MONETARY EFFICACY IN THE COMMUNITY LEVEL

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ABSTRACT

Hypothesis of the paper is that the monetary room for manoeuvre in the European Community is determined by the institutional and strategic characteristics of the ECB, moreover the financial market environment composed by multi-state community. The methodology of the paper is built on the evaluation of the decision making and strategy of ECB as institutional aspect, and the monetary transmission in national financial markets. In policy evaluation, the monetary targeting is surveyed through HICP, monetary base, central bank rates, exchange rates and treatment of price impacts. The transmission is examined through analysis of structure of the member state's financial markets.

I. INTRODUCTION

In the survey of international community level of policy making, the heterogeneity of interests is often a challenge for effective regional or global governance. Enforced actions in supranational way always can do harm for a part of the parties, thus, discouraging the cooperation. The counterpart, the compromises soften every actions, thus, the impacts can get extremely weakened.

However, if international policy makers are soundly aware of the structure of heterogeneity of parties, they can select among more policy instruments, items and their mixes to achieve the strongest impact in accordance with the policy intentions.

In this study, the focus is on efficacy of the single monetary policy made by the European Central Bank (ECB). The analysis is built on the literature of monetary transmission and the credit channel impact have been worded in the studies by Kashyap & Stein (1995), Perez-Quirós & Rodriguez (2001), Fountas & Papagapitos (2001), Lensink & Sterken (2002), Altunbas et al. (2002), Kakes & Sturm (2002), Mojon (2002) and Chrystal & Mizen (2002), Gaspar et al. (2002) etc..

In the methodology part, the way of survey and analysis is explained on ECB monetary policy making and channels of monetary impact. The part on price stability targeting analyzes the achievements in consumer price stability, the preservation value of the single currency and the central bank rate decisions. It is followed by the analysis on heterogeneity of euro zone financial markets. Finally, the paper concludes on transmitting capability of ECB.[1]

II. METHODOLOGY OF THE PAPER

To evaluate the monetary policy, there will be used two ways. On one hand, the ECB has target number, the price stability what can be the measure of well done task. On the other hand, the market room for manoeuvre shall be measured to estimate the business impact factor of monetary policy, namely the monetary transmission and its determinants.

The methodology of the paper is built on (1) the evaluation of the decision making and strategy of ECB as institutional aspect, and (2) the monetary transmission, namely the monetary efficacy in the national financial markets. In the (1) evaluation case, the monetary targeting will be surveyed through HICP, monetary base, central bank rates, exchange rates and treatment of global price impacts. The (2) transmission will be examined through the analysis of structure of the member state's financial markets.

The success of price stability can be measured, if we follow the ECB's monetary policy objective, as the annual inflation is between 0% and 2%. Deflation is also a failure. The other measure of success is if the monetary base can be kept close to the reference value. Latter one is determined by the central bank referring to the price stability target.

[1] The author was supported by TAMOP-4.2.1.B-09/1/KMR-2010-0005 project in the research of this paper.

The monetary transmission measures the ability and efficacy of the Central Bank to realize or "enforce" its monetary decisions in the private economy. Monetary transmission means monetary impact, which changes the real economic activity. (Lensink & Sterken 2002) It is important aspect of policy making to achieve the objectives, especially in a currency community far from perfect homogenous economic structure.[2] For instance, the efficiency of central bank decisions does not motivate same private reaction in several financial markets with different characteristics. The basic necessity of monetary efficacy is to have any degree of price rigidity. Besides, the structure of financial system determines the transmission. The commercial bank lending and depositing activities and the fees of other return related financial services are the financial market channels of intended monetary impact. Kashyap & Stein (1995) set the conditions of realizing the impacts: first the nominal monetary (price, wage, interest rate) rigidities should exist, second, a part of the private sector must depend on banking loans and/or market financing. The efficiency of monetary transmission can be indicated by the following characteristics, according to Lőrincné (2001:378-382) and Palánkai (2004: 204-207): market rates, foreign exchange rates, banking loans.

According to the indicators, the monetary transmission is determined by the following:

- the banking vs. market financing ratio,
- long-term and short-term financing ratios,
- the concentration of the financial sector,
- indebtedness of non-financial sector,
- the national saving and indebtedness structure and bias,
- level of economic openness,
- interest rate sensitivity of output industries,
- the flexibility of prices and wages, general level of income,
- composition of the wealth structure

To measure the efficacy, Perez-Quirós & Rodriguez (2001) developed an overnight interest rate measuring model assuming risk neutral, perfect and competitive market. The model concludes, if the market can predict the ECB actions exactly, the market over-night rates should not be significantly affected ECB policy communication (namely, the news on policy decisions).

Frankel et al. (2004) surveyed the relation between the transmission of central bank rates and the choice of foreign exchange regimes. Namely, is the monetary policy with flexible FX rate more able to isolate the domestic interest rates from the negative shock of global monetary tightening (e.g. sharp U.S. rate cuts)? Their concluded the following:

> "*Under the combination of fixed exchange rates and complete integration of financial markets, which characterizes the European monetary union, monetary policy becomes completely powerless*."

Their argumentation is that, in country level, the excessive money flows out through balance of payment deficit right after its creation. Price of commodities, services and factors must adjust in the fixed pegging system of euro community. Of course, this approach is not applicable for euro zone and rest of the world relations, as euro is flexibly related to the key currencies (e.g. USD, JYN, CAD, AUD etc.) In this extra-zone relation, the flexible rates create opportunity for depreciation, thus, for stimulation of economic growth. In European practice, the stimulation is expectable only behind the realization of not higher, than 2% annual inflation.

Mateut et al. (2006) emphasize, that not only the bank credit channel can be surveyed, but, as it has a significant substituting item in real business, the trade credit practices can also differ the possible monetary impact. There are several estimations on share of trade credit mentioned their study. Approximately one third of total firm liabilities are considered to be trade credit, and even higher share of short-term debt. Their empirical conclusions is, that a certain group of firms, who has no access to bank credits (too small, or too new without history of bank relations), can even get credit and, thus, become sensitive for level of interest rates.

