### Jan L. Bednarczyk\*

## THE ECB'S MONETARY POLICY AS A TOOL TO OVERCOME THE CRISIS IN THE EUROZONE COUNTRIES

**Abstract.** The aim of this paper is to analyse the monetary policy of the European Central Bank since 2007 from the point of view of its effectiveness in eliminating the effects of the financial crisis in the Eurozone countries. The main source of data has been the ECB's statistical materials as well as publications of the Bank's trustees interpreting current problems of monetary policy. The research method adopted for the sake of this paper consists in the presentation of key aspects of the monetary policy explicitly oriented toward price stabilization and confrontation of this policy with the specific circumstances of the financial crisis. The undertaken studies indicate that the monetary policy tools which before the crisis were at the ECB's disposal were basically sufficient (following some modifications) to gradually restore efficiency of the main transmission channel for the ECB's monetary policy impulses running through the monetary market to the real sphere of economy. Consequently, the rapid limitation of this sphere financing due to the panic which burst out in international financial markets after the bankruptcy of the Lehman Brothers investment bank had been announced was not allowed. The unquestionable success of the ECB's monetary policy in the period of crisis was skilful reconciliation of a very active re-financing policy implemented in the situation of a significantly reduced basic interest rate with the maintenance of inflation indexes at a low level. On the other hand, it is difficult to find convincing arguments which could prove that this policy can directly contribute to faster recovery of the Euroland economy from the deepest slump in the post-war period.

Key words: European Central Bank, monetary policy, eurozone, financial crisis.

### 1. THEORETICAL PREMISES OF THE ECB'S MONETARY POLICY

The passing financial crisis was a serious test to the monetary policy of industrialised countries based on the consensus reached as a result of long-standing discussions between representatives of leading economic trends. In the 1970s the major division line extended between Keynesians and Monetarists, who presented fairly different points of view as far as the transmission mechanisms, the role and the way of applying the monetary policy tools in economy

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are concerned. Following the "monetary experiment" in the USA and Great Britain as well as an analysis of the effects of various monetary policy tools implemented in subsequent decades, the stances of representatives of both trends started to get closer to one another.

The nature of the discussion going on between the representatives of the New Keynesian Economics and the representatives of the New Neo-classical Synthesis continuing an earlier dispute between Keynesians and Monetarists was a bit untypical as the pragmatic matters and the will to understand the arguments of the other side overweighed the will to show superiority of the promoted views. As a result in the 1990s a common stance was taken with reference to the use of monetary policy as a tool of stabilisation policy and the issues of relationships between monetary policy and other economic policy tools, especially fiscal policy.

The consensus was founded on adopting the views referring to both the classical trend in economics (intertemporal optimalisation, rationalisation of expectations, making the real sphere dynamics exclusively dependent on the real factor influence) and those close to the Keynesian tradition (monopolistic competition, rigidity of nominal wages, key role of monetary policy in stabilization of economy) as the basis of an analysis of the ongoing changes in economy (Goodfriend, 2007, p. 59). A direct consequence of the growing similarity of views in these key issues was the recognition of price stability as a necessary condition (and actually a sufficient one) to maintain economy on the path to stable economic growth and to make the central bank the main institution responsible for making this true.

The new approach developed theoretically and at the same time implemented in practice<sup>1</sup> was soon expressed in the formulation of a new doctrine of stabilisation policy which in time was named the doctrine of inflation targeting. According to this doctrine, price stability is the best way to use monetary policy to stabilize the real sphere and especially to stabilise output and employment. It is so because in the situation of price stability companies can make plans of production profitability without any disturbances; they can also react to the changes in production or competition by their own price adjustments, the macroscale effect of which is maintaining the real production levels around the potential level determined by the supply-side factors characteristic for the economy which admittedly diverges from the model of perfect competition but functions in the situation of price flexibility.

<sup>&</sup>lt;sup>1</sup> It is not fully clear what sequence should be given the theory and policy (central banking practice) in creating the bases and then arriving at the ultimate postulates of the inflation targeting doctrine. Here we accept the precedence of the theory in the sense that it was co-created by practitioners involved in central bank activities.

