

## **CONSIDERATIONS REGARDING UNCONVENTIONAL MONETARY POLICIES OF CENTRAL BANKS DURING THE PRESENT FINANCIAL CRISIS**

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### ***Abstract***

*The paper deals with the unconventional monetary policy of the Central Banks with regard to their fundamental role in ensuring the stability of the financial systems affected by systemic financial crises. Are unconventional monetary measures determined by either an increasing critical role of the Central Banks in the world economies or by a short-term lack of effectiveness of the classic monetary measures – this is the question we try to answer. The present financial crisis has a special feature if compared to the previous ones, it differs not only in size but also (mostly) in its effects on the world economies. Assuming that the Central Banks intervention during a financial crisis when markets are distorted is of major importance, we intend to briefly analyze the measures taken by the Central Banks such as Federal Reserve or European Central Bank for a proper operation of the markets during the financial crisis as well as their purpose and the context.*

**Keywords:** *unconventional monetary policies, central bank,*

### **1. A point of view on changing the role of the Central Banks in the world economies during the present financial crisis**

The paper aims to present the new role of the Central Banks they subtly played during the financial crisis triggered in 2007-2008 and afterward, which made people believe that the Central Banks were the only savers from economic collapse or credible institutions able to revive the economic cycle.

In this respect, the Central Banks took both classic unconventional, for managing some collapsing banking systems and preventing the blocking of the financial-banking system. We analyze some of these measures taken by Central Banks, including National Bank of Romania. The impact of the NBR's actions is discussed in the economic context of our country. Our conclusion is that the unconventional measures taken by Central Banks for managing the effects of financial crises and resuming the economic cycle are effective tools to attain such objectives.

Central Banks have acquired importance and played a higher role in world economy especially by gaining independence from the political power. This began in late 1970's, when the demand stimulation policy (a cause of inflation) failed. Inflation reached alarming levels and no longer followed the Philips's curve; besides, unemployment was mounting up. Inflation is basically a monetary policy aims at price stability. According to Cerna (2013) Central Banks should be protected against the governments' involvement in formulating and implementing a monetary policy. Central Banks were obliged by law to pursue a monetary policy aiming at ensuring price stability. This independence was defined in different ways: for FED, their independence was defined not "in relation to the Administration" but "within the Administration"; for the Bank of England, the right to establish what "price stability" means is the Governments's task; for the Central European Bank, the independence from Community institutions and member countries' governments was defined in "Treaty establishing a Constitution for Europe"; for Romania, article 2 under the Law 312/2004 on the statutes of National Bank stipulates that "the fundamental objective of the NBR is providing and maintaining price stability. National Bank of Romania supports the general economic policy of the State, without hindering the fulfilment of its fundamental objective".<sup>1</sup>

Before the crisis, inflation was the main cause of financial instability. According to Isarescu (2012)<sup>ii</sup> "price stability is a (almost) sufficient condition to promote the financial stability". By setting low levels of inflation, the Central Banks decisively contribute to financial stability and economic growth sustainability. At least this paradigm was promoted at the conceptual level. Isarescu added that the present crisis began in 2007 in an economic environment characterized by low levels of inflation (the great moderation), and thus the price stability axiom could not ensure financial stability. Moreover, according to Croitoru (2012), in countries with very low inflation and higher effectiveness of the monetary policy for correcting the crisis effects, it was lower<sup>iii</sup>.

In our opinion, the increasing critical role of the Central Bank in economy cannot be replaced for fulfilling the Government's fundamental role in managing the public development strategies, which means both their working out and application and the collection and administration of public resources. Translated to an objective as clear as that of the Central Bank, the role of the Government should be general economic growth, finally aiming at raising the people's welfare. The price stability policy and the long-term financial stability policies (as shown above, they are not identical and simultaneous) often contradict the consumption stimulation policies which Governments adopt to meet the voters' expectation,

generally on short term. Especially during the election cycles, these policies are mostly contradictory. Thus, the Governments 'need to increase budget deficits may cause a price rise because of the expanding demand.