III. EFFICIENCY OF PRICE STABILITY TARGETING

The ECB is the prime bank of the European System of Central Banks (ESCB). Beside of ECB the National Banks of euro zone exist and are represented in the decision making body of ECB, the Governing Council. In this sense, the ECB can not be called supranational, as its decisions depend on member states' delegates. The Governing Council determines the medium term monetary objectives and makes the central bank rate decisions. Since the number of ECB delegates is fixed in six, but of the member states' representatives have been increasing during the enlargement of euro zone, the six community leaders (president, vice-president, four

[2] See regional differences, industrial differences, export structure differences in Eurostat

members of board, altogether the Executive Board) have diminishing weight to the national representation. That is why, Sinn (2001) criticized the multi-representative, decentralized central bank rate decision making, considering the decisions to be late and inadequate to stimulate for maximum real economic output, and minimize the output gap.

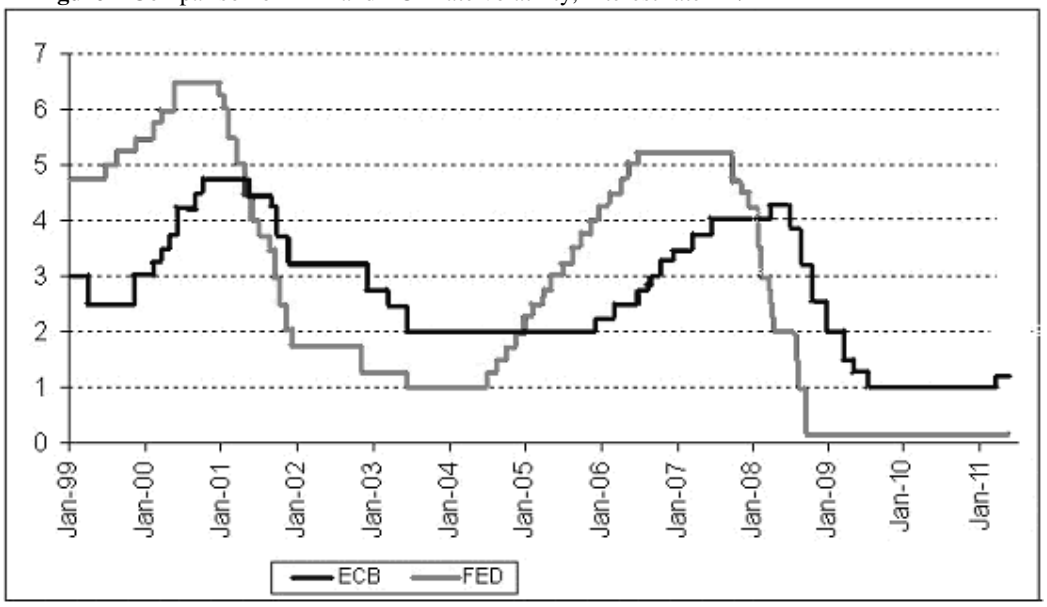
The primary objective of the ESCB is the price stability. In 1998, the Governing Council of ECB defined its exact content, namely, the harmonized index of consumer prices (HICP) shall not exceed the 2% in year-to-year annual view. This value got set according to the broad economic policy guidelines of European Council. (Issing et al. 2001) This definition, however, lacks the change of producer and real estate prices, which are often roots of bubble economies in the world. According to Gaspar et al (2002), the stability-oriented ECB strategy is used both for structuring the decision making, and for external communication, as the forward-looking behaviour is necessary not only from the policy maker, but from the private market actors, too.

The annual price stability demand also means flexibility in inward-the-year and territorial sense, as it is affordable to have year-to-year inflation more than 2% for some months, and the aggregate euro zone must have averagely maximum 2% inflation, but regions can distort in asymmetric shocks. (Apergis et al. (2005) tested whether zero or positive inflation target is more desirable in the euro zone.) The flexibility can be understood, also, as policy making room. For periods of under 2% inflation or deflation, there is opportunity for monetary stimulation through central bank rate and money supply policies. (Haan et al. 2005)

To form effectively and not only observe the inflation, the Central Bank has a two pillar system. One pillars is the monitoring of M3 monetary base and comparing it to the reference money volume derived from the price stability target and the projected growth of GDP. Depending on direction and scale of distortion from reference volume, there is central bank intervention. The second pillar is the broad, comprehensive macroeconomic analysis and forecast on price indices, real GDP and industrial indicators, indices of economic trust, labour market indicators on wage and employment, foreign exchange rates, stock and commodity exchange rates, financial returns, financial market expectations. (ECB 2004)

The perfection or imperfection of information characteristic of the financial markets is a crucial factor for accordance between policy makers and market actors. The ECB has the classic central bank instruments to ensure the price stability: deposit and credit rates, open market operations, obligatory reserve rate prescription, and the communication toward the market. Gaspar et al. (2002) shows a confirming proof to the Perez-Quirós & Rodriguez (2001) hypothesis by testing European Over-Night Index Average rates within a reserve maintenance period. The deduction is that the market does not make systematic mistakes in anticipating monetary decisions. In case of judgment of economic policy making, the market appreciates the stability and predictability. However, the predictability results the readiness of the market for monetary decisions, thus the direct impacts of policy making can be weak. For example, Poole & Rasche (2000) and Gaspar et al. (2001) could not measure significant impact of over-night central bank rates, since the market expectations met the ECB decisions in approximately 90%.

