

# WAYS OF HANDLING THE NATIONAL CURRENCY IN THE CRISIS ECONOMY

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## **Abstract:**

*This paper aims to present a new vision on national currencies, focusing on power reserve currencies belonging to the major economic powers, that play a critical role in the world economy and international economic relations. Moreover, it wants to be measured as the first milestone, starting the publication of an econometric model which quantitatively demonstrates the way in which their influence can generate benefits in terms of nation's wealth it produces.*

**Key words:** Central Bank, Power reserve currency, Financial Crisis

**JEL clasification:** E51, E52, E58, F31, O24

## **INTRODUCTIVE NOTES**

The Crisis Economy is a special category during which most times people and governing bodies of states behave atypically, implementing special measures and policies that, most likely, during healthy economy times they would not take.

During the undertaken research the author focuses on the concept of crisis economics, the ways to influence it, and the nations' ability to ensure supplementary income for a better management of the implemented measures, in particular through central banks. Also the international currency market in the shape of foreign exchange markets (Forex) is a central point in the author's conducted studies and research.

Thus, bonding of the above categories, it creates the framework for a new concept derived from existing elements but also coming with new visions and new aspects of how power reserve currencies can play an important role in generating value for the states that issue and know how to put them at work.

The power reserve currency concept is based on the privileged category of currencies issued by the world economic powers, currently playing an important role in international trade, that are present in large amounts in the national reserves and all world population savings. This role can also be performed by the main commodities that are traded internationally, including here precious metals and even oil. Past experience has shown that during crisis situations people tend to increase demand for certain instruments in this category, and this could generate major benefits for the issuing states, if they know how to manage in an appropriate issuance and withdrawal of currency on the market.

The ending part of the paper highlights how Switzerland managed such a situation, while the increasing demand of Swiss francs on international markets during the summer of 2011. Attention is focused more on the management of this particular case, as the monetary decisions coming from the National Bank Switzerland may act as a double-edged sword that could turn against the holder at any time.

The article builds up the way for a mechanism that is intended to be embodied in an econometric model that will show in quantitative terms which is the last milestone that can be reached by a central bank performing such a currency manipulation act.

### THE POWER RESERVE CURRENCY ISSUE

It is well known that during a global crisis, a vast majority of the world population’s savings and even the national reserves of states tend to head for safe assets. These assets may include precious metals, or currencies which have less powerful states suffer from recession.

Since 2008 that coincided with the installation financial crisis in most of the countries of the world gold and silver registered a continuous increase, even spectacular in some periods. The charts below illustrate the progress achieved by these two precious metals in the past. It is japoneje candle charts, with intervals of one month for each candle. These are personal processings based on a marketmaker’s trading platform that I believe provides the most comprehensive range of traded products on the Romanian market, including here from precious metals, currency pairs, indices, other goods (commodities) and even stocks traded in several exchanges of the world[5]. These provided instruments are traded as CFD (Contract for Difference), the trader obtaining profit or loss recorded only on the difference between the buying and selling levels that concluded the transaction.

It should be noted that the market prices provided by the Market Maker are the real ones used worldwide, but they can oscillate with a maximum of 2-5 pips to other serious trading platforms, be they Romanian or foreign. Drawn with white candles are representations for price increase, and black candles for decrease.

**Figure nr. 1. Gold price evolution during 2006-2011**



**Figure nr. 2. Silver price evolution during 2006-2011**

From the graphs above, it can be seen that from the beginning of the study is represented by the vertical bar corresponding to October 2008 the two precious metals prices started climbing.

Thus, the candle for October 2008 has been the last that registered a consistent decline, dropping gold price from opening \$ 871.57 / oz to the lowest level reached by that time, which is \$ 681.58 / oz visible in the "Data window", the window representing the key levels for the selected candle. It should be noted that this minimum level is the normal price candle registered before the first shock waves released during September 2008, this being represented on the graphic in the form of climbing candles that are more substantial than in previous periods.

But at this point, marked by the last significant lowering of global gold price, onward, a trend can be observed, marked by the higher highs and higher lows, with a small period of congestion in the year 2009, which but that was easily overcome.

It is of extreme importance to note that most of the candles in the period after the global financial crisis began, are much longer than the preceding key moment. This indicates an increase in trading volume (such forex platforms, being decentralized, the volume indicator is irrelevant unlike centralized stock exchanges markets) and thus an increase in worldwide investors appetite for this financial instrument. Note that in the period the gold price rose from \$ 681.58 / ounce to \$ 1,855.67 / oz, even reaching a peak somewhere around 1920 USD / ounce, yet unsupported value. However, the candle at September 2011 is not yet closed, the takeover took place in the month between 9-14. It shows almost a tripling of the price of saving in a period of only 3 years.

