

CENTRAL EUROPEAN UNIVERSITY

**CONDITIONS FOR EFFICIENT MONETARY POLICY IN TRANSITION:
A COMPARATIVE PERSPECTIVE**

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Abstract

Since the dissolution of the USSR the economic developments of the post soviet countries, as well as the lessons of the overall evolutions, are still unstructured.

Institutions as well as governmental policies play a major role in the economic growth of a country. Monetary policy being one of the cornerstones of the economic reform of a country and its sustainable economic growth is what I will be looking at in this paper.

The topic of my thesis will answer why some countries are most successful than others by looking at two dissimilar examples: Slovakia and Moldova. By the use of scientific research methods such as: scientific abstraction, induction and deduction, method of analysis, comparison, analogy and synthesis, my thesis will answer the question how were/are these countries able to overcome the challenges posed by the transition period from state to market economy, what were the good and bad roads in the monetary policies' implementation and what lessons are there to be learned.

Introduction

It has been almost 18 years since the dissolution of the USSR and the economic developments of the post soviet countries, as well as the lessons of the overall evolutions, are still unstructured. While sharing a common past soviet legacy the countries of Central and Eastern Europe in aiming to build a sustainable economy have followed different paths that led to differences and gaps that have widened over time. Heterogeneous economic performance could be observed while looking at the economic indicators of the above mentioned counties, while most countries have been growing, only a handful have restored the GDP level of 1989. At the same time, general principles of development to a large degree apply to the transition economies. As the inheritance from the past gradually becomes less important, transition countries are dealing with similar issues: restructuring and capital governance, development of a self-sustainable banking system and qualitative management of public finances.¹

Economic growth remains a concern of the maximum importance for the governments of all countries and represents a priority in the economic analysis as an objective of state economic policies. Macroeconomic policies in the process of transition of Central and Eastern European countries to market economy had an important function to ensure the adjustment of the economic structures to a certain Central and East-European market economy model. In this context the policies of macro-stabilizing and of economic growth had a significant role.

Economic growth cannot be analyzed without taking into consideration the enhancement and consolidation of the role of institutions and governmental policies (especially monetary policy) and their implications in the promotion of economic reforms. Among the economic growth policies economists include monetary policy, which is defined by ECB as the “action undertaken

¹ David Begg, Laszlo Halpern, and Charles Wyplosz, *Monetary and Exchange rate policies, EMU and Central and Eastern Europe: Forum Report of the Economic Policy Initiative no.5* (London: Economic Policy Initiative, 1999), 1-3.

by a central bank using the instruments at its disposal in order to achieve its objectives (e.g. maintaining price stability)”² and represents an instrument of macroeconomic policy that leads to the regulation of the monetary mass, of the volume of credits and of the interest rate. What remains important is to see the conditions for this instrument to be successful and efficient for developing countries in their transition to the market economy.

Debate

In order to evaluate economies in transition it is important to focus on those areas of monetary policies that are relevant to this research by assessing the specific literature on this topic and what exactly monetary policy has to deal with. By looking at the literature and analyses available quite a significant amount of scholars agree that the foreign exchange rate regime, inflation and money targeting are considered to be optional tools of the policy makers in following intermediate goals of the main target - that of economic growth based on non-inflation.

For example, on the role of the central bank as well as the interconnection between the monetary and exchange rate policies (with the emphasis on a fixed exchange rate regime) Fisher argues that ‘the independent ability of the central bank to determine the rate of inflation and interest rates is sharply curtailed’.³

On the role of the central bank in delivering monetary policies, Freytag⁴, as well as Hayo and Hefeker⁵, reach the conclusion that while delegating the authority to the central bank and making it responsible for price stability as it ‘is an important institutional device for committing

² European Central Bank, under “glossary”, <http://www.ecb.europa.eu/home/glossary/html/glossm.en.html> (accessed 5 May, 2009).

³ Stanley Fisher, *Exchange Rate Regimes: Is the bipolar view correct?: Distinguished Lecture on Economics in Government* (New Orleans, 2001), 304.

⁴ Andreas Freytag, *Does Central Bank independence reflect monetary commitment properly? Methodical coordination: BLN Quarterly Review No.217* (BLN Quarterly Review, 2001), 182-208.

⁵ Bernd Hayo and Carsten Hefeker, *Do we really need central bank independence? A critical reexamination: University of Basil WWZ Discussion Paper No.3* (Basel: University of Basel, 2001).

monetary policy', there exist other alternatives, such as inflation targets and fixed exchange rates.

Contrary to that, Eichengreen and Hausmann⁶ are not so trustworthy on the ability of the developing countries to create and manage institutions that would provide satisfactory monetary policies and would go for a currency board.

Another point that is noticeably debated between scholars is the role monetary policy may have in the short and long run.⁷ Friedman argues that a relaxed and expansionary monetary policy does not induce long-term growth, but that there is a solid body of evidence that high inflation caused by a relaxed monetary policy damages economic growth.⁸ The second assumption highlighted by Allsopp and Vines is that monetary policy may and even should have a short run impact on stabilization. Medium-term commitment to price stability certainly does not exclude a short-run aim to decrease the fluctuations of output.⁹

These are just some examples of debatable issues that were and still are used in the delivering of sustainable monetary policy analysis.

Research question

Effective monetary policy is one of the cornerstones of the economic reform of a country and its sustainable economic growth. This topic is relevant from both an economic and business point of view. From an economic perspective it aims to analyze the monetary policies developed in the two dissimilar counties Slovakia and Moldova after the post-soviet period, bringing out

⁶ Barry Eichengreen and Ricardo Hausmann, *Exchange rates and financial fragility: NBER Working Paper No. 7418* (NBER, 1999).

⁷ Miroslav Beblavy, *Monetary Policy in Central Europe* (Oxon: Routledge, 2007), 7-9.

⁸ Milton Friedman, *The role of the monetary policy: presidential address to AEA: American Economic Review* 58 (AEA, 1986), 1-17.

⁹ Christopher Allsopp and David Vines, *The assessment: macroeconomic policy: Oxford Review of Economic policy* No. 16 (Oxford, 2000), 1-32.

similarities and differences in the policies implementation and from the business point of view it is supposed to be centered on the not so well known Moldovan and Slovak economies. Having as the explanatory variable (or an objective in the case of Moldova) the anchor role of the EMU and the drive to join the Euro zone, my thesis will answer the question how were/are these countries able to overcome the challenges posed by this transition period from state to market economy, what were the good and bad roads in the monetary policies' implementation and what lessons are there to be learned.

Methodology

In aiming to answer the question posed I use scientific research methods based on the principles of economic epistemology. From the multitude of methods and procedures used in economic analysis, I plan on applying to my research:

- scientific abstraction used with the purpose of synthesizing and generalizing the main concepts, principles, theories that I will use during my research
- induction and deduction that are interconnected and form the main components of the scientific economic research process;
- method of analysis, comparison, analogy and synthesis that will contribute to the analysis of the paper's objectives and drawing of conclusions that hopefully will be of interest to the scholars in the field;
- at the same time, taking into account the importance of the relationship between the natural evolution in time and space of the economic processes, I will be using historical and logical methods as part of my research process.

Contribution and importance

As I previously mentioned, this topic is relevant from both economic and business points of view. The economic perspective will provide an analysis of the monetary policies developed in both countries after the post-soviet period, and highlight the similarities and differences, while the business reader will benefit from this paper because of its aim to target the not so well known Moldovan and Slovak economies.

As contributions that I will be aiming at could be mentioned: results that will follow after the in-depth analysis of the correlation between monetary policies and economic growth of post-soviet countries in the example of Moldova and Slovakia and the role of monetary policies in the macro-stabilization approaches; findings resulting from the identification of the monetary policies used in the transition period by the two countries as ways to attenuate the effects and impacts on the real economy of the regional financial crisis and lessons to be learned, and finally identify the conditions for the efficient monetary policies implementation and the analysis whether Slovakia could be taken as an example and a success story for countries like Moldova.