Supporters of inflation targeting go even further claiming that the fact that the central bank convinced economic units of sustainable low inflation in future may contribute directly to earlier recovery of economy from the recession (Goodfriend, 2007, p. 55). It is so because in these circumstances deep cuts in interest rates are possible (deeper than in the situation of poorly anchored inflation expectations) which maintain consumer and investment expenditures in economy. However, in order to make it possible, central bank must resign from keeping the principles of their policy formulation and monetary policy tool implementation secret and make its policy fully transparent and predictable for economic units. Only then will they be able to appreciate fully its credibility resulting from the determination to stabilise prices.

In the presented model of monetary policy a special role is assigned to the policy of interest rates. It is an explicit divergence from the traditionally negative assessment of this tool by the monetarist trend adherents (Bednarczyk, 1990, p. 52). However, the monetarist supported regulation of money supply turned out to be difficult to be implemented in practice (financial innovations) and less effective, especially in fighting lower inflation. In the situation of lower inflation, regulation of short-term nominal interest rates surrounded by a nearly public debate concerning its objectives and significance for restoring macroeconomic equilibrium, seemed to contribute better not only to moderating inflation-related expectations but also to shaping the levels of long-term interest rates and consequently medium-term economic situation. The essence of the anti-inflation-oriented monetary policy (inflation targeting) is very accurately described by a slogan: "one target, one tool policy", revealing a fairly simplified opinion on economic reality completely dependent on the effectiveness of liberated market mechanisms.

Although the European Central Bank, like the Federal Reserve System, officially did not point to the inflation targeting as the basis of its monetary policy, yet in both the Maastricht Treaty and the Eurosystem Statute (*Consolidated Version...*, Chapter III, Article 9) it indicates the maintenance of price stability as the primary objective of the Central Bank activities. Indeed, in the years 1999-2002 the EBC's objective was maintaining inflation measured by the Harmonised Index of Consumer Prices (HIPC) below 2%. In May 2003 this goal was specified as maintaining the inflation rate below 2%, or close to this level (ECB, 2009, p. 8).

According to the premises of inflation targeting the main tool to achieve this goal is regulation of three official short-term interest rates, from among which

<sup>&</sup>lt;sup>2</sup> The price rise rate expressed in one digit values can be treated as lower inflation, although in countries such as Japan, Germany or Switzerland which traditionally reveal low inflation rates, these values could be qualified as galloping inflation.

one has a leading role<sup>3</sup>. In its policy the ECB takes also advantage of the money supply regulation as well as other tools to shape economic conditions in the Eurozone. Some of these tools are used incidentally, whereas others were used as "non-standard" measures (Trichet, 2009(2) in order to alleviate the financial crisis effects. Hence evaluation of the ECB's monetary policy effectiveness including also its effectiveness as a tool of the anti-crisis policy must be accomplished taking into account all the ECB's measures applied to this end.

# 2. IMPLEMENTATION OF MONETARY POLICY TOOLS IN THE SITUATION OF CRISIS

The European Central Bank reacted to the crisis phenomena very quickly. Provided that the crisis began on 9 August 2007, then the ECB reacted literally within the first few hours as the first central bank worldwide (Trichet, 2009(1). The reaction consisted in assuring banks that they can count on their refinancing in the central bank in the form of overnight loans taken according to the standing fixed rate, with no limits imposed on the amounts, and concluding these transactions within the next few days. As the demand from the banks for these loans was high (95 bln euros on the very first day), lending was continued, which had a temporary calming effect on the monetary market (Stark, 2009).

Other activities which were undertaken in response to the clearly visible significantly larger variability of short-term interest rates than that before August 2007 concerned: manipulating the lending given in particular periods of time within the scope of refinancing operations for commercial banks (frontloading), lengthening the loan repayment periods for banks to three and six months within the supplementary refinancing operations, providing banks with dollar liquidity as a result of swap agreements concluded with the Federal Reserve System, organizing additional tenders every two weeks before the end of 2007 in order to fully satisfy banks' demand for liquidity applying the minimum bid rate which was then at min. 4% (ECB). It must be stated that the market situation in the first phase of the crisis had not caused the ECB authorities any special problems with stabilizing it until the Lehman Brothers bankruptcy was announced in September 2008 and the first signs of panic appeared in international financial markets (Bernanke, 2009).

