UNIVERSITY OF CRAIOVA
FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION
DOCTORAL SCHOOL OF ECONOMICS
FIELD OF ECONOMY

Andreea-Maria ENEA-SMARANDACHE
[CIOBANU]

MONETARY POLICY IN ROMANIA, EUROPEAN UNION MEMBER STATE

- SUMMARY OF PhD THESIS -

Scientific Coordinator
Professor Gheorghe PÎRVU, Ph. D.

Craiova
2009

A. CONTENTS OF PhD THESIS

B. KEY WORDS

- Macroeconomic policy mix
- Monetary policy
- Currency demand
- Currency supply
- Monetary equilibrium
- Inflation targeting
- European Monetary System
- European Monetary Union
- Optimum currency areas
- Real convergence
- Nominal convergence
- European Central Bank
- National Bank of Romania
- CORE2 inflation
- Consumer price index
- Exchange rate
- Interest rate
- Monetary mass
- Stationarity tests
- Granger tests
- Recursive VAR
- Response function
- Purchasing Power Parity
- BEER methodology
- Johansen Cointegration Tests

C. SYNTHESES OF THE MAIN PARTS OF THE THESIS

Romania's accession to the EU on January 1, 2007 did not mark the end of the real and nominal convergence to the euro area, but rather it should continue, perhaps even faster than before. In this context, monetary policy has a key role in the convergence process, ensuring and maintaining price stability, stimulating sustainable economic growth.

Based on these considerations, in this doctoral thesis I explored the theoretical foundations of the monetary policy, the European monetary integration and the common monetary policy, the research focusing towards the end on the monetary policy promoted by the National Bank of Romania, its evolution, its impact on the real economy and particularly the challenges that it will have to face in the future in terms of adopting the single European currency. This work is structured in three parts, which are in turn divided into ten chapters.

In the first part, entitled **"Theoretical foundations of monetary policy"**, I highlighted, through the four chapters, the main theories that govern the currency, the monetary market and the monetary policy. The study approach initiated presents a unitary character, due to the filtration of theoretical elements with high relevance for the tackled themes, to the comparative analysis of different theories and points of view expressed in the specialized literature and last but not least, to pointing the critical-intrusive opinions and not just those traditionally supported, so that the ideational and informational variety characteristic of these topics to converge as good as possible to the objective of clarifying the monetary policy concept.

In the first chapter, entitled **"Monetary policy in the context of the macroeconomic policy mix"**, I tried to capture the role that monetary policy holds in achieving the fundamental objectives of the general economic policy. I started the analysis based on the idea that in the current period, none of the world’s states is any longer using pure economic policies, but the authorities' actions are directed towards the mix of policies, as a prerequisite for macroeconomic stability. For purposes of this mix, the economic policy and especially its essential component, the monetary policy, represents a compromise between the often divergent objectives, a veritable "vicious circle", designed to maximize long-term positive effects, by limiting short-term economic and social costs.

After developing an applicative mathematical model of the macroeconomic policy mix, the main conclusion drawn is that between the economic policies must exist both "division of labor" and cooperation. The "division of labor" between policies is done by assigning a specific objective to each policy and the cooperation between policies concerns, firstly, their harmonization, because the objectives can be achieved only if policies are harmonized. In case of imbalances, corrections must be made in accordance with the "division of labor", in other words, each policy must make corrections in its specific action field in time to avoid excessive burden of the other policies.

In the second chapter, entitled **"Money in economy: analysis of money market equilibrium″**, I presented the currency’s contribution to achieving general macroeconomic balance, the relationship between the two concepts being exposed and evaluated in all its complexity. To surprise the strength of this connection, I appealed to the currency analysis in terms of the demand-supply mechanism, using established models. The monetary market equilibrium analysis, however, would have been incomplete without linking it to the study of the balance established on the goods and services market, because the specific nature of a market economy lies in the monetary - real interplay, vital for the recovery of the financial and monetary flows of real resources, lying in a continuous inter-conditioning process.

In the third chapter, **"The monetary policy: objectives, instruments and transmission mechanisms"** I highlighted the general macroeconomic framework in which monetary policy should act, indicating the directions of expression and dissemination of its actions in the economy. I approached the impact of the monetary policy on the economy, both in terms of positive results and its limits, embodied particularly in the apparent contradiction that arises between the objectives pursued.

Following the effectiveness of the monetary policy through the agency of transmission channels allowing the monetary instruments to interfere on the monetary measures, I concluded that the monetary policy is more effective in an economy where prices of goods and services are rigid, and less efficient in the reverse situation, where prices of goods and services are flexible.