Isarescu (2013)<sup>iv</sup> reminds that Central Banks are blamed for excessive focus on price stability and less stimulation of economic growth and full employment. But there is no long-term contradiction between price stability and economic growth, as monetary policies, which keep inflation low and stable, are compatible with relatively high and sustainable economic growth and *de facto* conduct of the Central Banks was flexible and far from neglecting the real macroeconomic variables.

Although the National Bank cannot be responsible for the Governments 'ineffectiveness, the stability measures are essential for fulfilling the above objective, i.e. promoting public welfare. According to Cerna (2013), increasing the role of the Central Banks made us believe that these institutions were able to resolve all economic problems. Therefore, the Governments, which had not been too enthusiastic about the progressive strengthening of the Central Banks roles, gradually accepted that Central Banks should offset the wrong economic policies – even if some legislators and some representatives of the public concerned themselves about the deficit in democracy caused by transferring the task of setting economic policies to an institution the management of which was not elected by universal vote. Thus, while other organizations in charge of setting and implementing economic policies were blocked by unprecedented political polarization – both at national and at regional level, the Central Banks of the developed countries had to resort to their relative political independence and their broad operational autonomy to gain time and allow other authorities to take action<sup>v</sup>.

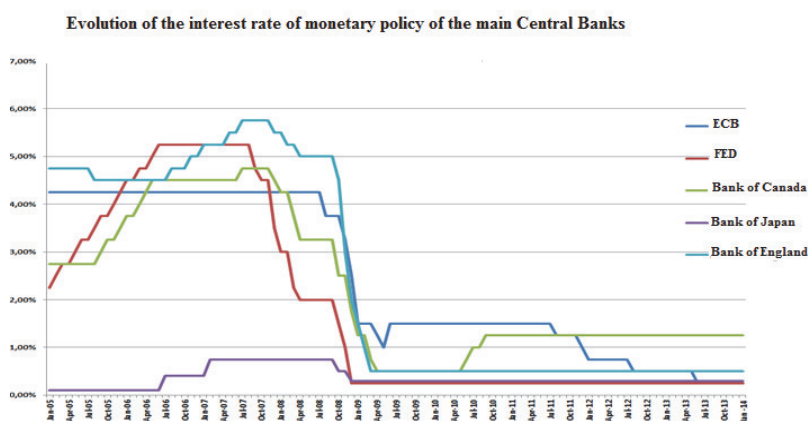
The necessity that Central Banks make use of unconventional methods was determined by the Governments 'inability to cope with economic problems. But many Central Banks warned several times that their capacity to compensate for the lack of action of other authorities or to correct their actions are not quite effective and risk-free. This compensation was based on tools and practices known in literature as "unconventional" (to be discussed below). Such insufficiently tested or risky procedures may obstruct the fulfilment of the price stability objective, with unforeseeable effects on the financial stability of the economy.

## **2. Unconventional measures taken by Central Banks to eliminate the effects of the economic crisis**

Here we intend to analyze synthetically the interventions of the Central Banks for improving the market operation and the effectiveness of these interventions. While during earlier crises Central Banks restrained their role to lender of last resort, during the present crisis they have also taken **unconventional** measures to stop any disturbances in the financial markets. While the crisis was expanding, the Central Banks worldwide diminished continuously the interest rate (*conventional measure of monetary policy*): by the end of 2008 and 2009, Bank of England, Bank of Japan, Bank of Israel, Central Bank of Canada and even European Central Bank

had diminished the interest rate to almost zero. What is unconventional in this measure is *the aggressiveness of the velocity for diminishing the interest rate of monetary policy as well as the almost zero levels of the set rates* (except for Japan, which adopted such a rate in the early 1990's). National Bank of Romania pursued a more prudential policy, and only in 2014 it diminished the interest rate of monetary policy to the historical minimum of 3.75%. The figure below shows the evolution of the interest rate of monetary policy in leading economies; moreover, we may see the aggressive policy of Central Banks to diminish the interest rate of monetary policy.