Chapter 1 – Why the price stability matters for transition economies

1.1. *Empirical analysis*

Strong events manifested at the end of 1989 in social and political context had an echo in all countries of the Central and Eastern Europe. The willingness of these countries to move to a new economic order has opened the way of transition to a market economy, that for some was difficult, and for others much quicker.

International Monetary Fund, talking about countries in transition, considers that "the main ingredients of the transition process are liberalization, macroeconomic stabilization, restructuring and privatization, and legal and institutional reforms ".¹⁰

Liberalization was focused, primarily, on prices, for the purpose of establishing them according to the mechanisms of the free market, but also taking into account trade liberalization that was aimed to ensure the prices liberalization. In this area, it should be recalled that the decisions have varied, Central European countries mostly opting for shock therapy in terms of price liberalization, a fact that, later on, will lead to more rapid macroeconomic stabilization and implicitly, faster economic recovery.

Depending on the adopted liberalization, the inflationary pressures were of a higher or lower intensity, as well as the periods of a three-digit rate of inflation were longer or shorter. (Annex 1) This has required, by itself, the adoption and implementation of a program of macroeconomic stabilization, which would enable the control of inflationary trends, meaning managing the generalized increase in prices in the economy, not intervening in the their administrative settling, eliminating the excess of demand by ensuring a sustainable economic growth. This process

¹⁰ IMF Publications, *Transition Economies: An IMF Perspective on Progress and Prospects 00/08* (IMF: 2000), <http://www.imf.org/external/np/exr/ib/2000/110300.htm#II> (Accessed 15 May, 2009).

needed to ensure a certain level of discipline in the state budget, as in the growth of money supply and credit in the economy; a discipline that should be combined with notable progress in terms of a sustainable external balance of payments.

For the macro-stabilization program to be effective, it ought to be accompanied by a broad reform in the real economy which would generate its restructuring, and eliminate, if possible, the state monopoly over economic activity. Both the restructuring and privatization processes must be based on a well-formulated legal framework, as well as an institutional framework that would enable reforms. Referring to the role of institutions for transition economies of the Central and Eastern Europe, Laszlo Csaba believes that “once market institutions are in their place, a different quality emerges that can be elaborated and solved in a context-specific manner”¹¹, a quality that eventually will lead to sustainable policies implemented by these institutions and eventually to positive economic results.

Given these issues, one can say that progress registered by Central and Eastern European countries during the transition period was not characterized by consistency; the beginning stages outlining substantive changes in the nominal scale, a reason for which the success of stabilization would require a strong nominal anchor.

The nominal anchor is, in fact, "a nominal variable that is fixed or limited to a certain level in order to ensure the price level stability. It should also be a central variable "¹², that would allow, ultimately, the indirect influence on the price level. Despite the somewhat similar problems that they faced, countries of Central and Eastern Europe have adopted different reform programs, a reason for why the process of macroeconomic stabilization has been successful or not.

¹¹ Laszlo Csaba, *The New Political Economy of the Emerging Europe* (Budapest: Akadémiai Kiadó, 2007), 70.

¹² Leslie Lipschitz, *Monetary policy in Central and Eastern Europe: strategies, instruments and transmission mechanism* (National Bank of Austria, 1999).

Starting from here we can observe the developments in these transition countries, from the outset can be seen clearly that the first cause of the differences between the group of countries presented in the **Annex 2** is the starting time for the process of macroeconomic stabilization.

If looking at the GDP and assessing the degree of recovery and growth, the leaders were Slovenia, Hungary, Albania and Poland while in the laggards camp were Serbia that experienced civil unrest, followed by Latvia and Lithuania the 2 former Soviet Union states. Some representatives of the NIS as Russia and Ukraine, even though had registered impressive growth rates in the post 99 period would spend quite a long amount of time in trying to return to their lost output level.¹³

Meanwhile the monetary policy adopted by these countries, unanimously agreed that the final objective of monetary policy in the transition to market economy should be price level stability.¹⁴ This objective is clearly stated in the monetary policy of countries in transition.

If in the case of Czech Republic the final monetary policy objective (as highlighted in the Constitution and the Statute of the Czech National Bank) aims to maintain national currency stability in order to ensure price stability (at its turn, price stability depending directly on the permanent targets of monetary policy: achieving macroeconomic stability, ensuring the process of disinflation and ensuring the external balance)¹⁵, the National Bank of Poland aims for the reduction of inflation that will lead over time to ensure price stability. In the case of Poland there has to be mentioned that achieving this objective will lead to the creation of a foundation to ensure sustainable economic growth, adding to this an objective aimed at supporting the

¹³ Laszlo Csaba, *The New Political Economy of the Emerging Europe* (Budapest: Akadémiai Kiadó, 2007), 36-37.

¹⁴ According to National Bank reports of the respective countries.

¹⁵ Czech National Bank, under "Monetary policy," http://www.cnb.cz/en/monetary_policy/, (accesses 12 May, 2009).

institutional development of modern financial markets¹⁶. Up till 2004, the year of its EU joining the Slovak Republic, had as the basic monetary policy objective of the National Bank of Slovakia the insurance of internal (implicit price stability) and external stability (external balance) of the national currency (Slovak Crown).¹⁷ In addition to this objective, Slovakia was aiming for economic growth.

As for Moldova that still remains a bottom case “the fundamental objective of the National Bank of Moldova is achieving and maintaining price stability”¹⁸. Additionally to its fundamental objective, it promotes and maintains a financial system based on market principles and supports the monetary and foreign exchange policy as the component part of the single economic policy of the state.

Given the high levels of inflation rates recorded during the transition period (Annex 1) is thus widely accepted that maintenance of price stability must be ensured. What distinguishes transition countries is how to achieve this objective, and adopt a strategy for this purpose (direct or indirect targeting of the final objective of monetary policy).

1.2. Strategies to ensure price stability

Inflation developments in recent years have led to the granting of special importance to the insurance of the domestic monetary stability, i.e. price stability, which became the final objective of monetary policy adopted by Central Banks. The task of ensuring price stability, able to lead to the creation of a stable economic framework, allowing for sustainable economic development,

¹⁶ National Bank of Poland, under “Monetary policy,” http://www.nbp.pl/Homen.aspx?f=en/onbp/informacje/polityka_pieniezna.html, (accessed 12 May, 2009).

¹⁷ Monetary Policy of NBS until 2008, under “Monetary policy,” http://www.nbs.sk/_img/Documents/MPOL/mprog/2008a.pdf, (accessed 12 May, 2009).

¹⁸ National Bank of Moldova, “Monetary and foreign exchange policy of the National Bank of Moldova for 2009,” (2009), under “Monetary and Foreign Exchange policy of the NBM,” <http://www.ecb.europa.eu/home/glossary/html/glossm.en.html> (accessed 12 May, 2009).

highlights, in fact, the increased level of responsibility assumed by Central Banks with regard to ensuring a sustained level of growth.

Achieving this objective depends, finally, on the individual schemes of monetary policy adopted by the Central Banks, leading to the achievement of the final objective. Differences arise on how the intervention tools are used:

- directly, by adopting an inflation target,
- indirectly, through the setting of interim targets, often represented by the exchange rate, money supply in the economy or another nominal anchor considered implicit.

Consequently, the theory, as well as the economic experience so far, has outlined four monetary policy regimes based on:

- a) the exchange rate, that can be classified into flexible, intermediate and rigid arrangement¹⁹;
- b) the control of currency supply;
- c) an implicit nominal anchor;
- d) direct inflation targeting (the most recent mechanism to achieve monetary policy).

In the following paragraphs I will be looking at each kind of the monetary policy regimes and offer a brief description on how they function.