The silver situation, presented in chart nr 2 is not much different, it recorded a first shock in September 2007 and the upward trend trigger is still in October 2008. In this case, the price rose from \$ 8.48 to \$ 41.59 at the time of data acquisition, but passing through the point of 48 USD, which indicates a price increase of about 6 times until the maximum and 5 times at the data acquisition.

We can also approach the Japanese yen as a reserve currency this time, as it became the main reserve currency worldwide during the time of financial crisis, but only to mid 2010, when even Japan was put into difficulty due to large amounts granted as credit to the deeply affected U.S, a different currency has become the star of international exchange market, the Swiss franc.

**Figure nr. 3. USD/JPY evolution in 2006-2011**

As can be seen from the graph above, the decline trigger point in the dollar yen happened in mid 2007 when, after a June which brought new strengths in the USD/JPY, August brought a dramatic decrease, with a long descent equal to the sum last three months of growth. It may be noted that the following candles are longer than the time before panic took over the housing market. In fact, panic is one of the strongest factors influencing the forex market, resulting in abrupt movements.

Thus, in a period of only a few months, the USD/JPY pair has fallen around 20%, from 123 Japanese yen per dollar, even up to 95 yen for one U.S. dollar, exceeding the minimum levels dating from the period before 2000, and easily breaking the natural support, that previous kept the market. There was a natural withdrawal from a technical point of view, Fibonacci stopped around 50%, then followed new decreases in price kneeling to the new patterns. It should be noted that the next wave down was triggered by the announcement that the Lehman Brothers was declared bankrupt, being thus the start of the global financial crisis.

But with the great Asian currency, during the current crisis, a decisive role, and yet very intriguing to play was given to a different currency from the five major world currencies. It is the Swiss franc, which especially after last months of 2010 managed to break the previous historical highs and became highly sought, especially wanted as reserve currency.

Thus, from the following graphs can be observed the greater candle length starting with 2007 compared with previous periods, when a monthly candles had on average about 200 pips, while during the crisis year, their length increased considerably, an average candle reaching approximately 600 pips, except for 2009, three times more.