Figure 1 Comparison of FED and ECB rate volatility, interest rate in %



Source: ECB, FED, CNBC, author

Table 1 Central bank key rate decisions by ECB, %, January 1999 – April 2011

date of rate decision		deposit facility	main refinancing facility		Marginal lending facility
			fix rate tenders	variable rate tenders	
2011	April-13	0.5	1.25	-	1.25
2009	May-13	0.25	1.00	-	1.75
	April-8	0.25	1.25	-	2.25
	March-10	0.50	1.50	-	2.50
	January-10	1.00	2.00	-	3.00
2008	December-10	2.00	2.50	-	3.00
	November-10	2.75	3.25	-	3.75
	October-10	3.25	3.75	-	4.25
	October-10	3.25	-	-	4.25
	October-10	2.75	-	-	4.75
	July-10	3.25	-	4.25	5.25
2007	June-10	3.00	-	4.00	5.00
	March-10	2.75	-	3.75	4.75
2006	December-10	2.50	-	3.50	4.50
	October-10	2.25	-	3.25	4.25
	August-10	2.00	-	3.00	4.00
	June-10	1.75	-	2.75	3.75
	March-10	1.50	-	2.50	3.50
2005	December-10	1.25	-	2.25	3.25
2003	June-10	1.00	-	2.00	3.00
	March-10	1.50	-	2.50	3.50
2002	December-10	1.75	-	2.75	3.75
2001	November-10	2.25	-	3.25	4.25
	September-10	2.75	-	3.75	4.75
	August-10	3.25	-	4.25	4.25
	May-10	3.50	-	4.50	5.50
2000	October-10	3.75	-	4.75	5.75
	September-10	3.50	-	4.50	5.50
	June-10	3.25	-	4.25	5.25
	June-10	3.25	4.25	-	5.25
	April-10	2.75	3.75	-	4.75
	March-10	2.50	3.50	-	4.50
	February-10	2.25	3.25	-	4.25
1999	November-10	2.00	3.00	-	4.00
	April-10	1.50	250	-	3.50
	January-10	2.00	3.00	-	4.50
	January-10	2.75	3.00	-	3.25
	January-10	2.00	3.00	-	4.50

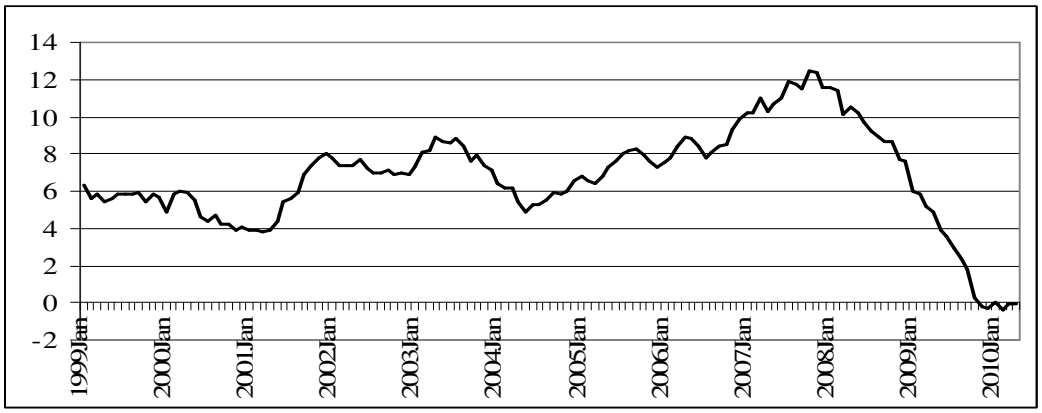
Source: ECB

About the interest rate policy, it can be established, that ECB is particularly follower of U.S. FED rate. (See figure 1) Of course, the two markets (USA and euro zone) demands similar monetary adjustments in global price and demand shocks, but according to the growth target – beside the price stability one – of FED, the U.S. policy is the active initiator in rate cuts and raises. The ECB rate has a strongly correlated parallel, but delayed trend in central bank rate decisions. However, economic growth stimulation does not belong to the core function of ECB, the follower's delay is reasonable, to reserve the approximate ratio of USD/euro exchange. That is why, the ECB rate is less volatile, having lower swings to the peaks and troughs. The lower volatility of ECB rates can be considered as a more stable, predictable business environment, what is preventive against the financial and real asset bubbles in the investment markets, and less likely to cause instability in the market of credits and loans through significant raise of default risk.

The foreign exchange rate is also an instrument for the ECB to maintain the price stability. Toward the main currencies (USD, JYN, GBP, see figure 3), the start-up period of euro was a three years long depreciation period. The absolute trough for the euro value was 0.8252 USD for 1 euro in 26th Oct. 2000 what last until a local trough of 0.8578 in 28th Jan. 2002. Since February 2002, with local peaks and troughs, an appreciation trend can be followed. As the raw material inflation – especially the crude oil commodity price increase – has been cumulating up to approximately 50% annual level, since 2002, the euro has been appreciating to the USD. The appreciation compensated particularly the global shock from raw material markets symmetrically in every euro

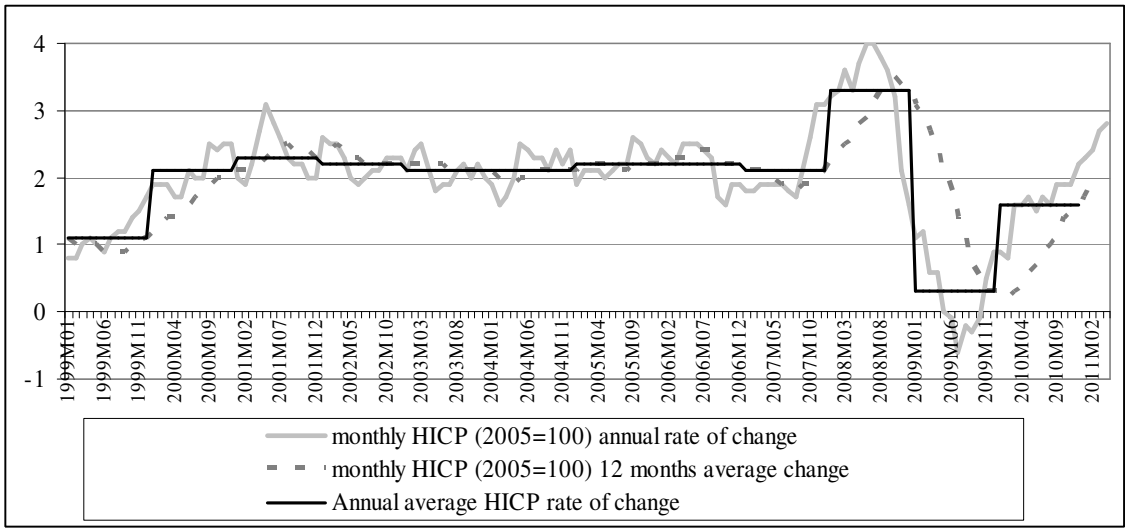
zone country, in nominal view. (See figure 3 and figure 4) Similar smooth euro appreciation trend can be observed in the GBP/euro rate. In case of JYN, the trend was broken by the crisis of 2008-2009, but it is rooted in the special deflation problems of Japan and the risk of external indebtedness of euro zone countries.