1.2.1. The exchange rate regime

Referring to the exchange rate management Julius Horvath believes it “has macroeconomic and microeconomic dimensions. The macro has to do with the importance of establishing a credible anchor aiming to price stability while the micro deals with the competitiveness of the economy and issues related to the efficiency of resource allocation”²⁰.

Part of the Intermediate Exchange rate arrangements are the target zones. “**Target** zone is an exchange arrangement in which central parity is fixed with a band around it. It differs from a peg

¹⁹ Julius Horvath, *International Currency Arrangements and Policies* (New York: Nova Science Publishers, Inc., 2006).

²⁰ Julius Horvath, *International Currency Arrangements and Policies* (New York: Nova Science Publishers, Inc., 2006), 4.

because it allows a movement of the currency around central parity and within given bands.”²¹ Thus in the case of adopting a regime based on targeting the exchange rate, the Central Bank tries to ensure the stability of the nominal exchange rates through the use of its own tools related on one hand to changes in the interest rates practiced, and on the other hand, on the direct foreign exchange interventions, interventions designed to support the exchange rate. Adopting such a system requires several conditions:

- the adoption of a mix of macroeconomic policies that would lead to ensuring a low inflation rate compared with the corresponding currency to which the national currency is anchored,
- the existence of a sufficient level of international reserves to allow the prompt intervention in the forex market,
- maintaining the country's external credibility, including the political stability and institutional and legislative framework which strongly influence the former.²²

The simplest form of this strategy involves "anchoring" the exchange rate of the national currency to one or more currencies of countries that have a low inflation rate, a method that contributes to reducing inflation in the anchored country too. This thing is being done in fact by "importing" inflation from the country or countries with which comparison is being made. This regime, however, has many variants, this being, in fact, the simplest option. The operation principle of this scheme is based on determining a fixed exchange rate, based on reporting to the anchor currency (or currencies basket). To this rate may be also established margins of fluctuation of exchange rate market, talking about the so - called exchange rate band. The fluctuation band is determined only for the nominal exchange rate, the market exchange rate floating freely, and Central Bank intervention being done only if market developments lead to outrun these limits. In the case of the fluctuation band, unlike in the classic example, a reduction of the speculative capital flows is achieved because, by granting a certain degree of free flotation to the exchange rates, the uncertainty regarding the future development of the market exchange rate increases, which ensures the Central Bank a higher degree of autonomy towards the development and implementation of monetary policy.

²¹ Ibid., 4.

²² Ionela Costica, *Politica Monetara* (Bucuresti: Editura ASE, 2002), 3.

Another variant of exchange rate targeting, the so-called **crawling peg**, also called “shiftable parities”²³ first applied in Chile in 1956 is a modified form of exchange rate regime. It assumes, in fact, the changing of the original exchange rate, depending on inflation developments, without, however, that this amendment reaches beyond the level of inflation. A controlled devaluation of the exchange rate is being done, that allows removing the pressures that can occur at the real exchange rate level that could lead to new pressures in terms of sustainability of domestic prices (and therefore their erosion).

An extreme alternative, if having in mind Argentina’s case which used this instrument in 1991²⁴, is represented by **currency board**, a representative of the rigid exchange rate arrangement, under which the national currency is put into circulation only based on the availability of the international currency reserves, being established a fixed exchange rate against a reference currency, exchange rate that has to be maintained at the original established level (Bulgaria, which introduced its currency board in 1997, adopted the initial anchoring of Bulgarian Lev to the German Mark, at a parity 1 to 1²⁵). This strong anchoring requires in fact the respective country to lead its economic development in achieving performances of the country with which the comparison is made, which often can lead to an overexposure of the real economy that simply can answer with bankruptcy at pressures.

The European Union is characterized by the monetary union rigid exchange rate arrangement. It is when a “set of countries introduce a common currency issued by a common, regional central bank”²⁶, the European Central Bank. Under this scenario member countries gave up their domestic currencies in favor of a common used currency, the Euro.

However, in my opinion, using the exchange rate as a monetary policy anchor presents certain advantages for the recipient country. First, imposes the respective economy to achieve the level of inflation of the economy that makes the comparison (phenomenon of imported inflation), which is lower. It is also important to state that the use of such anchors provides a more prompt response from the public since the announcement of a certain level of exchange rate determines a

²³ Julius Horvath, *International Currency Arrangements and Policies* (New York: Nova Science Publishers, Inc., 2006), 5.

²⁴ Ibid., 7.

²⁵ Ibid., 7.

²⁶ Ibid., 9.

certain behavior of the population, the exchange rate being, in fact, the price that highlights the future developments of the purchasing power of the national currency. Neither the less modern currency boards, adopted by the transition countries 'can not prevent an attack on the domestic currency.'²⁷

Even if a practice based on monetary exchange rate manipulation may increase the credibility of the monetary authority, we can not say that this scheme leads, at the same time to reducing the autonomy of the Central Bank as regards the adoption of monetary policy measures. Other monetary variables must be determined in close connection with the establishment of the exchange rate. Thus, other monetary variables too will be automatically linked to the corresponding variables in the country that makes the comparison, the modification of the latter resulting in significant changes in the former. Another potential risk is that of the adoption of an overvalued exchange rate which in time leads to an erosion of the purchasing power of national currency, because the real economy can not sustain on a long-term such a rate²⁸.

All four of the Visegrad countries while taking the way to transition economy, adopted fixed exchange rate regimes in 1990-1991, Hungary being the one who opted for an adjustable peg in 1990. Pressures of the real exchange rate as well as the need to be protected from potential speculations the above mentioned countries moved to floating exchange rates, Slovakia adopting it in 1998.

The Moldovan is fixed against the US dollar so that any significant oscillation of the United States currency against other currencies leads to sound results on the internal foreign currency market and affects the businesses and economy in general.

1.2.2. The scheme based on monetary targeting

The adoption of monetary anchors based on the monetary aggregates is based on the quantitative theory represented by the exchange equation, according to which in the long term, the increase in prices is determined by the recorded increase in the supply of currency.

Given the opportunity to provide an increase in the supply of currency in the economy, the Central Bank has therefore a high level of monetary policy independence, having the possibility

²⁷ Ibid., 8.

²⁸ Ionela Costica, *Politica Monetara* (Bucuresti: Editura ASE, 2002), 4.

to react quickly in the event of strong shocks at the national economy level (either through direct or indirect interventions).

However, an important problem facing the monetary authority is related to setting the best monetary aggregate that would allow the achievement of the final objective of monetary policy because it must be relevant to the economy it represents, and at the same time, its influence by the Central Bank should consider just the influence on the level of prices in the economy, having the purpose of ensuring their stability.

As a matter of fact, establishing a monetary anchor for monetary policy - the control of monetary aggregates - is effective only when the link between the monetary instrument and the price level is predictable, the Central Bank being responsible to ensure, on the basis of available monetary policy instruments, the efficient management of money supply in the economy. Under these conditions, characterized by strong innovation in the financial sphere, as well as by the computerization of markets and a strong process of globalization, the link between the two elements (monetary aggregate and level of prices in the economy) is even more volatile and therefore is very difficult to predict.²⁹

On the other hand, given that we talk about the transition to a market economy, it is difficult to undertake an accurate control of the supply of currency in the economy, being known that it is also determined by the current activity of banks in the system, activity that can not be directly influenced by the monetary authority, thus the intervening by the Central Bank is being done by its lending policies to the economy. The implementation of such a monetary policy (with the monetary anchor - the monetary aggregate) implies the existence of an economic framework that would enable the emergence of a stable and predictable connection between the monetary aggregate and the inflation, the ideal transmission channel of monetary policy being represented by the credit channel because money creation is closely linked to the credits' lending by banks to the economic system, the only possibility to influence them being the level of interest rates.³⁰

1.2.3. Implicit nominal anchor regime

One such scheme implies the application of a monetary policy whose implementation depends on the setting, juncture of the intermediate target as a nominal anchor which is not stated

²⁹ Czech National Bank, *Inflation targeting in the Czech Republic* (Working paper, 2000).