But the diminution in the collective interest of monetary policy could not stimulate borrowing and, further, consumption and investments, because, at the market level, the negotiated interest remained high because of the lack of safety and certainty that affected banks, households and companies alike.



Irrespective of the methods used (classic or unconventional), according to Fisher and even Friedman and Minsky, as cited by Roubini (2010), to prevent a new Great Depression, a central bank has to intervene and become a *lender of last resort* able to finance banks and even corporations and individuals. In extreme cases, Fisher supports the idea “*reflation*”, i.e. reviving the economy by pouring easy money.<sup>vi</sup>

Another measure of unconventional monetary policy was a **raise in the deposit guarantee ceiling**. To prevent generalized withdrawals of liquidities that might erode the financial system and the economic system, Central Banks worldwide expanded the financial security system protecting the depositors against losses in investment value; the maximum guarantee ceiling varies across countries. The first EU country that raises the deposit guarantee ceiling is Ireland, followed by Greece and soon by Germany, even if initially European Commission said that this measure *hinders the free movement of capital*. In less than one month, European Commission raises the deposit guarantee ceiling from 20,000 euro to 50,000 euro.

## Evolution of the deposit guarantee ceiling

Country	Maximum limits		Remarks
	Pre-crisis	Post-crisis	
Ireland	20,000	unlimited	For deposits of customers, either corporate or retail
Greece	20,000	100,000	
Germany	20,000	unlimited	Only retail customers
United Kingdom	45,000	54,000	
Switzerland	20,000	66,000	
France	70,000		
Austria	20,000	unlimited	Only corporate customers
Romania	20,000	100,000	

Source: Own Processing

European Union intends to apply uniformly some deposit guarantee schemes – a harmonized level of 100,000 euro per depositor/credit institution in order to ensure equal opportunities for EU depositors and implicitly and more confidence in the banking system. US Department of the Treasury announced an increase in the deposit guarantee amount from 100,000 to 250,000 US dollars. According to empirical analyses made by Angkinand (2009), the countries taking measures for increasing the deposit guarantee in crisis period face, on average, lighter losses in economic growth<sup>vii</sup>.

Even if the Central Banks and the Governments took measures for *diminishing the refinancing interest and raising the guarantee ceiling* the markets remained non-transparent, there was almost no confidence in financial and monetary markets which brought on disturbances in the real sector of the economy. After the aggressive diminution in the monetary policy interest, the Central Banks tried to correct the financial market distortions through unconventional monetary policies, thus expanding the fundamental objective set by regulation and creating the erroneous impression that they were able to resolve the economic problems both in developed economics and developing ones.

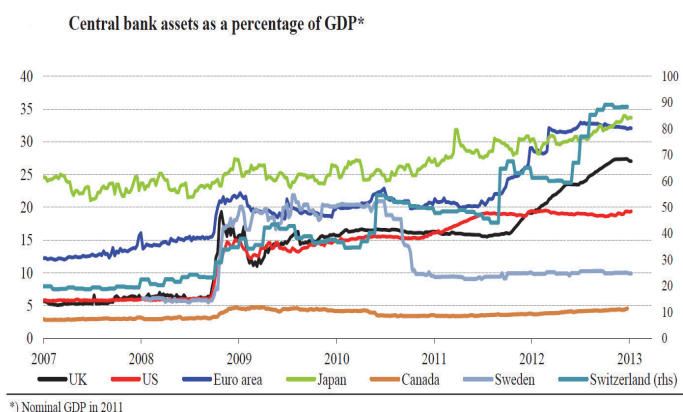
According to Ricardo (2010), the unconventional measures taken by the Federal Reserve are classified into three categories: *interest policy, credit policy* and *quantitative easing*. Quantitative easing policy essentially causes a change in the balance sheet size and the structure of liabilities of the Central Banks<sup>viii</sup>. **Quantitative easing** is an unconventional policy used by Central Banks to stimulate the economy when the classic measures are ineffective. By this method, Central banks buy a pre-determined amount of financial assets from commercial banks and other private institutions, thus increasing the money supply and diminishing the return on those assets. Unlike the standard policy, buying assets by quantitative easing concerns long-term assets (on short-term, it is no longer effective since the monetary policy interest is close to zero).