Figure 2 Change of M3 monetary base, %



Source: ECB

Figure 3 Monthly and annual inflation of euro zone



Source: ECB statistics

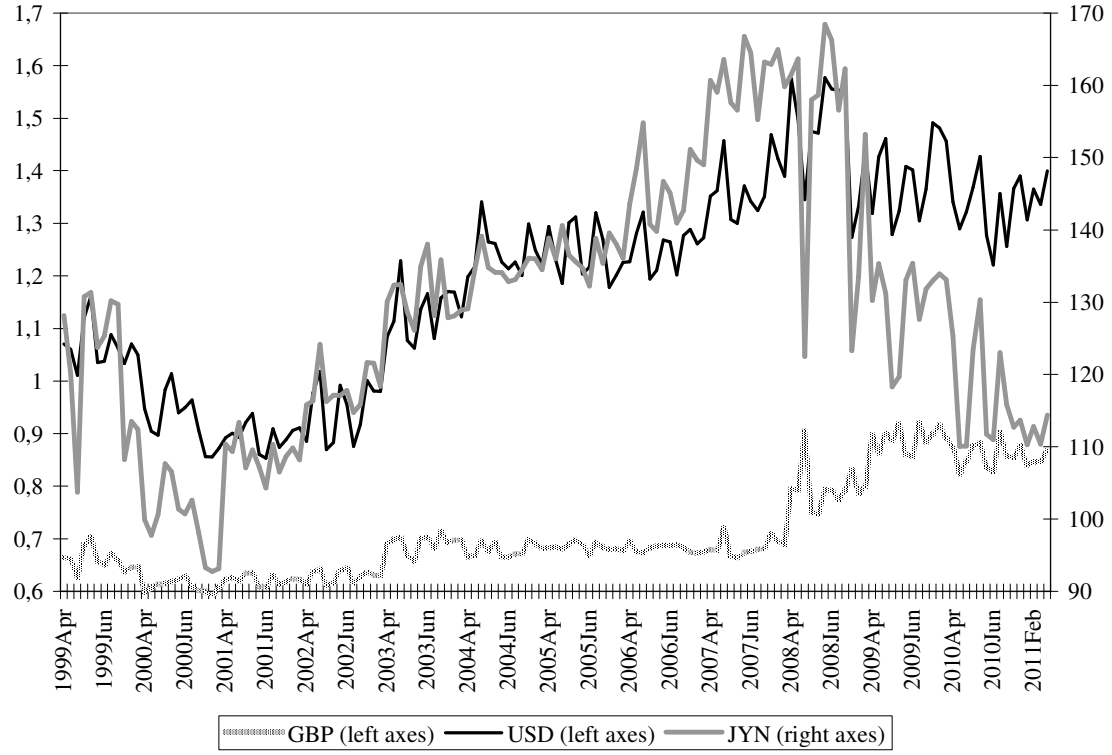
Note: euro zone means always the current members of given years (1999-2000 11 members, 2001-2006 12 members, 2007 13 members, 2008 15 members. 2009-2011 16 members without Estonia)

According to annual and monthly inflation data of the euro zone (see figure 3), in most of the past since the existence of euro, the ECB failed to maintain the price stability under its self-imposed standard, the 0%-2% inflation margin. Between 2000 and 2008, the inflation was always slightly beyond the 2%, and the rocketing prices of food and raw materials in 2007 and 2008 completely ruined the credibility for a while. The shrinking year 2009, between June and October, caused even monthly deflation, and reversed the inflation trends. But if we follow the change of M3 monetary base (see figure 2), it is clear that the ECB could not rule perfectly the money supply in accordance with price stability, neither in excessively high nor in low (or negative) inflation periods. The model of Apergis et al. (2005) concluded that "*negative correlation between the average output gap and the average inflation rate*" in the EU. So, in light of this conclusion, the overrun of inflation target might not have been supportive for euro zone. In 2009, during the minimum inflation and deflation months, the M3 even decreased (in figure 2 it means, the growth rate stepped into the negative margin in the end months of 2009). However, the ±0.5% range of HICP change created room for quick monetary expansion, thus, opportunity for growth stimulus. Of course, it must be admitted, that price stability targeting success depends both on monetary and fiscal policy. The current economic policy competence separation – namely, national fiscal, community

monetary competence – and the first decade public finances performance of the majority of euro members do not support too much the ECB policy objectives.

The year 2010 reversed the inflation to a higher level, what can be explained from the raw material prices growing again with high speed and a temporary depreciation of euro originated in the particularly already realized PIIGS debt crisis risk. The short-term depreciation and the 1.6% annual inflation did good for recovery of the export oriented euro recovery. Thus, the ECB policy in 2010 can be understood as a slight stimulus for production.

Figure 4 Nominal position of euro to U.S. dollar, U.K. pound and Japanese yen.



Source ECB statistical data warehouse, price of €1 in currencies

IV. BUSINESS ENVIRONMENT HETEROGENITY

The monetary transmission in a multi-member single currency zone is determined by the disparities among the structure of national markets. The structure in this case means ways of financing, composition of liabilities, distribution of savings in several funds, characteristics of debtors and creditors etc. In the followings, the heterogeneity of euro zone financial markets will be observed without the claim of completeness, as identification and indication of transmission factors still have a broad horizon to accomplish.