<sup>&</sup>lt;sup>3</sup>As of 15 October 2008 the role of the ECB's basic interest rate is taken over by a *fixed rate*. The top limit of interest on loans to banks is determined by the *marginal lending facility*, whereas the interest rate on commercial bank deposits in ECB – is determined by the *deposit rate*. The fixed rate precisely equals the arithmetic mean of the marginal lending facility and the deposit rate, and the corridor around these facilities was between 100 and 200 basis points.

The fall of one of the biggest investment banks which was seriously engaged in money markets practically paralysed these markets on both sides of the Atlantic. Particularly the market of inter-bank deposits, which was of crucial importance not only for sustaining banks' liquidity but also for their ability to credit companies and households, stopped to function<sup>4</sup>. The results of inter-bank market collapse included, on the one hand, stoppage of the cash flow between banks, and on the other hand, growing spread (disparity) between official and market interest rates. Both tendencies threatened the traditional transmission channel for the ECB's monetary policy impulses running through the monetary market to the sector of enterprises and households with complete collapse.

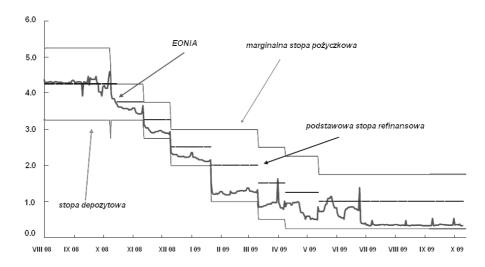


Figure 1. Dynamics of ECB's basic interest rates and EONIA rates in the years 2008–2009 Source: Tumpel-Gugerell, 2009.

In these circumstances, the ECB was forced to undertake a number of activities which somehow replaced the inter-bank market. Firstly, it started a cycle of reducing interest rates in order to lower costs of commercial bank refinancing in the situation when refinancing costs in the monetary market were excessively high. In the seven-month period, i.e. between October 2008 and May 2009, the basic interest rate was reduced in seven moves from 4.25 to 1 percent, that is by

<sup>&</sup>lt;sup>4</sup> Proper functioning of the inter-bank market is particularly crucial in Europe for ensuring cash inflow to the enterprise sector as over 70% of this sector financing are provided by banks. In the United States, where enterprises are financed mainly by the capital market, the share of banks in enterprise financing amounts to ca. 25% (Tumpel-Gugerell, 2009).

325 basis points (ECB). It is noteworthy that the first decision about reducing the basic interest rate was made on 15 October 2008 that is a bit longer than 3 months after the previous one which increased this rate by 25 basis points. At that time the ECB authorities could not predict, however, a dramatic change in the circumstances in which they would have to operate in a few months' time; their decision was determined by willingness to counteract a situation in which inflation expectations might get "de-anchored" if the access to the central bank's money was easier.

A week before making the decision about the basic interest rate reduction, it was announced that commencing on 15 October 2008 this role would no longer be fulfilled by the minimum bid rate with a specific minimum loan profitability and on 28 January 2009 for the first time it would be replaced by the fixed rate. This change indicated that the ECB would be ready to give loans to commercial banks with appropriate securities in full allotment at the fixed interest rate (and not in tenders, as it was done earlier). At the same time, in the period till 21 January 2009, the corridor around the basic refinancing rate (the difference between the marginal lending facility and the deposit rate) was reduced from 200 to 100 basis points, which, on the one hand, was to encourage banks to use the central bank financing and, on the other, to invest surplus money in the central bank if over-liquidity occurs.

Table 1. Selected indicators of changes on the Eurozone financial market, 2007-2009

Specification	2007	2008	2009
1. Average annual value of the ECB's main refinancing rate <sup>1</sup>	3.75	3.55	1.65
2. Average annual value of the EONIA rate <sup>2</sup>	3.87	3.87	0.71
3. Average annual value of 3M EURIBOR	4.28	4.64	1.22
4. Average annual value of 3M LIBOR			
- United States	5.30	2.93	0.69
– Japan	0.79	0.93	0.47
5. Average annual value of 12 M EURIBOR – EONIA spread	0.58	0.96	0.90
6. M <sub>3</sub> money supply growth rate	11.6	7.6	-0.2

<sup>&</sup>lt;sup>1</sup> Until 8 October 2008 – minimum bid rate, since 15 October 2008- fixed bid rate

Source: ECB (2010a), ECB (2010b), and author's own calculations.