Bernanke and Reinhart (2004), cited by Isarescu (2012), classify unconventional tools of monetary policy into three basic categories: policy

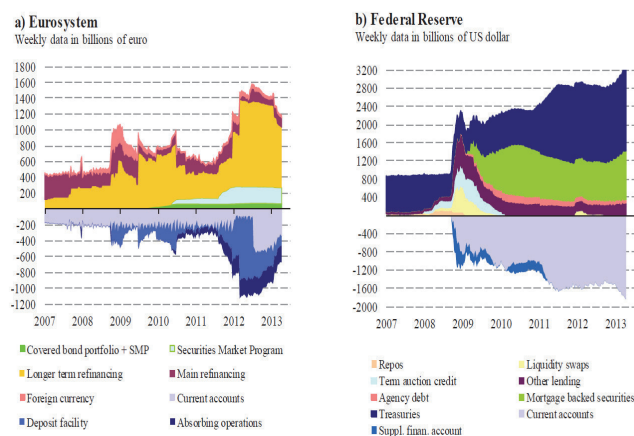
commitment, quantitative easing and qualitative easing (or credit easing). Isarescu says that after the crisis occurrence Central Banks used a mix of these three categories of instruments, and the term **quantitative easing** gained recognition and described the whole set of unconventional measures<sup>ix</sup>. Quantitative easing aims mainly at increasing available amounts of the banks in current accounts with the Central Bank beyond the level required to approximate the overnight interest to zero, and the channels of quantitative easing are the following: portfolio balance sheet – increasing liquidity determines the investors to orientate towards other financial assets, thus increasing assets value and stimulating final demand (Goodfriend, 2000)<sup>x</sup> and diminishing the expected value of costs related to public debt service and, further, the expected value of taxes, due to permanent increase in money supply (Auerbach and Obstfeld, 2003)<sup>xi</sup>.

Also, Isarescu says that **quantitative easing** usually implies an expansion of the Central Bank balance sheet, similarly to quantitative easing, but the stress is laid on the assets structure and not on the monetary base level. **Qualitative easing** pursues to change the structure of the assets portfolio held by the private sector and, implicitly, changes in the level of the relative price, having consequences for economic activity, so that – if the flattening of the term structure of interest rate and the diminution in the risk/liquidity premiums are able to stimulate aggregated demand – the monetary policy is not ineffective even if the short-term risk-free interest rate is zero. The basic measures for qualitative easing are related to the traditional role of the Central Bank as supplier in the interbanking monetary market, by direct interventions in other sectors of the financial market as well as direct purchase of long-term bonds.

The increasing role of Central Banks in the world economies is also revealed by the increasing weight of the assets of these banks in the Domestic Product (GDP). According to Pattipeilohya et al. (2013) – in a study published under the aegis of Central Bank of Netherland – the assets in the balance sheet of the Central Banks exceeded 20% of GDP, as a direct consequence of unconventional measures adopted by these banks during the financial crisis<sup>xii</sup>.



### The structure of balance sheets of the FED and Eurosystem, 2007-2013



Source: Pattipeilohya et al. (2013)<sup>xiii</sup>

According to Apostoae and Matei (2012), the new unconventional measures taken by Central Banks were taken to make substantial changes in balance sheets. These radical changes were made at several levels in relation to size, structure of risk categories and balance sheet composition<sup>xiv</sup>.

### 3. Measures taken by the FEDERAL RESERVE

In the year the financial crisis started, the leading Central Banks introduced significant amounts into the system to ensure liquidity on the interbanking market. In August 2007, the Federal Reserve injected liquidity amounting to 43 billion dollars and another 43 billion in November; ECB introduced an amount equivalent to 215 billion dollars, and Bank of Japan an amount equivalent to 8 billion dollars.