³⁰ Ionela Costica, *Politica Monetara* (Bucuresti: Editura ASE, 2002), 5-6.

explicitly. "A precondition for the successful operation of this scheme is the high credibility of the Central Bank, credibility based on the manifestation of a long-term monetary and prices stability in the analyzed country"³¹. The change of the intermediate target is possible when the Central Bank has achieved its monetary policy objectives, being forced under these conditions to redirect its attention to other monetary issues.

All these mechanisms require, ultimately, the reaching of final objective of monetary policy, implicitly of the macroeconomic policy, through intermediate objectives. (Annex 3) In the current conditions as a result of stronger inflationary pressures, the Central Bank involvement in ensuring price stability in the economy becomes more evident just by setting a level that is intended to be achieved, realization of which depends on the availability of monetary tools. In this context, in order to achieve sustainable price stability in the economy more common are cases of direct inflation targeting.

1.2.4. Direct inflation targeting

The strategy based on direct inflation targeting implies, giving up the setting of interim targets which, ultimately, can harden the Central Bank interventions, so that it will not channel its attention to the one price index, but react to any available information related to possible factors that can endanger price stability, leading to massive increases in the rate of inflation above the year set target. What is specific to this strategy is that for a determined level is being established the level of inflation which the monetary authority seeks to achieve, which is why the strategy based on direct inflation targeting allows for greater transparency of monetary policy, the public can know in advance what would be the Central Bank's direction of action.

Meanwhile, in order to achieve this objective, the Central Bank should have much more information than in the case of indirect strategies for ensuring price stability, because it should be taken into account any factor that may influence the price level in the economy, so that the measures adopted by the Central Bank lead to achievement of the forecasted inflation rate.

Even adopting monetary decisions in such circumstances, is more difficult, taking the decision to follow a strict inflation rate generates a larger independence of the monetary policy and its transmission, even if globally there are more talks about globalization, the total liberalization of capital movement or financial innovations. All this give nothing but provide the necessary

³¹ Czech National Bank, *Inflation targeting in the Czech Republic* (Working paper, 2000), 12.

information in formulating monetary policy decisions, decisions depending on the accuracy and also wide range of information.

Direct inflation targeting as a strategy has become more and more grounded in the current economy, while for economies in transition it is, in fact, the only way that to ensure price stability (Annex 3) and, implicitly, the settling the way to a joining the European Economic and Monetary Union.

In conclusion to the above said one could think that while embarking on the transition way to a market economy and to a better future, the catching up process to the most advanced economies was perceived by most transition counties as an immediate thing that will start happening once the appropriate policies are put on paper and started to be implemented.³² However the immediate improvement did not happen, or if it did in some countries it was due to the sound historical policies and procedures that were still at the roots of that economy (as in the case of Slovakia). Meantime while most of the transition countries were aiming towards liberalization, price stability and macroeconomic stability some countries were more successful than others. (**Annex 2**). On the recovery of growth Laszlo Csaba ³³argues that “it is by no means automatic” and countries of the NIS such as Moldova, Ukraine, Georgia face problems not only economic but also at the society level.

And the main idea here is that ‘there is no single case where growth could have been resumed without stabilization” and in many cases stabilization was and in some cases (Moldova, Georgia) still is a very arduous journey.

That is why in the following chapter in order to better understand and expand the concept of growth to which the sound monetary policy is a direct contributor I intend to look at policies of economic growth in the context of classical and contemporary economic theories and place and importance of monetary policy in the policies of economic growth.

³² Laszlo Csaba, *The New Political Economy of Emerging Europe* (Hungary: 2007), 33.

³³ Laszlo Csaba, *The New Political Economy of Emerging Europe* (Hungary: 2007), 37.

Chapter 2 - Theoretical approach on the role of monetary policy in providing economic growth

2.1. The main policies of economic growth in the context of classical and contemporary economic theories

The concept of growth is one of the most important of the classical and contemporary economic theories and the theory of economic growth is of particular importance in studying the behavior of economic aggregates systems for understanding the evolution of macroeconomic variables. Economic growth is particularly important for the governing bodies of all countries and is a priority in the analysis of economists of different times as an objective of economic policy of the state because of the opportunities for social and economic prosperity which they can offer. Issues of economic growth are largely addressed by specialists that have different views on what the concept of economic growth means³⁴.

In general, we define growth as a country's ability to provide increasing quantities of goods and services, as reflected by increases of the macroeconomic indicators in a given period of time.

Through its content "the economic growth is a positive development trend of the national economy, for a medium and long term, but which does not exclude oscillations, and even temporary economic regressions."³⁵ In a broader sense, according to Nita Dobrota, economic growth means all changes (positive, negative, zero) in the macroeconomic results in a specific spatial and temporal framework.³⁶

In the narrow sense, he believes that economic growth lies in increasing the quantity of activities and results over national economy and its various subsystems, in conjunction with the factors contributing to this increase.³⁷

The history of global economic development shows that in all times, the welfare of people was evaluated by the GDP level which is "the total income earned domestically, including

³⁴ Robert J. Barro and Xavier Sala-i-Martin, *Economic Growth* (New York: McGraw-Hill, 1995).
Michael C. Burda and Charles Wiplosz, *Macroeconomics: a European text* (Oxford: Oxford University Press, 2005).
Richard G. Lipsey and K. Alec Chrystal, *Economics* (Oxford: Oxford University Press, 2007)
Ileana Stănescu and Coralia Angelescu, *Politica de Creștere Economică* (București: Editura Economică, 2004)
³⁵ Dumitru Ciucur and Ilie Gavrilă, *Economie* (București: Editura Economică, 1999), 392.
³⁶ Nita Dobrotă, *Economie* (București: Editura Economică, 2000), 256.
³⁷ Nita Dobrotă, *Economie politică – o tratare unitară a problemelor vitale ale oamenilor* (București: Editura Economică, 1997), 312.

the income earned by foreign-owned factors of production; the total expenditure on domestically produced goods and services”.³⁸ The role of GDP is significant because:

- GDP is the fundamental indicator for macroeconomic policies;
- GDP highlights the economic growth of a country;
- GDP deflator, along with the consumer price index is an indicator that allows the analysis of price movement and inflation.

In the context of many economists allegations, obtaining a high rate of growth is one of the four main objectives of macroeconomic policy, since the growth lies in its contribution to the overall prosperity of the community. Economic growth is desirable in any country since it enables the community to consume more goods and services and contribute to ensuring a greater quantity of goods and social services such as health, education etc., thus leading to improvements of the real standards of living of the population. Macroeconomic indicators of a country and the economic-financial situation of the economic agents are influenced largely by macroeconomic policies and state strategies. Thus making a brief analysis of the concept of macroeconomic policy of the state and identifying the role that different currents of economic thought have attributed to this policy in the process of ensuring the economic growth is highly desirable.

The economic policy of the state can be defined as "actions taken by a government to influence its economy. Types of economic policy actions can include setting interest rates through a federal reserve, regulating the level of government expenditures, creating private property rights, and setting tax rates. "³⁹ "The starting point in developing economic policy is the perception and awareness of the general supreme interests of the nation at a time and in a foreseeable perspective.”⁴⁰ In other words, the economic policy is a deliberate state intervention in the economy to do some structural or conjuncture objectives.⁴¹ Based on comparative analysis of the types of fundamental economic mechanisms, Richard Lipsey reaches the conclusion that the practical problem is not to choose between free market

³⁸ N. Gregory Mankiw, *Macroeconomics fifth edition* (USA: New York, 2003), 530.

³⁹ Investor Words, http://www.investorwords.com/6501/economic_policy.html (accessed May 20, 2009).

⁴⁰ Nita Dobrotă, *Dicționar de economie* (București: Editura Economică, 1999), 356.