These activities turned out to be effective to quickly stabilise the EONIA rate, which from November 2008 started to assume values in between the basic interest rate and deposit rate, and from July 2009 – the values very close to the

<sup>&</sup>lt;sup>2</sup> Interest on one-day inter-bank loans

deposit rate (0.25%). Other short-term rates of the monetary market, such as 12M EURIBOR or 12M LIBOR responded very well to the ECB's decisions concerning regulation of interest rates. Practically since the end of 2008 they have not exceeded 2%, and in time they have increasingly approached the ECB's basic refinancing rate.

Success of the ECB's policy of interest rates in the field of reducing costs of company and household financing was possible mainly because of the properly implemented Bank's refinancing policy. In the critical situation which emerged after the inter-bank market collapse, using the refinancing policy tools, the Bank managed to ensure continuity of financial circulation and to prevent limiting their clients financing. Nevertheless, if crediting had slowed down (Table 2), the reasons for that were more on the demand- than supply side.

The entire activities of the ECB oriented toward sustaining bank crediting, called "enhanced credit support" (Trichet, 2009(1) included, among others, an extended list of assets accepted by the ECB as a security for the loans to banks<sup>5</sup>, extension of the loan repayment period to one year, satisfying banks' demand for foreign currencies (dollars), direct purchases of euro-denominated mortgage bonds/debt certificates issued in the Eurozone countries. Among the above mentioned tools shaping liquidity of the banking sector only the purchase of mortgage bonds/debt certificates was actually a new measure so far not practiced by the ECB. Using it resulted only from a specific situation of the mortgage bond market in the time of crisis. On the one hand, this market remained a traditionally important link of bank re-financing; on the other hand - the loss of trust for all mortgage securities did not let banks benefit from this convenient source of capital inflow. Also in this case, the ECB had to undertake activities replacing the actually functioning market though the scale of the purchases made was small and totalled 60 bln euros. (Tumpell-Gugerell, 2009).

The financial crisis experiences showed the ECB has good tools at its disposal to affect the market situation even in extremely difficult conditions. The proof confirming this thesis is a fairly fast stabilization of market interest rates at low levels and gradual decrease in spreads between the shortest market interest rates (EONIA) and 12-month rates (e.g. 12M EURIBOR) (Table 1). These spreads testify to the degree of anchored inflation expectations and medium-term investment risk assessment. Their average rate standing at about 90 basis points in 2009, on the one hand, means almost a doubled value in comparison to 2007, but on the other, it allows to state that the ECB's monetary policy proved effective in restoring normal relationships between banks and the rest of economy without putting its basic objective (price stability) at risk.

<sup>&</sup>lt;sup>5</sup> Expansion of the list of assets was accomplished via lowering the rating of securities accepted for the payment of loans given to banks by the ECB from "A" to "BBB-". Rating lowering did not concern asset-backed securities.

# 3. ECB'S MONETARY POLICY VERSUS DEVELOPMENT OF THE MACROECONOMIC SITUATION IN THE EUROZONE COUNTRIES

Even though the view that the ECB fought the consequences of the crisis in the banking sector quite effectively is considered justified, which is a value in itself due to the fact how disastrous its effects might have been for the Euroland economy if the Bank had not succeeded in this field, the question to what extent the ECB's monetary policy might have contributed to reduction of recession in the real sector and faster recovery of the Euroland's economy is still open. The answer to this question is even more difficult in view of the above mentioned fact that both the law and philosophy of this institution do not allow its direct involvement in economic growth support.