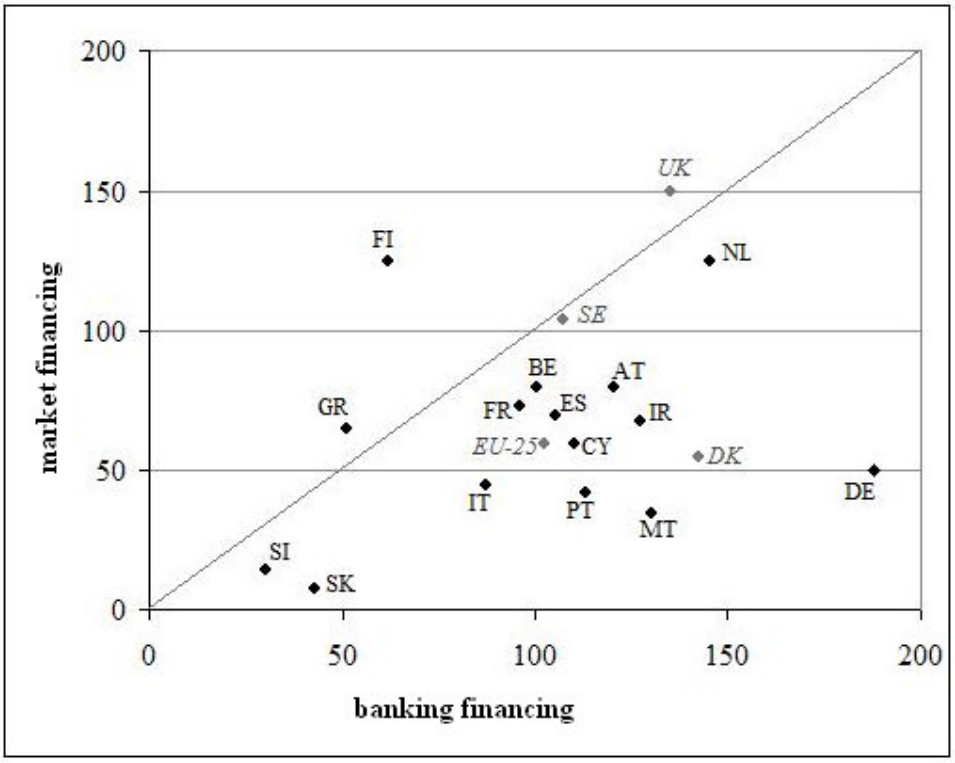
The simplest measure of heterogeneity is the share of banking (indirect) and market (direct) financing in the national financial system. Banking financing means bank loans finance the non-financial business activities and household savings. Market financing means stock and bond exchange financing directly from the money market, without financial intermediaries. In case of the euro zone, most of the countries converge to the prevalence of banking financing (see figure 5), but heterogeneity is significant. In the single currency area, Germany and Finland are the furthest to each other. The importance of way of financing is that commercial bank loans directly depends on over-night central bank lending rates, but company stocks is related to central bank rates only as the rates are benchmarks for expected profitability. The bias for bond and stock exchange financing also shows higher risk tolerance than bank loans from bank deposits, namely, a difference in market behaviour.

Of course, dominance of banking financing does not mean automatically similar transmission opportunities in several member states. Next character for identification is the level of competition in the national banking sectors. For clear view on heterogeneity of financial market and banking channel, the single monetary policy in multi-market situation has been modelled by Baglioni (2007), testing the single policy in two extreme market

situation Cournot oligopoly (well capitalized banks) and monopolistic competition (undercapitalized banks). The two categories are quite enough to classify the euro zone countries. (see table 2) Baglioni's conclusions help to forecast the ECB policy impact, as identified the following factors:

- The competition intensity and the capitalization of the banks will determine the inter-bank interactions. In monopolistic competition the inter-bank relations has stronger multiplying effect from the monetary easing because of the strategic necessity of complimentary behaviour. In oligopoly structure, the banks, to sustain the market share, thus, it does not worth to lend inter-bank credits, but to decrease. This weakens the monetary policy intention.
- In heterogeneous banking market, the equilibrium tilts toward the well-capitalized banks, and they will be important in shaping the equilibrium after monetary shocks. It means the policy maker must pay attention mostly on well-capitalized banks in case of heterogeneous market situation.

Figure 5 Market and banking financing ratio in euro zone, % of GDP, 1995-2004



source: Allen et al. 2006, DE-Germany., FR-France., BE-Belgium, ES-Spain, IT-Italy, AT-Austria, IR-Ireland, PT-Portugal, FI-Finland, GR-Greece, SI-Slovenia, SK-Slovakia, NL-Netherlands, MT-Malta, CY-Cyprus, *UK-United Kingdom, SE-Sweden, DK-Denmark*

Fountas & Papagapitos (2001), to prove the importance of credit channel differences, created test for significance of external finance premium, and it was found, that the premium is important indicator of economic activity in Germany and Italy, but insignificant in UK and France. Thus, their results strengthen the assumption, that structure of business activity financing matters in the credit channel helping the prevalence of monetary policy.

In the European market of financial services, the global multi-decade trend is valid, namely, the number of banking actors keeps on decreasing through fusions. However, this process does not automatically result oligopolistic banking market in every euro member states. Especially in Germany and Italy, two large markets, the market share concentration is relatively low, yet. (see table 2) This state of markets is favourable for ECB policy making, as – in financial sense – most of the bigger markets (Germany, Italy, Luxemburg, Spain) of the euro zone can be called monopolistic competitive ones. According to Haan et al. (2009:221-225), the market focus of banking is national, yet. That means, the global oligopolies have not prevailed the financial sector.[3]

[3] In case of the underdeveloped EU and euro zone states, since lacking local capital assets, naturally not the local banks, but higher developed member states' banks dominate the market by acquisitions or direct market entry.