⁴¹ Cezar Basno, Nicolae Dardac and Constantin Floricel, *Monedă, credit, bănci* (București: Editura Didactică și Pedagogică, 1999), 379.

economies and economies of centralized command, instead, there has to be chosen the market mix and government intervention that best fits the objectives of economic policy.⁴² Thus defined, the economic policy can be only macro-economic, since all its components relate to the choices the public authority makes in the economic decisions, objectives followed and instruments used for their development.

Over time, the progress registered in developing national economies based on the adoption of appropriate macroeconomic policies have been properly reflected in economic theory. However, in the analysis and design of macroeconomic policies were many controversies between the classical and contemporary schools of economic thought. Contemporary theories and models of economic development, irrespective of the doctrines on which they are based, take into account the need to stimulate economic development through government macroeconomic policies and development strategies.

The classical school, with the most notable representatives such as Adam Smith, David Ricardo, Jean-Baptiste Say, Alfred Marshall and Arthur C. Pigou has focused its efforts to understand the long term economic growth.

According to the classical economists "the supply creates its own demand" through free pricing mechanism and economic development does not require direct government intervention to increase or decrease the aggregate demand⁴³. A government that increases the aggregate demand will only increase the price level, generating inflation. A government that lowers the aggregate demand will only decrease the price level, resulting in deflation. These policies will not affect the volume of production and unemployment. The best policy, according to this school is based on the principle of "laissez-faire, laissez-passe, le monde va de lui meme". The classics recognized only the indirect state intervention in the economy that ought to be concerned about stimulating supply, accumulation, investments and innovations.

⁴² Richard G. Lipsey, *An Introduction to Positive Economics* (London: Weidenfeld and Nicolson, 1989), 456-466.

⁴³ "The Aggregate demand curve plots all combinations of the price level and national income that yield equilibrium in the goods and the assets market", *Ibid*, 574.

Until today neoclassical doctrine more known as the marginal utility theory, remains the main economic doctrine in developed countries. The main representatives of this theory are William Stanley Jevons, Leon Walras, Carl Menger.

The Neoclassics were of opinion that the fundamental problems of the economy (inflation, unemployment, economic growth) can be resolved by a restrictive monetary policy.

Keynes and his followers were of opinion that the state must intervene actively in a country's economy through the promotion of harsh monetary and fiscal policies to avoid the tough periods of crisis and ensure economic stability. In his "General theory of employment, interest and money", Keynes fights the classics idea about the general economic equilibrium, stating that at the national economy level, the aggregate supply and demand balance is not automatic, and free price mechanism is insufficient to ensure balance and economic development. Government intervention through fiscal and monetary macroeconomic policies becomes a necessity to generate a global demand to the full use of available resources⁴⁴.

As Keynes said, the government has two major tools that can influence economic change: the first is an expansionary fiscal policy, which includes a deliberate lowering of the rate of taxes or an increase of transferable prices, such as unemployment benefits or welfare to encourage extra consumption or investment. Also under this policy, the government may increase its own expenditures on goods and services. The second instrument is the expansionary monetary policy, so a deliberate growth of money supply, which reduces the interest rate and encourages economic agents - consumers, producers and government to loan money and thus to increase their costs on the goods and services.

As the scientific and technical progress develops, the developed countries began to face new problems, the main one being the dynamics of economic growth and the creation of a regulatory economic state policy for the long run. Accordingly, Keynes's followers brought many proposals for improvement and development of the keynesist economic policy being known as the neo-keynesists and post-keynesists.

Neokeynesism (R. Harrod, E. Hansen, J. Hicks, P. Samuelson) has focused its efforts on the combining of Keynes macroeconomics with neoclassic micro-theory. The concept thus

⁴⁴ John Maynard Keynes, *The general theory of employment, interest, and money* (London: Palgrave Macmillan for the Royal Economic Society, 2007).

formed – “keyneso-neoclassical synthesis” implied combining the active governing policy of macro-proportions with the maximum development of private initiative at the micro level.

Referring to the analysis of economic growth, British neo-keynesians proposed a more flexible economic policy than that of Keynes, expressed by the formula “stop-go”. This provided a differential use of economic leverages of the state (budget, monetary and fiscal policy), depending on the changing economic situation (high taxes and interests during the economic expansion and, conversely, low taxes during the recession).

One merit of the American researcher P. Samuelson is that he discovered the stimulating role of the inflation on the investments by reducing savings.⁴⁵ When comes the need to reduce the volume of loans in the economy, the state through its monetary and budget policies resorts to the compression of money supply – process that pulls after itself the increase of the interest rate and the hardening of credit conditions. This has an immediate effect when the demand for money is constant, reducing the ability to invest both of economic agents and of population. Thus, reducing the money supply determines the decrease in the global demand, which in turn leads to lower national income and inflation rate. To conclude, we can say that neokeynesists have focused on the defining and shaping of the state interventionist economic policy that aims to stimulate and accelerate economic growth.

However the Keynesian paradigm on which the policies of developed countries were built, at the end of 40s was not answering to newly emerging questions, causing galloping inflation at the same time while the global economy instability caused the interruption of the national stabilizing programs. Thus, comes into sight the need to use other theories that will solve the problems of that period, which resulted in the emergence of a new current of economic thinking - the monetarism. The post-keynesist monetarist theories have been promoted by the Chicago School, whose leaders were Milton Friedman and John Kenneth Galbraith, both Nobel Prize laureates in economic sciences.

Monetarism represents “the doctrine where monetary magnitudes exert powerful influences on the economy, and control of these magnitudes is a potent means of affecting its macro

⁴⁵ Paul A. Samuelson and Robert Solow, “Analytical Aspects of Anti-Inflation Policy,” *The American Economic review* 50, no.2, Papers and Proceedings of Seventy-second Annual Meeting of the American Economic Association (May, 1960): 177-194.

behavior”⁴⁶. It is the economic thinking which gives money the decisive role in the fluctuating movement of the economy, placing on the spotlight the money and the monetary policy instruments. In their theories the monetarists examine the money mechanism, the banking system, the monetary policy and the foreign currency relations in order to outline the link between money supply and the volume of production. According to their view, banks are the main instrument of adjustment with which changes occurring in the money market turn to changes on the market of goods and services.

The debut of monetarism as a theory was the formulation by Milton Friedman in 1956 of a version of the quantity theory of money,⁴⁷ according to which the currency is one of the important ways to store wealth and the demand for currency depends partly on the monetary production, the role of interest in influencing the later being less stressed.

The monetarists argue that money supply plays an important role in influencing the production and prices level in the economy. According to their view changes in the quantity of currency in circulation will first lead to a change in production levels and only later on will influence the level of prices. Thus the "Monetarism means more than the argument that money is the most important determinant of economic performance."⁴⁸

The monetarists have as the convergent item of their concept the conviction regarding the importance of changes in money supply in the correct interpretation of the inflation causes. They support the dominant role of monetary instruments and explain the complex phenomenon of inflation solely through monetary expansion: it is possible to influence the economy in their view, only through an incisive and direct monetary policy. Thus, achieving a stable growth rate of money supply makes it possible to control inflation.

As a result of the above, we can say that in the concept of monetarists the monetary policy has a direct impact on the aggregate demand, which contravenes the keynesist analysis that claimed that the impact of currency on aggregate demand is weak and uncertain.

Contemporary research related to policies of economic growth highlight aspects beyond the abstract formulas of econometric models. The revival in learning about the theory of

⁴⁶ Richard G. Lipsey, *An Introduction to Positive Economics* (London: Weidenfeld and Nicolson, 1989), 694.

⁴⁷ Milton Friedman, *The Quantity Theory of Money – A Restatement* (Chicago: University of Chicago Press, 1956), 3-17.

⁴⁸ David Begg and Stanley Fisher, Rudiger Dornbusch, *Economics* (London: McGraw-Hill, 1997), 187.

economic growth since the mid-1980s led to the development of a new wave of growth models which established a known review today, the "endogenous growth theory", theory that determined the emergence of a large volume of empirical studies on growth.