Figure nr. 4. EUR/CHF evolution in 2004-2011

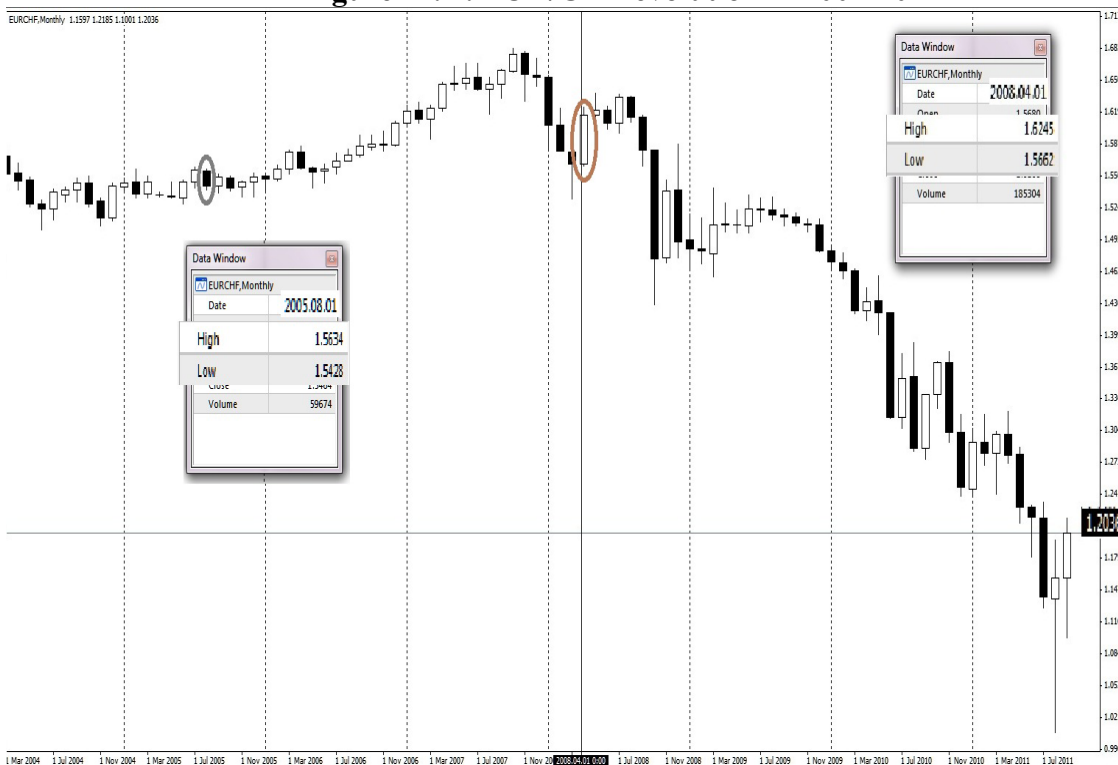


Figure nr. 5. GBP/CHF evolution in 2005-2011



Of charts and analysis presented above we have seen that in times of crisis, humanity tends to choose certain instruments to transfer their savings and reserves including here precious metals and power currencies.

Before this analysis we were talking that some states holding such currencies can provide substantial income from carrying on activities in financial markets, which involve its own newly issued money. How can this happen is the question that we'll try to find the answer to in the next section.

## **PRACTICAL STUDY OF A POWER CURRENCY USE FOR THE PURPOSE OF OBTAINING INCOME – THE CASE OF SWITZERLAND**

As stated in previous paragraphs, the states which have the advantage of issuing strong currency can achieve significant benefits by manipulating the amount of currency issued in circulation. Thus, in periods of strong currency appreciation, they can easily put in circulation amounts raised in the international circuit.

As presented in the previous subsection, the Swiss franc situation during the current crisis was a prime. While other currencies like U.S. dollar, euro or sterling pound were depreciating on the international level, the franc formed and maintained a very stable and comfortable trend. Thus, huge amounts of other international currencies tended to be converted to the new currency with a pivotal role in the world circuit.

It is notable the appreciation did not have a strictly fundamental character, coming as a result of the never before seen ascension of Switzerland but was rather due to the populations reduced trust, on the global level, in the other coins which until the moment the crisis broke were the main reserve coins.

If we add to the issue the situation of the countries outside the euro zone in regards to the sovereign debts which have even weakened the trust in the existence of euro in the following period, the populations economy issue becomes more clear.

As a result, the request of precious metals has risen, the prices rising up to three times for gold and up to 5 times for silver in the last 3 – 4 years along with the Japanese coin which has risen with up to 30 – 40 % compared with the American dollar, euro, sterling pound or Swiss franc, which at least for the last two years has become the star of currency exchanges, having the largest request and managing to break tops after tops.

While appreciating due to the strong demand, the Swiss franc continued to enjoy an increase in demand, which could be explained using the snowball system. Bullish factors coming from the technical analysis never ceased to appear, and in moments of lucidity, the demand carriers, especially speculators obviously started to ask "how far?", new elements of analysis underlying the states that were facing issues appeared, giving new speculative impulses to the rising of the franc.