In chapter four, I analyzed the **"Alternative Strategies for the Central Bank in directing the monetary policy"**. After stressing the need for finding an optimal monetary anchor giving time consistency to the monetary policy, I gradually presented the main monetary policy strategies, while achieving a comparative approach in terms of advantages and disadvantages brought by them. Pursuant to this analysis, I noticed that the direct inflation targeting regime combines the benefits of other regimes, forming a superior alternative, the focus on the settled objective, the assurance of a high degree of transparency, the explanation for the large public of the undertaken strategies and measures and taking responsibility for these measures are as many arguments in favor of applying a monetary policy based on this regime.

In the second part, **"Monetary integration and monetary policy of the European Union",** I addressed the issue of European monetary integration and the common monetary policy of the European Union, issues of importance to create the institutional, strategic and operational framework for its implementation in Romania at the same time with the introduction of the single European currency.

In chapter five, entitled **"European monetary unification process"**, I presented the main coordinates of the European monetary integration process, starting from the origins of the monetary integration - the gold standard - continuing to analyze the causes behind the currency crisis during the interwar period, to present the Bretton Woods Agreements and the International Monetary Fund and completing with the identification of the events that led to the European Monetary System advent. To best identify the foundations and the context of the emergence of the European Economic and Monetary Union in its present form, I explained the functioning mechanisms of the European Monetary System, their way of concrete action, as well as the periods of crisis, among its crash causes counting the erosion of competitiveness in some countries (notably Italy) due to differences in inflation relative to Germany and the rise in labor price, exchange rate variations due to the asymmetric shock of German unification, and last but not least, the speculative attacks occurred both because of the inevitable changes in the monetary policy and the lack of economic fundamentals.

In chapter six, **"European Economic and Monetary Union and the single currency",** I made a summary of the major bibliographic sources referring to the dominant theory of monetary integration - the theory of optimum currency areas and the steps and conditions to achieve the monetary union. I addressed the theory of optimum currency areas, both in a classical way, in terms of optimality criteria applied to a currency area, and in a modern way, based on cost-benefit analysis, pursuing the identification of some justifications for using the Maastricht convergence criteria as terminals in the process of creation of the European Monetary Union, in the context in which the degree of closeness to the criteria of the optimum currency areas theory is very low.

In addition to the nominal convergence, expressly stipulated in the Maastricht Treaty, I emphasized the importance of the real convergence, trying to formulate a set of criteria for its evaluation and its application in the analysis of the European Union's eastward enlargement process. The results of this analysis show that in terms of standard economic variables: production, consumption, income, prices, the CEE countries have made significant progress over the past few years. One of the greatest achievements of the transition period is the sustainability of the disinflation process. Many of these countries have had high inflation or even hyperinflation in the 90s, while in recent years inflation registered a single-digit level in all the CEE countries, many of them close to achieving price stability.

Another successful field, important for the financial markets, was the exchange rate stability and even the strong appreciation of currencies in the CEE countries. In line with the exchange rate fluctuations, the interest rates declined in many countries, especially in long-term maturities. This positive trend was caused, no doubt, by their commitments relative to the euro adoption, but nor the extremely favorable global financial conditions in recent years that contributed to the peace of the regional markets should not be ignored.

Against a background of completion of the process of European monetary unification by creating a single currency, chapter seven **"European Central Bank and monetary policy in the Euro Area"** presents the institutional, strategic and operational framework for the promotion of the monetary policy in the Euro Area. I examined the European Central Bank, the European System of Central Banks, the Eurosystem and the national central banks of its component in terms of the responsibilities they hold, the monetary policy strategy pursued, characterized by accountability, transparency and communication, and the instruments used in achieving the final objective - the price stability.

Regarding the monetary policy instruments, the Eurosystem's operational framework has three main elements. Firstly, through open market operations, ECB manages the reserve requirements and influences the interest rates affecting the market, providing banks reserves to cover liquidity needs. Secondly, banks have at their disposal two standing facilities, a marginal lending facility and a deposit facility, which enable them to contract or grant overnight credits or set up deposits in exceptional circumstances. The facilities are available to banks at their request, although the loans under the marginal lending facility should be offset by eligible guarantees. Thirdly, the establishment of the minimum reserves leads to an increase in banks' needs for liquidity. Moreover, given that they can be calculated as a monthly average, these can also disburden temporary liquidity shocks in the monetary market, thereby reducing the volatility of short-term rates.

In the last part, entitled **"Monetary policy in Romania - recent developments and outlook",** I approached, in the three chapters, the main developments of the monetary policy in Romania, the effects of various monetary policy measures on the overall economy, without omitting the monetary dimension of the European integration of our country. In this context, I presented the major mutations required in Romania for the euro adoption to be permitted, assessing the opportunity of the adoption of the single European currency in terms of the current global financial crisis.

In chapter eight I analyzed the **"Monetary policy promoted by the National Bank of Romania"**, with particular attention to decoding the objectives pursued, the instruments used and the transmission channels of monetary policy impulses in the economic activity.