Similar characteristics can be deducted about the insurance sector in the euro zone. The global companies can not dominate, but the continental focusing Allianz and Axa companies prevail the European market before the ones focusing on national market. (Haan et al. 2009:283)

Lensink & Sterken (2002) examined the impact on transmission made by single market competition intensity in the banking sector. They assume, according to tests made by Altunbas et al. (2002), Kakes & Sturm (2002), Mojon (2002) and Chrystal & Mizen (2002), that the more monopolistic banking sector can afford higher commercial bank interest rate margins. Thus, especially the central bank rate cutting can not be expected to appear significantly in the loan rates for households and non financial companies.

Table 2 Financial market concentration in the euro zone banking and insurance sectors, 2005

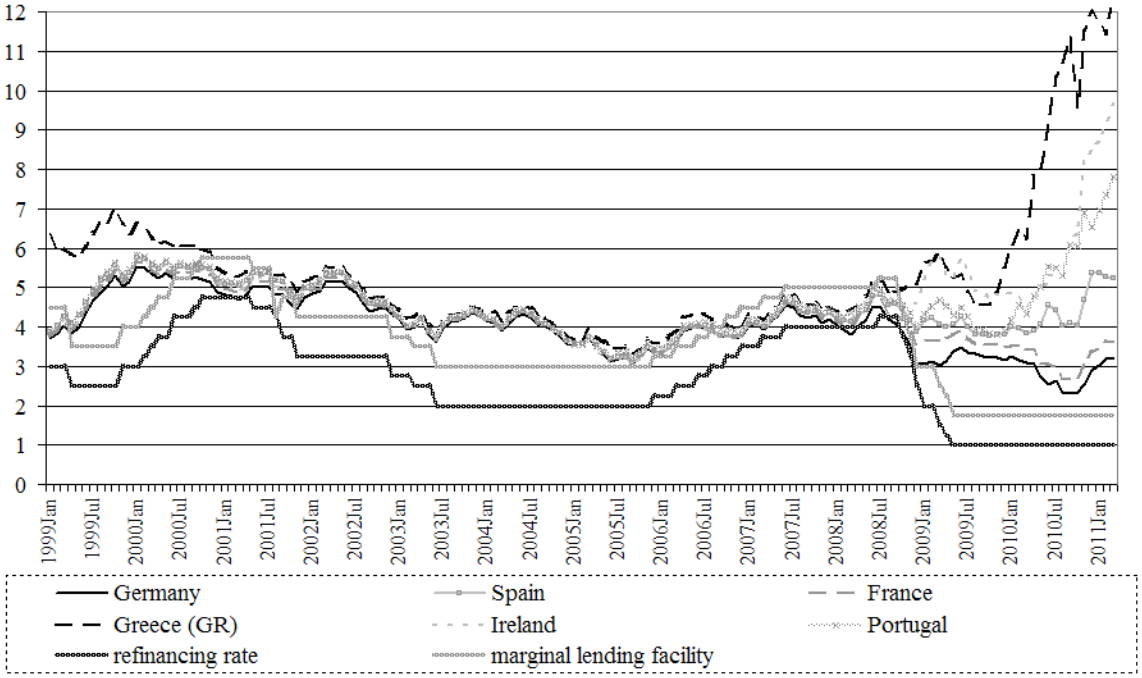
Member state	Number of Banks	CR5 (%)* Banks	Herfindahl-index banks**	Number of insurance comp.	CR5 (%)*** Life insurance	CR5 (%)*** Non-life insurance
Austria	880	45	560	73	59.4	75.2
Belgium	100	85	2108	171	78.1	61.6
Cyprus	391	60	1029	33	85.5	49.4
Finland	363	83	2730	67	89.1	91.5
France	854	54	758	486	55.6	51.7
Germany	2089	22	174	663	45.3	38
Greece	62	66	1096	95	67.8	37.2
Ireland	78	46	600	226	71.8	64
Italy	792	27	230	239	61.8	67.9
Luxemburg	155	31	312	95	-	-
Malta	18	75	1330	25	100	74.9
Netherlands	401	85	1796	300	73	52.8
Portugal	186	69	1154	69	83.3	67.8
Slovakia	23	68	2643	26	72.8	89.7
Slovenia	25	63	1369	18	82.7	96.1
Spain	348	42	487	362	39	40.2

*CR5 the biggest five banks' market share from total assets of the market, %
** Herfindahl-index: sum of square of total market shares of banks, 0-10.000
***CR5 the biggest five insurance companies' market share from total insurance fee revenue. %
Source: Haan et al. 2009, CEA 2007, CEIOPS 2006, Allen et al. 2006, Bikker et al 2006,

Inspecting the figures 6 and 7, it can be stated, that the monetary impact and control through interest rate channel has shown various ECB influence. Right in the first year of euro, neither the refinancing rate nor the marginal lending facility rate were too indicative for the bond market. Figure 7 shows the euro zone average public bond rate deviation from the ECB rates. Since the public bond is the less risky, so called risk free, in every national bond market, thus level of public bond interest rate pushes every other corporate and mortgage bonds sorted to investment or speculative category up to higher rate level. That means, if public bonds break off from the movement of the central bank rates, all the other more risky bonds will do the same.