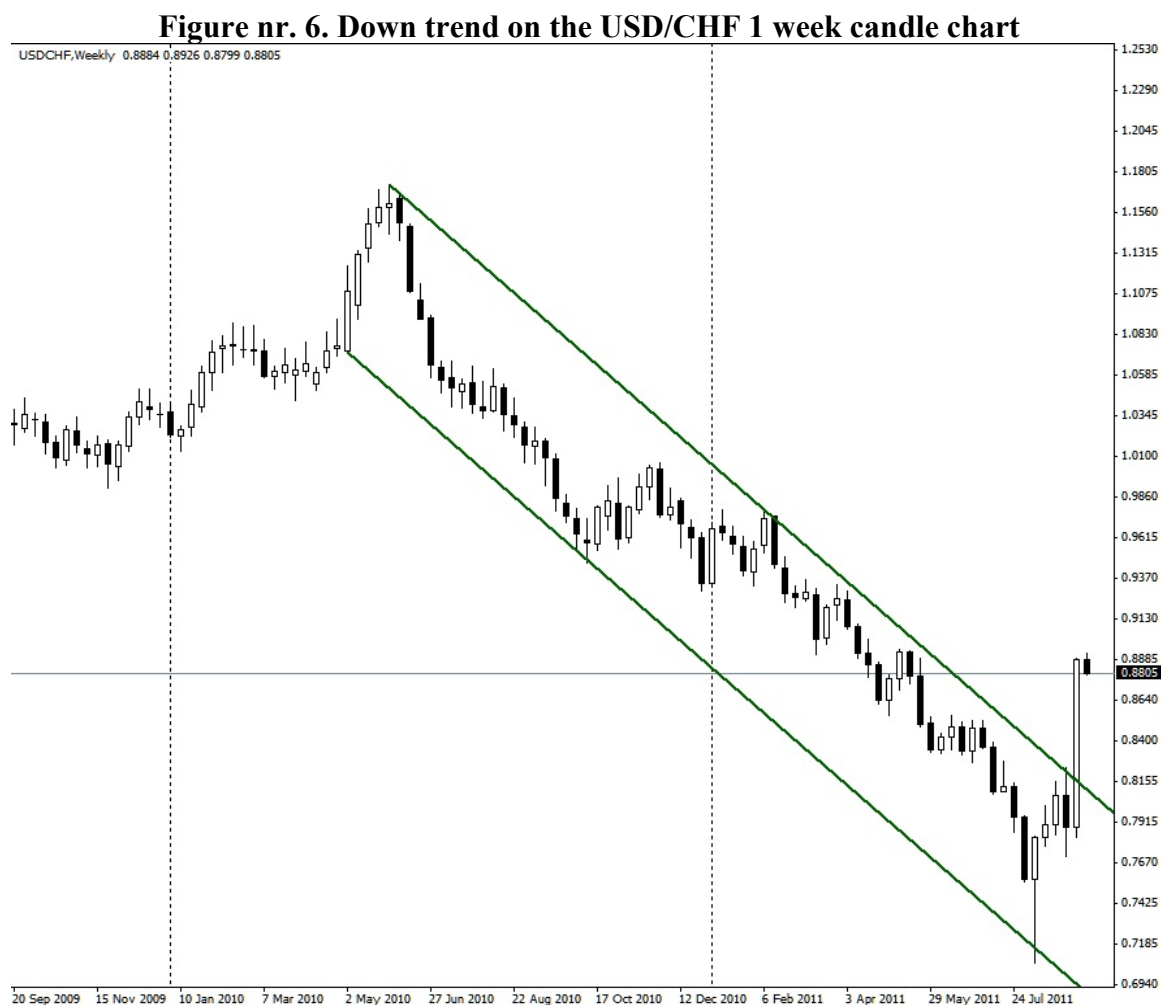
According to the theory that I express, these are ideal situations in which states are in the privileged position and can provide themselves with major advantages of using appropriate strategies of supplying the global market with liquidity. There is not an ethically exuberant method, but it is possible to apply such a method and historical experience has shown that including the United States have pursued a similar strategy in the post Bretton Woods, but in another context both historically and economically.

In such circumstances, monetary issue is easy, as all amounts circulate easily, finding their place in a market in search of that currency. Therefore the central bank can inject new liquidity in the market by buying government securities, other currencies or securities, or open market operations, but buying currencies on international market using the currency that is intended to be released it would be much more effective in such situations. This way, the central bank in general the issuing economy drops some appreciation rate, but blocks some of the advantages of having such currencies[4].

It is important to take account of how these injections occur with newly created money in the market, especially given that, on the foreign exchange these conclude in a major psychological factor. Thus, a distraction from the issuing bank that ensures a halt to currency appreciation can lead to a blocking period of profits from international speculators, which would make a significant correction. These action levels can be calculated with greater accuracy in such situations, especially on such a market, where technical analysis prevails.

It is known that on the financial markets, candlestick formations encountered on larger timeframe graphics are combinations of formations present in the lower timeframe graphs. Thus, a wave part of a trend consists of a pulse and a correction on a Timeframe say on the weekly is

nothing but a succession of two opposing trends that effect the lower timeframes candlesticks graphs.



The representation above shows a trend format on the USD/CHF pair on the weekly timeframe from June 2010 to July 2011. It is interesting to watch how the descent forms even a trend channel with the upper trend line as standard, accompanied by a parallel line joining low points at the format pattern.

The idea of the central bank intervention wanting on the one hand to offer the world wide required quantities of currency, and on the other hand obtaining gains in this process of providing sufficient liquidity to lower the speed of the down trend's, but carefully enough not to invert the trend earlier than necessary. Thus, the lack of attention may have major consequences and the correction could become more important with the momentum. This could send the market signals[2] that selling pressure is greater than the franc buying pressure, which in terms of speculation could lead to increased sales of francs against dollars or purchasing currency the USD/CHF pair, which would tend to increase more than the franc appreciation against the dollar, with the possibility of reversing the trend.