To quantify the contribution of each instrument in achieving the final objective - the price stability - and to assess the importance and effectiveness of each mechanism, I studied, in quantitative terms, using econometric methods, the main characteristics of the transmission mechanism of monetary policy in Romania. The results I have obtained using the VAR methodology show that in case of exchange rate shocks (a depreciation in the exchange rate of one standard deviation) and monetary policy (an increase in interest rates with one standard deviation), the other variables respond correctly. Also, a monetary policy shock produces significant statistical effects on inflation, either total or only the one associated to the CORE2 index. Even if the method used is characterized by simplicity and rigidity, the achieved recursive VAR seem to lead to the conclusion that there is an interest rate channel, with significant effects on the exchange rate. One also may find an immediate response of the exchange rate and inflation to a monetary policy shock, in the sense of an appreciation in the rate exchange and a reduction in inflation.

In chapter nine, I quantified, in real terms, **"The impact of monetary policy on the real economy"**. Although the general economic framework analysis of the Romanian economy shows positive trends in time of the main macroeconomic indicators, however, still one can feel the need for adequate and competent reforms to ensure the convergence with other European Union Member States, especially regarding inflation. Maintaining the growth rate of consumer prices nearby the projected trajectory is one condition for future developments of the exogenous factors that should not deviate substantially from the coordinates of the baseline scenario, and is based on the adequate support given to the monetary policy by the other components of the macroeconomic policy mix.

Romania's integration into EU structures has increased the chances and opportunities and stressed the need given by the advantage of being a full member to concentrate its efforts in order to modernize the economy and reduce disparities still separating us from the other member countries.

In chapter ten, entitled **"Romania and the single European currency"** I made a quantitative analysis of the nominal and real convergence criteria that are required for Romania to meet before the euro adoption. Regarding the situation of the achievement of the nominal convergence criteria by Romania, it is characterized by an unfavorable trend in time, only one criterion being fulfilled in present. Romania is still lagging behind in the matter of real convergence criteria, but ignoring them under the pretext that they do not appear explicitly in any treaty would be a mistake. It is true that euro adoption could also be achieved in less stringent requirements, but the evolution of Romanian economy could be compromised, generating more costs than benefits unless serious measures are taken in order to compatibilize all economic structures.

At the same time, I estimated, using econometric models, the equilibrium exchange rate, by setting the central parity as close to it, to exclude the possibility of compromising the process of nominal and real convergence. Based on this estimate, one can see the negative impact of the openness of the Romanian economy on the exchange rate in the sense of depreciation, as well as the positive influence of the net foreign assets. Meanwhile, the estimate of the equilibrium exchange rate of the national currency has a tendency to appreciate (a decreasing trend), a trend that was accentuated in the second part of the period analyzed, the Romanian leu being overvalued compared with the equilibrium value.

Finally, I have drawn the main directions of the monetary policy in the context of the global financial crisis, the hypothesis of a more rapid adoption of the single currency by Romania being verified both in terms of advantages and disadvantages. The speed-up for the euro adoption in a relatively short horizon of time has the main advantage of the earlier manifestation of the benefits of the exchange risk disappearance, which leads to a sustainable economic growth. Meanwhile, the pace of the structural reforms remains alert, being stimulated the consistency for the whole set of economic policies. Moreover, an early adoption of the single currency has, in turn, a number of disadvantages relating principally to the loss of monetary autonomy and exchange rate. In the absence of the independent monetary policy and exchange rate, the full burden of structural adjustments is displaced on the economic activity and employment, in terms of a still limited flexibility of the Romanian economy. In addition, the lack of synchronization of business cycles in Romania and in the Euro Area would increase the risk of asymmetric shocks, and the probability of the event of a stronger Balassa-Samuelson effect would have a negative impact on disinflation.

A long-term postponement of the euro adoption is not, however, a viable solution for Romania. Although there would be a longer period to achieve the outstanding structural adjustments and a progress in terms of real and nominal convergence, the persistence of higher transaction costs associated with the exchange risk could inhibit investments and economic growth. At the same time, the desire to keep for a longer period of time the autonomy in the monetary policy and exchange rate could send an unclear message to international capital markets, delay that can be attributed to structural or economic policy weaknesses.

Therefore, the previously announced timetable for the euro adoption - the accession on 1st January 2012 to the MRS II -represents the equilibrium solution for Romania. It combines the advantages of the two extreme options and limits their disadvantages, achieving a complementarity between the desirability and feasibility of the proposed path. At the same time, it is also ensured an adjustment period necessary to complete most of the structural reforms and to obtain a more flexible labor market, in order to continue the process of disinflation, to exceed the peak of capital inflows and to synchronize the business cycles. In other words, the accession to the MRS II in 2012 sets the *ex ante* conditions for that the duration of the participation in this mechanism to be limited to two years. However, keeping in line with the accession date and completing the minimum period of two years inside this mechanism is subject to the need that by 2012, in Romania, many but appropriate and competent reforms to be fulfilled.