Table 2. Evolution of macroeconomic situation in the Eurozone countries in the years 2007- 2009 against the background of selected monetary market indicators (%)

Specification	2007	2008	2009
1. Actual 3M EURIBOR	2.14	1.35	0.94
2. Actual 3M LIBOR			
<ul><li>United States</li></ul>	2.44	-0.94	1.03
– Japan	0.73	-0.45	1.82
3. M <sub>3</sub> money supply growth rate	11.6	7.6	-0.2
4. Growth rate of bank loans to			
<ul><li>enterprises</li></ul>	14.5	9.5	-2.3
– households	6.2	1.7	1.3
5. Consumer price index (CPI)	2.1	3.3	0.3
6. Real GDP growth rate	2.8	0.6	-4.0
		0.6	(III quarter 2009)
7. Industrial production growth rate	3.2	-2.2	-13.8
			(III quarter 2009)
8. Private consumption growth rate	1.6	0.4	-1.0 (III quarter 2009)
9. Export growth rate	6.3	1.0	-13.5
			(III quarter 2009)
10. Growth rate of fixed–asset investments	4.8	-0.4	-11.4
11. Euro real effective exchange rate			
$(1999 Q_1 = 100)$	104.2	107.1	107.9
12. Current balance of payments as a GDP			
percentage	0.2	-1.4	-
13. Budget deficit as a GDP percentag	-0.6	-2.0	-4.1
	-0.0	-2.0	(III quarter 2009)

Source: ECB (2010a), ECB (2010b), and author's own calculations.

Thus, the question which is more justified should perhaps be formulated in the following way: is it really true that the ECB's prevention of the inflation expectation breakdown allowed it to reduce interest rates in an extraordinary way, which in turn might have contributed to the faster recovery in the enterprise sector and stimulation of household demand.

As the data in Table 2 reveals, the effect of significant reductions in the ECB's basic interest rate was, on the one hand, a gradual decrease in short-term real interest rates in the monetary market affecting costs of credits for enterprises and households (e.g. 3M EURIBOR), but on the other hand, these reductions were significantly weaker in 2008 than in the USA or Japan. Only in 2009 real interest rates of monetary market started to reach similar values like in the USA. It is difficult to assess exactly to what extent the ECB's conservative policy as regards interest rates, and especially delayed initiation of the cycle of interest rate reduction (more that a year after the Federal Reserve System)<sup>6</sup>, entailed reduction of many benefits which might have been achieved by the Euroland economy if its Central Bank, basing on anchored inflation expectations had effected a stronger reduction in money costs, i.e. if that reduction had been at a similar level as the one applied, for instance in the USA.

Meanwhile, maintaining high interest rates, especially in 2008, entailed further appreciation of the euro and, to some extent, further collapse of exports which for the largest Euroland economies were a key element in enhancing economic growth. Higher interest rates might also have an adverse influence on fixed-asset investments and consumption dynamics. This is indicated by the data concerning the course of theses categories in both 2008 and 2009. It seems then that the ECB did not use the credibility it enjoyed sufficiently implementing with determination, from the very beginning of its activities, the policy of reducing inflation. As a result, despite the fact that the ECB had much more room for manoeuvre than for instance the Federal Reserve System, its activities led only to a slow-down of the financial sector crisis, but were not able to create a climate in the Euroland economy which would sustain at least the hitherto levels of economic activities. Consequently, the scale of the economic situation collapse in the Eurozone countries was stronger than in the US economy and many premises indicate that the pace of recovery after the crisis will be faster in the US than in the European economy.

<sup>&</sup>lt;sup>6</sup>It should not be forgotten, however, that the ECB continued to increase the basic interest rate in July 2008 when the FRS had been reducing its basic rate since September 2007 by a total of 325 basis points!

### 4. CONCLUSIONS

The analysis of the ECB's effectiveness in fighting the financial crisis effects reveals that adherents of the new consensus in stabilisation policy may overrate the effectiveness of monetary policy oriented explicitly toward price stability as a method of creating positive conditions for economic growth. Experiences of this crisis, both in Europe and America first of all point to insufficient regulation in short-term interest rates as a tool to stabilise economic situation, especially in the period of major disturbances in market equilibrium. If the interest rate policy had not been supplemented by the active refinancing policy, the banking sector crisis might have been longer and more profound. It also turned out that that even in the situation of anchored inflation expectations it is difficult to choose such interest rate levels which, on the one hand, would be conformable with the postulate of keeping future inflation low, but on the other hand, would not limit the medium-term prospects of overcoming the crisis in the sphere of real economy.

#### BIBLIOGRAPHY

Bednarczyk J.L.(1990). Polityka pieniężna przeciw inflacji. Studium gospodarki kapitalistycznej. PWN Warszawa.