But in present conditions, this report could have been observed so that the bank of Switzerland, could provide the markets with newly issued francs, corresponding quantities of foreign currencies against the international movement. A very important aspect is that during the entire period of time, the franc was the same relationship with in all major currency pairs, which could provide a wide range of options that could be juggled by the issuing bank.

Of course the effects of currency appreciation on external balance can be devastating. It is advisable that the central bank to know when and how to stop. I think that the Swiss bank issue was under control the entire analyzed period. So getting out of this situation was appropriate.

The appreciation of swiss franc had the peak at 0.71 francs to the dollar in August 2011. On August 10, Swiss National Bank decided to start fighting against the domestic currency appreciation.

As a psychological factor on the forex market intervention that had an immediate effect. The graphical analysis shows how in only one day, the French lost about 400 pips against the dollar, while in previous periods that same number could have been acquired in a period of one entire month.

Thus, a sudden movement is visible, following an attempt to accelerate the rate of appreciation of the Swiss franc against the dollar. This can be seen on the other currency pairs as well, as it is not due to policies implemented by the Fed, but the CBS announcement. I used the term announcement as the most significant impact in this move came from the psychological impulse induced to the speculators by the central bank, making them block some of the profits they had scored so far.

This evolution can be followed in the next representation.

**Figure nr. 7. SCB intervention on the USD/CHF**



From previous representation I wanted to highlight on the one hand the movement caused by the announcement of starting to fight against franc appreciation, and on the second hand the strict way the chart respected technical analysis elements. Thus, climbing started at 0.72 CHF/USD, rising to the resistance formed by the convergence between the trend line, then the 0.82 CHF/USD level which is a round number, that play a natural support and resistance role, while achieving the Fibonacci resistance level of 78.6% from the previous impulse.

From a technical point of view, this move could be considered a typical withdrawal and could begin another down wave. This is oftenly seen on the graph, after reaching level B, the dollar starts to continue depreciation in favour of the franc. However, BCS comes at a key moment to finally reverse the trend. Chooses the 38.2% level of retirement to make the following announcement on market intervention.



**Figure nr. 8. The second SCB intervention representation on the USD/CHF**

You can see how the Fibonacci 38.2% which coincided with the round number 0.89 CHF/USD, formed a period of indecision, the market waited for clues on the direction it will go further. The hint came on September 6th, when the Swiss National Bank announced how it will implement action to combat forced appreciation of the franc, namely the introduction of a system of fixed rates established at 1.2 francs for one euro. The following resolute reaction of the market can be seen with naked eye, the market moved in a single day 800 pips, which translated means a depreciation in real terms by about 10% of the franc against the U.S. dollar. It is a clean break of the trend line, with a candle without long and too obvious wicks, which gives even more credibility from the technical perspective. The pair stabilized in a key area also, that of the 161.8% Fibonacci extension level, which coincides with round number 0.89 CHF/USD and other support and resistance levels earlier.

It can be observed from this analysis how the fundamentals are intertwined over the technical analysis, with very interesting results. If this market is generally defined by a low fundamental analysis influence that is subject to the much more relevant technical levels, some key news, wearing the form of intervention from the monetary authorities[1], can have a major impact in further development of a currency pair.

As a final report of developments in recent months, it is worth noting that the Swiss Central Bank has the means to implement the developed and explained in this chapter theory at its disposal. Thus, it could get on some significant gains by buying cheap currencies with its own newly issued currency appreciation during its appreciation. Meanwhile, the world market could be flooded by the newly created Swiss francs, which would lead to the moderation of the continuous appreciation of its currency. From this perspective, it is interesting to analyze the net gain that could be achieved by Switzerland as a nation at the expense of other states. A simple calculation would show us that a depreciation of the Swiss with 20%, calculated simply by dividing the current value by the past value of the franc parity with all other strong currencies would generate profits only from the

official reserves of other countries in the world of about[6], 1 billion U.S. dollars. But the highest value is the amount held by the public, where Switzerland could achieve more substantial benefits.

### CONCLUDING REMARKS

Central banks have the ability to dramatically influence the domestic currency exchange rate and in the situation of power reserve currencies, they may even provide an income for the national economy through interventions such interventions. The concept of power reserve currency deserves to be studied, and the benefits they provide for their issuing states can and deserves to be investigated in future studies. Personally, I will continue to explore this area, with the final target of achieving an econometric model to quantitatively demonstrate the way to have these advantages.

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