An important element of this theory is the set of models developed in the 1980s and summarized in the work of Paul Romer (1986, 1990)⁴⁹ and Robert Barro and Xavier Sala-i-Martin (1995)⁵⁰. Keeping the basic factors of growth, these researchers have enriched the standard models of endogenous economic growth by explaining the technical progress based on increased results, research and development, imperfect competition, human capital, and one of the most important contributions - government policies. The role of government policies in their view lies in the application of economic measures aimed at macroeconomic stability, openness of economies and elimination of distortions in the price level.

In the last decade the process to promote economic growth is oriented towards achieving the Millennium Development Goals, adopted by the United Nations General Assembly at the Millennium Summit in 2000. These targets aim to reduce severe poverty, reduce child mortality, fight HIV/AIDS and other epidemics, and develop a global partnership for development.

Millennium Development Goals are a set of objectives, achievement of which requires the promotion of appropriate policies, the existence of sufficient resources and favorable institutional circumstances. These objectives will ensure the focusing of policy makers on specific lines of development and can contribute to a better coordination of economic and social policies. Their implementation, however, is based on good governance which involves participation, partnership and is of a big importance especially for new democracies with economic, social and political issues.

At the same time we have the European Union's economic growth policies as objectives that has been looked at, not only through the application of commonly used theoretical models, but also in the light of specific characteristics of its economic and political integration.⁵¹

⁴⁹ Pau M. Romer, "Increasing Returns and Long-Run Growth", *Journal of Political Economy* 94, (October 1986), 1002-1037.

⁵⁰ Robert J. Barro and Xavier Sala-i-Martin, *Economic Growth* (New York: McGraw-Hill, 1995).

⁵¹ Teodora Borota and Ali M. Kutan, "Regional integration and economic growth: the case of the European Union," *The Journal of International Trade and Diplomacy* 2 (1), (Spring 2008), 93-113

Their essence lays in offering potential growth advantages that the EU may provide to its members. The enlargements bring further interest in the growth implications and the willingness to catch up and reach the level of the advanced nations, while aiming to EU and EMU integration.

2.2. Place and importance of monetary policy in the policies of economic growth - theoretical considerations

In recent years, based on the background of inflationary pressures and the growing number of unemployed, on the emphasis of macroeconomic imbalances in most countries, particularly in economies in transition there is an increasing emphasis on adopting a mix of economic policies that contribute to macroeconomic stabilization.

The process of macroeconomic stabilization is strongly influenced by the measures of economic policy adopted, by their consistency and degree by which the authorities involved in the implementation of these measures are capable to work together to achieve planned objectives. All measures imposed by the authorities are closely related to the stability of the currency on which depends the economy as a whole.

Macro-stabilization policies applied in the countries of Central and Eastern Europe are drawn from a model according to which trade liberalization and reduction of state subsidies will lead to a development of private activities, both in investment and production fields. The ideal goal, which generates a full macro-stabilization is that of ensuring a sustainable economic growth, full employment, balanced state budget and trade, and of course price stability. But the practice of several economic transition countries has shown that achieving this complex objective remains at the theoretical level only, because achievement of one of its components can be in contradiction to achieving others.

In the real economy macroeconomic policies may be applied alone or in combination with other policies, to determine the achievement of objectives. These policies can be classified according to two criteria, namely:

- the macroeconomic effect;
- the objective followed.

In relation to the macroeconomic effects are distinguished:

- policies to stimulate aggregate demand; and
- policies to stimulate aggregate supply.

In relation to the second criteria, we can distinguish:

- Macroeconomic stabilization policies;
- policies of economic growth;
- policies against unemployment;
- anti-inflationary policies;
- trade policies;
- foreign exchange policies.

Policies to stimulate the aggregate demand are the macroeconomic policies that attempt to influence the aggregate demand, so as to increase the later (expansionist policies) or to restrict it (restrictive policies).

Depending on the policy used, the policies to encourage the aggregate demand include:

- budgetary/fiscal policy; and
- monetary policy.

According to Lipsey, Fiscal policy is “the policy that attempts to influence the aggregate demand curve by altering government expenditures and/or government revenues thus shifting the Investment Saving curve”⁵². This policy is specific, especially by the functions it satisfies: the stabilization function, the allocation of resources and distribution of incomes⁵³ and by the instruments it uses: variation in the level and /or structure of public expenditures and ways to cover deficits.

Governments can change the economic growth process by encouraging the spending in the economy through reducing taxes (through an effective fiscal policy), increasing the money supply and reducing interest rates (by the use of an effective monetary policy). In addition,

⁵² Richard G. Lipsey, *An Introduction to Positive Economics* (London: Weidenfeld and Nicolson, 1989), 782.

⁵³ Richard A. Musgrave and Peggy B. Musgrave, *Publics finance in theory and practice* (New York: McGraw-Hill, 1989), 189.

they may act on the economic supply side by encouraging the initiative of entrepreneurs and providing resources for improving productivity.

Analysts include as part of the policies that stimulate the aggregate demand, monetary policy. Mankiw defines it as “the central bank’s choice regarding the supply of money”.⁵⁴ Besides being an instrument of macroeconomic policy which tries to adjust the money supply, in order to guide the economy the monetary policy is also concerned about credits and interest rates. As Lipsey puts it “Monetary policy seeks to affect total demand by influencing the amount of money and credit available, and the cost of that credit to borrowers (interest rate)”.⁵⁵ The experience of several countries shows that most economic policies used to a large degree monetary instruments, which had positive consequences on both inflation and the real economy. Monetary policy effectiveness is influenced by the monetary transmission channels, which allow monetary instruments to intervene on the quantities of money and real variables.

These interventions that are even more complex in reality, explain the difficulty to dose the instruments of monetary and budgetary policy as part of the economic growth policy of the state. Often this dosage is only the result of some practical considerations: it is easier to resort to monetary policy, than to budgetary policy to the extent that the latter involves a longer period of implementation. There are many combinations of monetary and budget policies, in which monetary and fiscal instruments are not perfectly substitutable, for example, a revival through public expenditure has not only stabilization effects, but also faster allocation and redistribution effects than those resulting from a revival carried out using monetary instruments.

There are analysts who believe that any budgetary policy is reduced, ultimately, to a monetary policy. For example, a budget deficit policy (maintaining or creating a surplus of budget expenditures against budget revenues) assumes for the financing of the deficit, to contract a loan from the Central Bank in exchange for government bonds, which is nothing but an injection of money in the economy, i.e. monetary policy. Unlike monetary policy, the budget policy has a greater rigidity in the sense that a tax policy, once taken, on the one hand will be felt over a longer period than would a measure of monetary policy and on the other

⁵⁴ N. Gregory Mankiw, *Macroeconomics fifth edition* (USA: New York, 2003), 532.

⁵⁵ Richard G. Lipsey, *An Introduction to Positive Economics* (London: Weidenfeld and Nicolson, 1989), 458.

hand, is more difficult to cancel a budget policy than a monetary one. For example, government investments, once triggered, require very high costs to get cancelled.

In the process of transition from the centralized-planned to market economy, the macroeconomic policies of Central and Eastern European countries had the important function of ensuring that the administrative machinery of the state becomes more sensitive in its operation as part of a changing market environment and to develop policies that would determine the economic structures adjustment to a particular model of Central and Eastern European market economy type. In this context a major role had the macro-stabilization and economic growth policies.

Achieving macroeconomic stability is reflected by how the objectives set by the macroeconomic policy are being achieved and, last but not least, depending on the nature of the objectives. Macroeconomic stabilization is often associated with monetary stabilization which implies the insuring of monetary stability by restoring the general balance of the economy.