In December 2007, FED increased the liquidity available to financial institutions through the *Discount window lending*<sup>xv</sup> to calm financial markets and investors. When the crisis began, Bernanke took several measures to reduce the difference between short-term interests and later long-term interests established by the market and short-term interests established by the Central Bank. To achieve it, FED set several new facilities for „liquidity” in order to ensure low cost loans for all who needed them. In fact, the Government involved directly in the market, beyond the usual tools for injecting liquidity – by diminishing the one-day interest on federal funds – and directly lent money to financial institutions in need. FED became the main lender of last resort and offered credits and liquidity to a wide range of players within the financial system. Initially, FED considered institutions (deposit organizations or banks) that already had some rights to receive one-day loans directly from FED by means of the *discount*

window. In March 2008, banks could borrow through discount window for up to 90 days, with almost no penalty.

#### Specific measures taken by the Federal Reserve

<b>August 2007</b>	It introduces 43 billion dollars into the system for liquidities easing in the interbanking market.
<b>September 2007</b>	FED diminishes the reference interest rate from 5.25% to 1% in a single year.
<b>December 2007</b>	By means of <b>TAF Term Auction Facility (TAF)</b> , FED offers long-term funds to financial institutions. TAF is adopted also by Bank of Canada, Bank of England and SNB which began to supply long-term funds.
<b>March 2008</b>	The start of <b>Term Securities Lending Facility (TSLF)</b> by which FED's counterparts in operations on the free market may change less liquid bonds for government bonds.
<b>April 2008</b>	The start of the <b>Primary Dealer Credit Facility (PDCF)</b> by which all primary dealers, either investment banks, commercial banks or brokers, may receive loans from FED.
<b>September 2008</b>	Widening the range of securities accepted as guarantees
<b>September 2008</b>	FED concludes <b>swap agreements</b> with ECB, Bank of England, Bank of Canada, Bank of Japan, Bank of Denmark, Bank of Sweden and SNB for amounts available up to 620 billion dollars.
<b>September 2008</b>	Increasing the amount for deposit guarantees from 100,000 to 250,000 dollars.
<b>September 2008</b>	The allocation of 700 billion dollars to recapitalize the banks for buying assets guaranteed by mortgage receivables within the TARP for protecting the banking system against bad assets.
<b>October 2008</b>	FED increases the amounts destined to Central Banks by swap agreements up to the amount necessary to any of them, i.e. an unlimited amount
<b>November 2008</b>	The start of the <b>Money Market Investor Funding Facility (MMIFF)</b> by which the monetary funds in the market can separate the bad assets using a specially structured investment tool guaranteed by Federal Reserve Bank of New York.
<b>August 2009</b>	Extension of the <b>TALF</b> by one trillion dollars; for commercial securities guaranteed by mortgages the TALF provides June 2010 as a final payment date.
<b>February 2010</b>	FED starts the <b>ABCP</b> for ensuring liquidities for Monetary Market Mutual Funds (MMMMF), the CPFF, the PDCF and the TSLF and concludes new temporary swap agreements for liquidities from the Federal Reserve and other Central Banks.
<b>May 2010</b>	Reactivation of the emergency currency swap tool for lending any amount required by ECB, Bank of England and SNB without a ceiling, in dollars.

Source: own processing

As we notice, FED's endeavor to ensure liquidities for the American economy and world economy was huge on short term. FED has maintained the monetary policy interest close to zero since December 2008. The purchase of FED



bonds contributed significantly to economic growth and brighter economic prospects, but this program cannot last for long.

#### 4. Measures taken by the EUROPEAN CENTRAL BANK

At the beginning of the financial crisis, the European Central Bank did not diminish the monetary policy interest rate. But after the collapse of the Lehman Brothers, the ECB reduced the key interest rate to a historical minimum. The main refinancing rate was diminished by a cumulated total of 325 base points, to 1% between October 2008 and May 2009. Moreover, the Board of Governors took several temporary unconventional measures, called Enhanced Credit Support (ECS), and focused further on banks. As there was some uncertainty about the reliability of other banks (not European ones), actually the interbanking market could not function properly. After the fail of the Lehman Brothers in September 2008, the interbanking market was actually blocked. Because of a severely affected market and major credit concerns of the counterparty, the demand for liquidity grew abruptly, while the interbanking credit market diminished at a rapid pace.