Bernanke B. (2009), *Reflections on the Year of Crisis*. Speech by Chairman Ben S. Bernanke at the Federal Reserve Bank of Kansas City's Annual Economic Symposium, Jackson Hole Wyoming, Aug. 21,2009, www.federalreserve.gov. (31.01.2010).

Consolidated Version of the Treaty on European Union and the Treaty on the Functioning of the European Union, "Official Journal of the European Union", Volume 51, 09.05.2008.

ECB (2009), Price stability: why is it important for you.

ECB (2010a), ECB Monthly Bulletin. Euro Area Statistics Online, January 2010, www.ecb.int (31.01.2010).

ECB (2010b), ECB Monetary Statistics, January 2010.

ECB, Key ECB interest rates, www.ecb.int (31.01.2010)

Goodfriend M. (2007), How the World Achieved Consensus on Monetary Policy, "Journal of Economic Perspectives", no 4/2007.

Stark J. (2010), Wirtschaftliche Perspektiven nach der Krise: historische Erfahrungen, lechren für jetzt. Vortrag von Jürgen Stark, Mitglied des Direktorium der EZB am Leipziger Seminar Ökonomie und Praxis, Leipzig, 20.January 2010, www.ecb.int.(31.01.2010).

Trichet J-C. (2009(1), *Lessons from the financial crisis*. Keynote address by Jean-Claude Trichet, President of the European Central Bank at the "Wirtschaftstag 2009", organised by the Volksbanken and Raiffeisenbanken, Frankfurt am Main, 15.Oct. 2009, www.ecb.int (31.01.2010).

Trichet J-C.(2009(2), *Key lessons from the crisis*. Speech by Jean-Clude Trichet , President of the European Central Bank at the Annual Conference organised by the Association de Mercados Financieros, Madrid, 23 Nov.2009, www.ecb.int (31.01.2010).

Tumpell-Gugerell G. (2009), *The European response to the financial crisis*. Speech by Gertrude Tumpell-Gugerell, Member of the Executive Board of the ECB, Bank of New York Mellon Headquarter, New York, 16 Oct. 2009. www.ecb.int. (31.01.2010).

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### POLITYKA PIENIĘŻNA EUROPEJSKIEGO BANKU CENTRALNEGO JAKO NARZEDZIE PRZEZWYCIĘŻANIA KRYZYSU W KRAJACH STREFY EURO

Celem artykułu jest analiza polityki pieniężnej Europejskiego Banku Centralnego od 2007 roku pod kątem jej skuteczności w niwelowaniu skutków kryzysu finansowego w krajach strefy euro. Bazę źródłową dla opracowania stanowią głównie materiały statystyczne EBC oraz publikacje członków zarządu Banku, interpretujących aktualne problemy polityki pieniężnej. Metoda badawcza przyjeta w artykule polega na prezentacji kluczowych aspektów polityki pienieżnej jednoznacznie nakierowanej na stabilizację cen i konfrontacji tej polityki ze specyficznymi warunkami kryzysu finansowego. Z podjętych badań wynika, że narzędzia polityki pieniężnej jakimi dysponował EBC przed kryzysem okazały sie właściwie wystarczajace (po pewnych modyfikacjach) do stopniowego przywrócenia drożności podstawowego kanału transmisji impulsów polityki pieniężnej EBC, biegnącego poprzez rynek pieniężny do realnej sfery gospodarki. W konsekwencji udało się nie dopuścić do gwałtownego ograniczenia finansowania tej sfery wskutek paniki jaka pojawiła się na międzynarodowych rynkach finansowym po ogłoszeniu upadłości amerykańskiego banku inwestycyjnego Lehman Brothers. Niewątpliwym sukcesem polityki pieniężnej EBC w okresie kryzysu było umiejętne godzenie bardzo aktywnej polityki refinansowej, realizowanej w warunkach znacznej redukcji podstawowej stopy procentowej z utrzymaniem się na niskim poziomie wskaźników inflacji. Z drugiej jednak strony trudno jest znaleźć przekonujące argumenty, które mogłyby świadczyć o tym, że polityka ta może bezpośrednio przyczynić się do szybszego wyjścia gospodarki eurolandu z najgłębszego załamania koniunktury w okresie powojennym.

Słowa kluczowe: EBC, polityka pieniężna, strefa euro, kryzys finansowy.