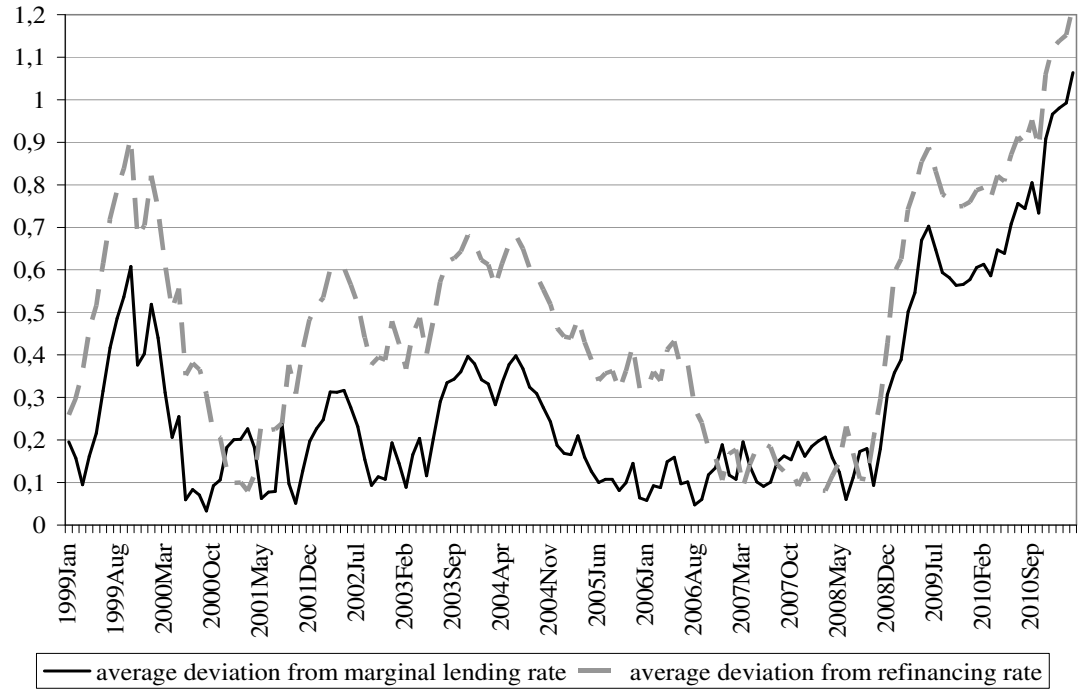
The inefficacy of ECB rate has worsened in case of recession/crisis years. Period of 2003-2004 and period after 2008 the shows higher distortion of bond rates from ECB rates. Analysing the October 2008 and April 2011 period, it can be recognized, that long before the Greek debt crisis (January 2010), there was no effect of rate cuts from 3.25 of refinancing rate and 3.75 of marginal landing rate in November of 2008 and later on the bond market rates in any euro zone member states. This period of inefficacy can be explained not by the heterogeneity or other euro zone market factors, but by the global financial reaction on U.S. banking and financial crisis, as because of temporary imperfect information and panic, the investors turned to the less risky items, the U.S. public bonds and the gold commodity. Thus, there was no chance for interest rate reduction in the euro zone bond markets. Since January 2010, the Greek and later the Portuguese and Irish debt crisis, and newer threats of other members' default possibilities started to layer increasing national default risk into the public bond markets. So, in the bond markets, the two and a quarter year long period of 1% refinancing rate was in vain. Only the solvent, sustainable level indebted countries could enjoy an April-October of 2010 period of 0.2-0.5% rate decrease after 2.25% central bank rate cut. After November of 2010, this temporary easing disappeared from the solvent euro bond rates. In the date of this survey, the end of high level inefficacy of monetary policy on bond markets can not be seen.

Figure 6 The 10yrs long debt securities interest rate in comparison to ECB central bank rate (refinancing rate) and to ECB marginal lending facility



Source ECB statistical data warehouse

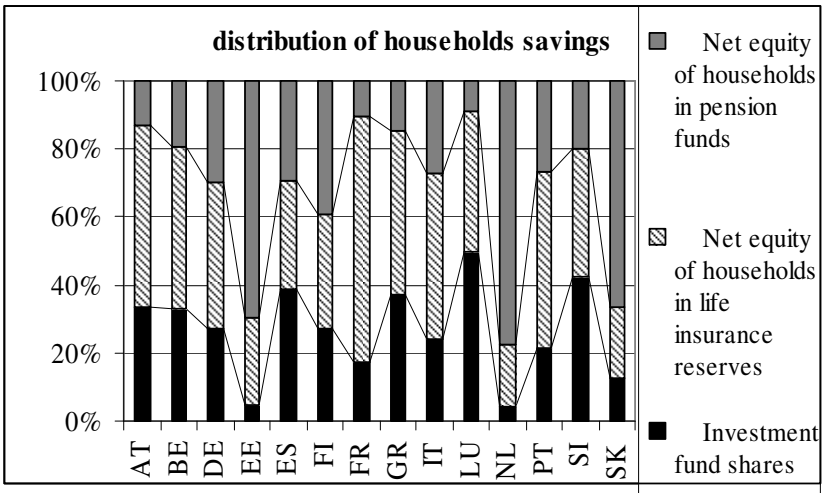
Figure 7 Euro zone standard deviation of 10yr long public bonds interest rate from refinancing rate and marginal lending rate, %.



Source: author's calculation from ECB statistics

Note: euro zone means always the current members of given years (1999-2000 11 members, 2001-2006 12 members, 2007 13 members, 2008 15 members. 2009-2011 16 members without Estonia)

Figure 8 Relative distribution of households' savings in % of total national savings



source: OECD statistics, the countries imperfect data service limited the comparison, DE-Germany., FR-France., BE-Belgium, ES-Spain, IT-Italy, AT-Austria, EE-Estonia, PT-Portugal, FI-Finland, GR-Greece, SI-Slovenia, SK-Slovakia, NL-Netherlands; short-term = inward 1 year, long-term = more than 1 year loan

The regional disparities in EU mean difference in saving opportunities, too. As Benczes (2006) described, the euro zone policy rules demands special income policy making to establish the ground for long-lasting and sustainable economic growth, as "*the continental Western-style neo-corporatist industrial relations system has not sprung into existence in Eastern Europe*". Examining the household savings and liabilities, heterogeneity can be discovered in this case, too. First of all, the countries having mandatory private funded pension system, they have significant reserves in pension funds in comparison with pay-as-you-go system countries. The Netherlands are stands out with the share of pension savings. Life insurance as less risky, indirect bond-investment has also distinct culture and share in the various member states. The investment fund distribution, also, shows difference in risk taking bias. The differences of household savings and liabilities imply the hypothesis of heterogeneity in households' sensitivity for central bank decisions, as, in national aggregates comparison, households share the risk to different portfolios.

V. CONCLUSIONS[4]

The ECB must act in a heterogeneous currency zone in financial market view. This means opportunity not only for different necessities on monetary stimulus/restriction, but also a different strength of impacts in the member state markets.