Specific measures taken by the European Central Bank since the start of the present financial crisis

<b>August 2007</b>	ECB introduces 215 billion dollars into the system to ease liquidities in the interbanking market.
<b>2007</b>	ECB concludes a swap agreement with the FED for maintaining a balance on the European USD financing markets.
<b>October 2008</b>	ECB decides to grant an unlimited amount at the refinancing rate of interest (the main lending rate of ECB).
<b>Oct. –Dec. 2008</b>	ECB reduces the monetary policy interest rate to 3.75%, 3.25% and 2.50%, respectively.
<b>March 2009</b>	ECB extends for an undetermined period the possibility to borrow unlimited amounts at the refinancing interest rate.
<b>May 2009</b>	ECB provides 60 billion euro for buying bonds, especially mortgage bonds.
<b>July 2009</b>	ECB is the first bank to buy mortgage bonds amounting to 60 billion euro.
<b>May 2010</b>	ECB buys Eurozone bonds amounting to 16 billion euro.
<b>May 2010</b>	Reactivation of swap lines for supplying liquidities, established with the Federal Reserve.
<b>May 2010</b>	ECB launches a program for securities markets; by the end of 2010 the Eurosystem made a purchase of 73.5 billion euro from the Government bond market.
<b>2011</b>	At the end of 2011, the interest rate for the main financing operations was 1%, the interest rate for the deposit facility was 0,25%, and for the marginal credit facility it was 1.75%.
<b>2012</b>	In the second half of 2012, the representative interest rates were maintained at historical levels: 0.75% for the interest rate on the main financing operations, 0.00% the interest rate for the deposit facility of 0.25%, and for the marginal credit facility 1.5%.

Source: own processing

Pattipeilohya et al. (2013)<sup>xvi</sup> try to provide evidence concerning the performance of unconventional measures taken by the ECB. The authors refer to the **Extended Liquidity Provision (LTRO)** and **Securities Market Program (SMP)**. The study reveals that the LTRO had beneficial effects (on short term) on government bonds. But the changes in the SMP caused a diminution in interests in the summer of 2011, when the program was reactivated for Italy and Spain, but the effect vanished in a few weeks.

In December 2013, the ECB Board of Governors decided that the interest rate for the main refinancing operations and the interest rate for the marginal credit facility and the deposit facility should not be modified for 0.25%, 0.75% and 0.00%, respectively, and confirmed that the intend to keep the rates at the same or lower levels for a longer period.

One of the frequent questions asked from the beginning of 2009 to date, especially during political debates in the USA and Europe, was and still is how to stimulate the economy in an environment where the monetary policy interest rate was reduced to zero. The main justification found by the Central Banks for unconventional monetary policy measures consisted in the fact that they continued the relaxation of the monetary policy „by other means” only when the lower limit of short-term interest rates was reached and supported the transmission of the monetary policy to stimulate the economy, taking into account the financial market distortions. The purpose of these unconventional measures was to avoid turning the immediate liquidity problems into more pressing solvency problems that could cause major bankruptcies, assets sales and collapse of financial markets.

### Conclusions

The unconventional measures taken by the Central Banks increased their role in world economies, strengthened by quantitative elements - a considerable expansion of the Central Banks 'balance sheet as well as an increase in their weight in GDP – and also by qualitative elements, i.e. assuming a leading role and using such elements by means of unconventional monetary policy measures effective on short term. The Central Banks tried „to keep their balance on a string” and had to compensate for restarting the engine of the economy by means of massive liquidity as well as by assuming the final objective, i.e. price stability.

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- <sup>xv</sup> The term *discount window lending* refers to an earlier period when banks in need went to receive money directly through the counter window at the FED. Few banks exercised this right just because in normal times, FED requested a penalty interest from everybody coming to the discount window. The purpose was to offer small emergency loans; it was not conceived for crises. But while conditions were worsening, FED diminished the penalty and allowed the banks to receive loans for longer periods.
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