosnia and Herzegovina is - BAM or alternatively EUR.

It is clear that many of the world's and economic issues are managed and influenced by the politics, often causing political issues to be resolved through economy, which unfortunately usually and mostly affects the people who bear the burden of "the world's monetary games".

Finally, it is important to emphasize that all the above concern only economic indicators and the effects of such economic phenomenon, but the question remains what the psychological effects will be and have been on the people and families who

practically monitor a CHF exchange rate on a daily basis, experiencing enormous amount of stress on a daily basis.

Finally, based on the available information presented and summarized in this article, each loan beneficiary is left with a choice whether to immediately convert the loan or later, or perhaps not at all, or to wait for the end of the world monetary games and then convert the loan, since a large number of non-economic factors affects the stabilization of the EUR/CHF exchange rate.

# MONETARNA POLITIKA ŠVICARSKE NACIONALNE BANKE, DEVIZNI KURS ŠVICARSKOG FRANKA I NJIHOV UTJECAJ NA GRAĐANE BOSNE I HERCEGOVINE

## SAŽETAK

Historijski posmatrano, švicarski franak je često prihvaćan kao sigurno valutno utočište gdje su se investitori sklanjali prilikom pokušaja izbjegavanja globalnih makroekonomskih ili geopolitičkih rizika. Neočekivano uklanjanje blokade kursa CHF/EUR od strane Švicarske nacionalne banke je u januaru 2015. godine uzburkalo dešavanja na svjetskim finansijskim tržištima, a reakcija je bila precjenjivanje CHF za oko 30%. Značajne posljedice ovog poteza SNB su osjetili i građani BiH, ali i regiona. Rezultatima istraživanja ovog članka ostvarena je primarna misija istraživanja: afirmisati poznavanje monetarne politike SNB, ali i njenog utjecaja na građane BiH. U članku su detaljno izložena najvažnija obilježja monetarne politike, njeni modeli i instrumenti, te monetarna politika SNB. U toku pisanja ovog članka, posebna pažnja je posvećena efektima monetarne politike SBN na građane BiH, ali i različitim pristupima rješavanju problema kredita denominiranih u CHF. Također, na kraju članka je prezentovana moguća perspektiva kredita denominiranih u CHF.

Ključne riječi: CHF, EUR, SNB, monetarna politika, kurs.

#### **LITERATURA**

- 1. A.C. Fernando, 2011. Business Environment, Pearson Education India
- 2. Abdel-Monem, T., 2015. What Is the Gold Standard?, University of Iowa Center for The Center for International Finance and Development, [online]. http://ebook.law.uiowa.edu/ebook/faqs/what-is-the-gold-standard, [Accessed: 04.05.2015]

- 3. Abel, A., Bernanke, B., 2005. Macroeconomics, 5th edition, Pearson, Wesley
- 4. Athanasios, O., 2008. Taylor rules (Abstract). The New Palgrave Dictionary of Economics, 2nd Edition. v. 8.
- 5. Baiden, J.E., 2012. Inflation Targeting: Why the value of money matters to you, Xlibris Corporation
- 6. Benchimol, J., Fourçans, A., 2012. Money and risk in a DSGE framework: A Bayesian application to the Eurozone, *Journal of Macroeconomics*, vol. 34.
- 7. Billi, R.M., Kahn, G.A., 2015. "What Is the Optimal Inflation Rate?", Federal Reserve Bank of Kansas City Economic Review, No. 2., [online]. http://www.kansascityfed.org/Publicat/ECONREV/PDF/2q08billi\_kahn.pdf, [Accessed: 06.05.2015]
- 8. Centralni registar kredita poslovnih subjekata i fizičkih lica u Bosni i Hercegovini na dan 31.12.2014 godine
- 9. Dangi, V., 2014. *Investment Management and Security Valuation: for B. Com-III Semester-V*, VK Global Publication, New Delhi
- 10.ECB, 2015. European Central bank, [online]. https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-chf.en.html, [Accessed: 08.05.2015]
- 11. Encyclopedia Britannica, William Jennings Bryan, [online]. http://www.britannica.com/EBchecked/topic/82490/William-Jennings-Bryan, [Accessed: 05.06.2015]
- 12. European Central bank, [online]. https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-chf.en.html, [Accessed: 08.05.2015]
- 13.Federal Constitution of the Swiss Confederation, Article 99., [online]. https://www.admin.ch/ch/e/rs/1/101.en.pdf, [Accessed: 07.05.2015]
- 14.Federal Reserve Bank of New York, "Open Market Operation", [online]. http://www.newyorkfed.org/aboutthefed/fedpoint/fed32.html, [Accessed: 05.06.2015]
- 15. Ford, W.N., 2013. *The Constitution, Government, Politics and the Economy*, Friesen Press, Victoria, BC, Canada
- 16.Jahan, S., 2015. Inflation Targeting: Holding the Line, IMF, [online]. http://www.imf.org/external/pubs/ft/fandd/basics/target.htm [Accessed: 30.04.2015]
- 17. Kozarić, K.: Centralna banka B&H, Informacija Centralne banke Bosne i Her-

- cegovine o problemima korisnika kredita ugovorenih s klauzulom o indeksiranju obaveze u CHF i mjerama poduzetini za rješavanje ovih problema za sjednicu Parlamentarne skupštine B&H na inicijativu poslanice Aleksandre Pandurević koja je usvojena na 7. sjednici održanoj dana 26.02.2015. godine i dostavljena dopisom broj 01-50-15-7/15 od 26.02.2015., [online]. https://www.parlament.ba/sadrzaj/plenarne\_sjednice/Default.aspx?wsid=46225&langTag=bs-BA&pril=b, [Accessed: 09.05.2015]
- 18.Kwakye, J. K., 2012. "Key issues in the choice of an appropriate monetary policy framework for Ghana", *The Institute of Economic Affairs (IEA)*, Ghana, No. 32., 2012, pp. 10-11., [online]. http://ieagh.org/wp-content/uploads/2014/07/mono-32.pdf, [Accessed: 03.04.2015]
- 19.NBP, National Bank of Poland, Press release after the meeting of the Financial Stability Committee, [online]. http://www.nbp.pl/homen.aspx?f=/en/aktual-nosci/2015/fsc.html, [Accessed: 09.05.2015]
- 20.NBS, National Bank of Serbia, No Copy-Paste Solutions to CHF-Indexed Loans, press release, [online]. http://www.nbs.rs/internet/english/scripts/show-Content.html?id=7957&konverzija=no, [Accessed: 09.05.2015]
- 21.Reuters, 2015. Factbox: CEE exposure to Swiss franc lending, [online]. http://www.reuters.com/article/2015/01/15/us-swiss-snb-cee-factbox-idUSKBN-0KO1U420150115, [Accessed: 09.05.2015]
- 22.SNB, 2015. Swiss National Bank, 107th Annual Annual Repport 2014, [on-line]. http://www.snb.ch/en/mmr/reference/annrep\_2014\_komplett/source/annrep\_2014\_komplett.en.pdf [Accessed: 07.05.2015]
- 23.SNB, 2015a. Swiss National Bank, SNB balance sheet items end of March 2015, [online]. http://www.snb.ch/ext/stats/balsnb/pdf/deen/A1\_Ausweise\_ der\_SNB.pdf, [Accessed: 09.05.2015]
- 24. Sullivan, A., Sheffrin, S.M., 2003. *Economics: Principles in action*, Pearson Prentice Hall. Upper Saddle River, New Jersey

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