First, it was proved, that the ECB is not successful in self-defined standards of price stability. However, the interest rate and the foreign exchange policy is very sound comparing to the U.S. FED, what is mostly rooted in the differences of position, institutional characteristics of decision making and objectives of monetary policies. However, in most of the past years, the inflation has been tended closely to the upper limit of adequate rate of HICP change.

The crisis period 2008-2009 caused only temporary changes in the direction of monetary indicators in the euro zone. (The crisis impact appeared mostly in fiscal characteristics both in strength and durability aspects.)

Through market structure analysis, the proof and illustration on heterogeneity of national financial markets united in the euro zone has been shown. There have been found evidence on heterogeneity in the way of financing, the competition intensity of banking and insurance sector, the various efficacy of central bank rate policy, the structure of household financial assets and liabilities.

The developments of the relation between central bank rates and bond markets since November 2008 ruined the ECB influence on securities market and its ability for stimulation on more private consumption. It seems, the ECB has had not too much role in the recovery of euro zone markets, as fiscal default risk counterweight any interest rate cutting monetary expansion, and such bail-out as the monetary easing done by the FED through purchasing U.S. public debt securities in the secondary market, is forbidden for ECB.

[4] For useful constructive comments and suggestions, I am grateful to the anonymous reviewers and B&ESI Conference Participants; all errors remain mine.

REFERENCES

Allen. F. – Bartiloro. L. – Kowalewski. O.: "The Financial System of EU25." 2006 in: Liebscher. K – Christl. J. – Mooslechner P. – Ritzberger-Grünvald R.: Financial Development. Integration and Stability in Central. Eastern and South-Eastern Europe. Edward Elgar. pp. 80-104., 2006

Altunbas, Y., Fazylov, O., Molyneux, P.: "Evidence on the bank lending channel in Europe." Journal of Banking and Finance 26, 2002

Apergis, N. – Miller, S. – Panethimitakis, A. – Vamvakidis, A.: "Inflation Targeting and Output Growth: Empirical Evidence for the European Union", Working Paper/05/89, International Monetary Fund. 2005

Baglioni A.: "Monetary policy transmission under different banking structures: The role of capital and heterogeneity" International Review of Economics and Finance No. 16 pp.78–100, 2007

Benczes I.: "Social pacts: a helping device in euro-adoption?" Transition Studies Review, vol. 13. no.2. July 2006. pp. 417-438, 2006

Bikker. J.A. – Spierdijk. L. – Finnie. P.: "The Impact of Bank Size on Market Power" DNB Working Paper 120. De Nederlandsche Bank. Amsterdam, 2006

CEA: "European Insurance in Figures". CEA Statistics. No. 321 Comité Européen des Assurances. Brussels, 2007

CEIOPS: Financial Conditions and Financial Stability in the European Insurance and Occupational Pension Fund Sector 2005-2006 (Risk Outlook), Committee of European Insurance and Occupational Pensions Supervisors. Frankfurt am Main, 2006

Chrystal, A. – Mizen, P.: "Modelling credit in the transmission mechanism of the United Kingdom" Journal of Banking and Finance 26, 2002

ECB: Monetary Policy of the ECB, European Central Bank. Frankfurt am Main, 2004

ECB: Annual Report 2010, European Central Bank. Frankfurt am Main, 2009

Frankel, J. – Schmukler, S. L. – Servén, L.: "Global transmission of interest rates: monetary independence and currency regime", Journal of International Money and Finance 23 pp.701–733, 2004

Fountas, S. – Papagapitos, A.: "The monetary transmission mechanism: evidence and implications for European Monetary Union" Economics Letters Elsevier 70 (2001) 397–404, 2001

Gaspar. V. – Masuch, K – Pill, H. "The ECB's monetary policy strategy: responding to the challenges of the early years of EMU". paper presented at the conference "The functioning of EMU: the challenge of the early

years". organised by the Directorate General Economic and Financial Affairs of the European Commission., 2001

Gaspar. V. – Peprez-Quirós. G. – Sicilia. J.: "The monetary policy decisions of the ECB and the money market " BIS Papers No. 12. Bank of International Settlements, 2002

Haan. J. de. – Eijffinger. S.C.W – Waller. S: "The European Central Bank. Credibility. Transparency. and Centralization" CESifo Book Series. MIT Press. London, 2005

Haan. J. de – Oosterloo. S. – Schoenmaker. D.: European Financial Markets and Institutions, Cambridge University Press , 2009

Issing,O. – Gaspar, V. – Angeloni, I. – Tristani, O.: Monetary policy in the Euro Area: Strategy and Decision-Making at the European Central Bank, Cambridge University Press. Cambridge, 2001

Kakes, J. – Sturm, J.E.: "Monetary policy and bank lending: Evidence from German banking groups." Journal of Banking and Finance 26, 2002

Kashyap, A.K. – Stein, J.C.: Monetary policy and bank lending, 1995 In: Mankiw, N.G. (Ed.): Monetary Policy, Chicago University Press, Chicago, IL, pp. 221–256, 1995

Lensink R. & Sterken E.: "Monetary transmission and bank competition in the EMU" Journal of Banking & Finance No. 26 pp.2065–2075, 2002

Lőrincné Istvánffy H.: Pénzügyi integráció Európában, KJK-Kerszöv Budapest, 2001

Mateut, S. – Bougheas, S. – Mizen, P.: "Trade credit, bank lending and monetary policy transmission" European Economic Review No. 50 pp.603–629, 2006

Mojon, B. – Smets, F. – Vermeulen, P.: "Investment and monetary policy in the euro area" Journal of Banking and Finance 26, 2002

Palánkai T.: Az európai integráció gazdaságtana, Aula, Budapest, 2004

Poole. W. and Rasche. R. H. "Perfecting the Market's Knowledge of Monetary Policy." Journal of Financial Services Research, December 2000. *18*(2-3). pp. 255-98. , 2000

Perez-Quirós. G – Mendizabal H.G.: "The daily market for funds in Europe: has something changed with the EMU?". ECB Working Paper. no 67., 2001

Sinn, H-W: "Chancellor Schroeder's „steady hand" must act now" Ifo Viewpoint, August 29., 2001