It is considered that the most important and most difficult phenomena to be achieved in the monetary policy of any economy is monetary stability. There has to be a distinction between the concept of monetary stability and the notion of monetary stabilization. Under the concept of monetary stability is the atmosphere in which a currency exists, if it maintains its purchasing power at a constant level throughout its entire existence and functioning (stable money), while the notion of monetary stabilization is a complex of political and monetary measures, taken as necessary for achieving and maintaining in time a currency standard, a constant purchasing power. The monetary stabilization is the only monetary policy that can be accepted and recognized as being in the interest and purpose of any economy, both nationally and worldwide.

In this context, one can say that in all macroeconomic policies of a state the monetary policy is one that sets the guidelines for other types of economic policies: budget/fiscal policy, income policy, enterprise policy, impacting even the essential transition process - privatization.

At the same time, the monetary policy is considered to be one of the most important policies to be adapted to the economic, political and social context, in order to achieve the major goal of one state's economic policy, namely –economic growth. Because money affects the

multiple variables that determine the welfare of any economy, the authorities of any country give a great importance to the development and promotion of monetary policy.

Traditionally, the monetary policy is defined as all interventions of the Central Bank or of the monetary authorities that are being performed upon the economy liquidity either by sizing the volume of supply, either through interest rate in order to contribute, through the use of monetary instruments and techniques to achieve the general objectives of the economic policy (economic growth, employment, price stability, external balance).

Once known the speed of the currency movement and the potential GDP growth a direct and unique relationship may be established between monetary growth and price increases.

Over the time the quantitative classical theory has been subjected to numerous changes being founded in a new quantitative theory of money, which forms the core monetarist model of macroeconomic policy.⁵⁶

The neoliberal monetarist current glorified the instruments used by the monetary authorities in the sense that they can increase or decrease the money supply and thus may influence in a sense or other the macroeconomic dynamics in the short run (can stimulate it in the sense of bringing the real dynamics at its potential level or may restrict it through a steady real growth). But the new classical macroeconomics - the current of thinking that outlined in the last three decades - reconsiders the role of monetary policy based on the integration of new theories of the new concept of rational anticipation and the principle of neutrality. New classical macroeconomics act against both keynesism and traditional monetarism.

The development and implementation of the monetary policy belongs to the Central Bank, which aiming for its implementation must ensure the following of the general objectives of the state. Central Bank is responsible for ensuring the currency, supporting the general economic policy of the government, control monetary developments on the market related to the money demand in an economy.

The general function of the monetary policy has different forms from one country to another and from one period to another. The management of the national currency is one of the most professional activities of a country's government. However, for this policy to have multiple positive effects (depending on the economic situation) as in the symbolic economy, as in the functional one there is a need for a very good background of this policy based on the realities

⁵⁶ N. Gregory Mankiw, *Macroeconomics fifth edition* (USA: New York, 2003), 85.

of the country and on the organic integration in all economic policies, and in the economic and social development strategy of that country.

In any country, the monetary policy must be subordinated to the general objectives of the macroeconomic policy of the state that are important to its existence and evolution. The monetary policy strategy is ensured based on the tactical measures adopted by the central bank under which the primary objective is being implemented. Monetary policy can be tackled using an analysis grid (**Fig 2.2.**) which provides the specific explanatory "movement" of the objectives:

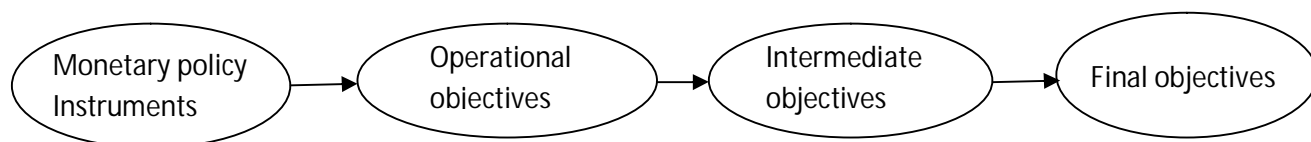


Fig. 2.2. Explicative frame of the monetary policy⁵⁷

Thus, in the analysis of monetary policy is necessary to define the precise objectives to be given to the monetary policy between the operational objectives, intermediate and final. The correlation between these monetary policy objectives, and instruments used by the monetary authorities to achieve them is presented in **Annex 3**.

Economic theory and practice have led to the final objective that is pursued by the central banks of various countries which in the development and promotion process of monetary policy aims at: tackling unemployment and ensuring a high employment; sustaining growth, price stability and exchange rate stability (**Annex 4**).

In this context, one can say that regardless of the monetary policy objectives and instruments applied to achieve these goals, it leads essentially to the modification of available reserves of the banking and non-banking sector, thus changing the operating conditions for the banking system, and for real economy. Monetary policy leads to fast, strong and generalized changes on some variables such as prices and production, which is in fact the principal objectives of such actions.

The interpretation of the impact, of effectiveness of monetary policy is conducted in a double perspective: expansionary and restrictive. In this sense, macroeconomic models emphasize that monetary policy either expansionary or restrictive is expansionary or restrictive acts on the economic activity prior to influencing prices.

⁵⁷ Developed according to Marius Băcescu and Angelica Băcescu-Cărbunaru, *Macroeconomie și politici macroeconomice* (București: ALL Educational, 1998), 531.

Expansionary monetary policy aims for reduction in interest rates and increase of monetary supply. This policy affects the aggregate demand and production stimulating those components of aggregate demand that are sensitive to interest rates. Thus, if the monetary policy is aimed at reducing the interest rate as a result there would be more investment spending, particularly for construction and domestic consumption and, respectively, economic growth would be registered.

A restrictive monetary policy is the policy to increase the interest rate and decrease the money supply in order to fight inflation. To achieve economic stability by applying a restrictive monetary policy, monetary authorities can act only through capital expenditure from the state because, in the absence of a well developed system of commercial banks that would grant loans to people and firms, the restrictive monetary policy can not directly influence through credit restriction, the private sector activity in terms of expenditure.

So a restrictive monetary policy could contribute to macroeconomic stability only by a simultaneous application of a restrictive fiscal policy.

For example, a restrictive monetary policy has been applied in Germany. Thus, the Central Bank of Germany and has set specific objectives to decrease the money mass in order to maintain price stability and fight imported inflation occurred as a result of the reunification of the two Germanys.

In the above context, it could be concluded that monetary policy plays an important role in promoting and maintaining economic growth especially in transition countries because it is essential in adjusting economic imbalances that these economies have, in particular in managing inflation and current account deficit of the balance of payments. In terms of these existing imbalances that can not be totally balanced by the market, the state intervention is appropriate and necessary through measures related between them and with the existing economic reality.

Chapter 3 - Comparative perspective of monetary policy in transition

For transition economies, the measures of severe control of prices that was applied while engaging on the path of market economy have inevitably led to record high rates of inflation. General economic context and the macroeconomic policies used have induced different rates and volatility of this imbalance, with implications on the costs and the solutions adopted. Regarding macroeconomic policies of the state monetary and fiscal policy had a major role in regulating the existing gaps at the beginning of the transition period and in creating favorable conditions for promoting economic growth.

Thus, in the Slovakia, Czech Republic, Slovenia, Poland, Romania, Russia and Ukraine monetary policy contributed to economic growth by reducing the rates of inflation, maintaining exchange rate stability of the currency and reducing bank interest rates. All these measures led to increasing the domestic and external demand for goods and services, stimulating the development of small and medium enterprises, stimulate savings and investments, all these being the base coordinates of a sustained economic growth.

Comparative analysis of growth trends in the Republic of Moldova and other countries during the transition period of 1996-2007 reveals the fact that as a result to a transition to market economy and development of the private sector countries of the Central and Eastern Europe have seen average rate of growth, located within 4-7% (**Table 3. 1.**).

Table 3.1. GDP dynamics in some Central and Eastern European countries (annual growth rate, %).

Country/Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Czech Republic	4.0	-0.73	-0.76	1.34	3.65	2.46	1.9	3.6	4.48	6.32	6.79	6.57
Moldova	-5.2	1.6	-6.5	-3.4	2.1	6.1	7.8	6.6	7.41	7.5	4.78	2.99
Poland	6.24	7.09	4.98	4.52	4.25	1.3	1.44	3.87	5.34	3.62	6.23	6.65
Romania	4.01	-6.1	-4.79	-1.2	2.1	5.7	5.1	5.2	8.4	4.17	7.9	6.0
Russian Federation	-3.6	1.4	-5.3	-6.4	10	5.09	4.74	7.35	7.14	6.4	7.4	8.1
Slovak Republic	8.03	5.73	4.39	0.03	1.36	3.4	4.75	4.73	5.16	6.55	8.5	10.42
Slovenia	3.57	4.91	3.57	5.37	4.39	2.85	3.97	2.84	4.29	4.35	5.9	6.76
Ukraine	-10.0	-3.0	-1.9	0.2	5.9	9.2	5.2	9.4	12.1	2.7	7.3	7.6

Source: The World Bank Group, World Bank Indicators

Making a comparative analysis of GDP growth during 1996-2007 we see that although the Republic of Moldova's positive rates of growth have been recorded only since 2000, the annual rate of growth in the last 7 years is higher than in other countries in transition of Central and Eastern Europe, excluding Russia and Ukraine. However, this increase is due largely to the transfers of remittances and flows of remittances in the sphere of consumption and not investment.

As far as Visegrad countries are concerned, a major fall in output could be seen during 1990s. It is well known by now that none of the transition countries managed to reach the pre 90s GDP/cap level. Menbere Workie talking about Slovakia argues that in 1990 Slovakia's GDP was approximately at the level of 68% of the average GDP/cap of the EU and dropped to 49% in 1993. The worst GDP/cap indicator of Slovakia that can be seen from the above table were registered during 1999, when it had no growth, but following that year having in mind that 1) Slovakia's "primary objective of the transformation program has been stabilization and elimination of distortions of various forms, which may guarantee sustainable economic growth and accelerated degree of income per capita convergence in the long term horizon"⁵⁸ and 2) that changes are gradual and require several decades.

⁵⁸ Menbere Workie, *Slovakia's Growth Performance in the Regional Context during the 1990s-An Empirical Investigation*, in *the Slovak Economy and EU Membership*, edited by Bruno S.Sergi and William T.Bagatelas (Bratislava: IURA Edition, 2004), 216.

In the continuation of this chapter I will be testing two dissimilar countries: Moldova and Slovakia (Slovakia as the most successful and Moldova - less successful) by looking at policies and tools used in delivering the monetary policy during transition period to market economy.

3.1. The configuration of monetary policy during the transition to market economy of the Republic of Moldova

While some countries are more successful than others, Moldova is a 'bottom case' representative. A country characterized by civil unrest, with a separatist region that is still unrecognized and which economically draws back Moldova 'as well as soft policies and state failure, that catapulted in 2001 the communists back in to power, explain much of the failure.'⁵⁹ Slovakia, a country who became independent in 1993 that was also part of the Soviet Union could be comparable with Moldova in size and population number. However it is considered a success story. Being part of the former Czechoslovakia, one of the wealthiest countries in the world between the two wars, it now experiences the economic growth stronger than most post-communist states.⁶⁰ In 2006 and 2007, the economic development of Slovakia has registered record numbers, being a leader not only among the EU Member States, but even worldwide. Thus, according to data published by the World Bank Group, in 2007 the country's GDP grew by 10.4 per cent. In comparison, other countries of the Visegrad Group, for instance, recorded much lower index - Czech Republic 6.6 per cent, Poland 6.7 percent, and Hungary 1.1 per cent. Dramatic increases have occurred in other areas.

Thus in order to identify the role and contribution of monetary policy to the promotion and maintenance of economic growth in Moldova and Slovakia is necessary to carry out an analysis of monetary policy measures adopted by the monetary authorities during the transitional period and of the effects of these measures to achieve the primary objective of the state economic policy.

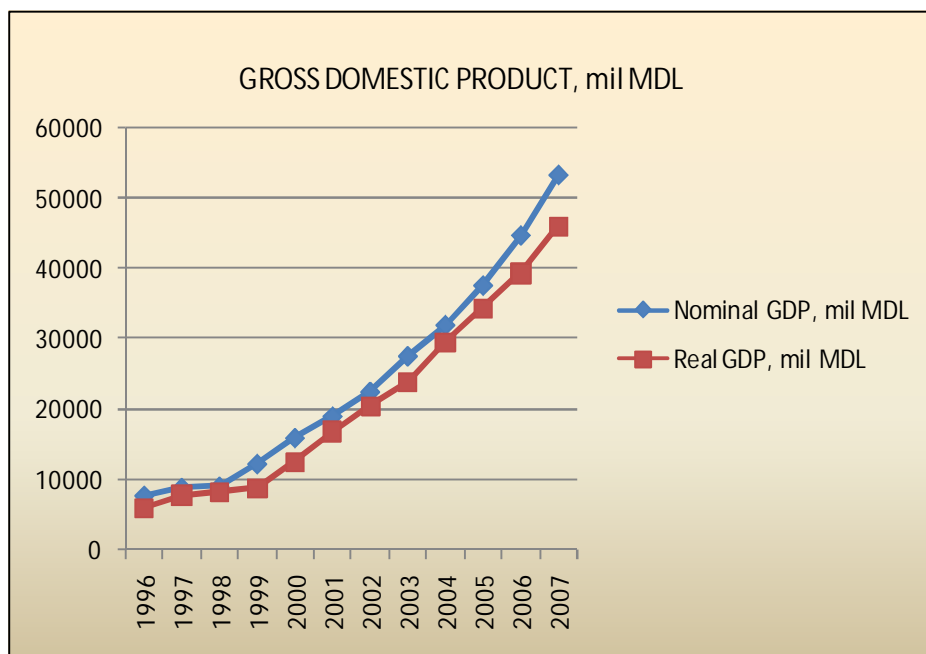
Moldovan economy before 1990 was characterized by big distortions between the aggregate supply and demand, generated by the lack of market relations. As a result of the starting of transition to market economy, the process of reforming the national economy by the principles of market economy has registered several steps, widely described and studied by analysts, in which

⁵⁹ Laszlo Csaba, *The new political economy of the emerging Europe* (Budapest: Akademiai Kiado, 2007), 40.

⁶⁰ Bruno S. Sergi and William T. Bagatels, *The Slovak economy and the EU membership* (Bratislava: IURA Edition, 2004), 7.

the macroeconomic policies had to gradually align to the essential commands of macroeconomic stabilization. During this period the economy of Moldova has been influenced by several monetary factors such as: interest rates, exchange rate, inflation rate, the degree of monetization and dollarization of the economy, influence of which were very controversial on the processes of fighting the existing crisis at the early 90s, as well as for the stabilization processes and economic growth. For over eighteen years of transition, the national economy has suffered the impact of internal and external shocks that have influenced the structural transformations of the economy and led to GDP fluctuations (**Chart 3.2. and Table 3.3.**).

Chart 3.2. Real and Nominal GDP, mil MDL



Source: National Bureau of Statistics of the Republic of Moldova

Table 3.3. Evolution of the Nominal and real GDP during 1996-2007

GROSS DOMESTIC PRODUCT					
Year	Nominal (mil. MDL)	Compared to last year (%)	Per inhabitant (MDL)	Real (mil.MDL)	Per inhabitant (MDL)
1996	7797.6	94.1	2167	6098.9	1695
1997	8917	101.6	2441	7926	2169
1998	9122.1	93.5	2498	8333.6	2282
1999	12321.6	96.6	3379	8814.9	2417
2000	16019.6	102.1	4402	12581.3	3457
2001	19051.5	106.1	5247	17003.4	4683
2002	22555.9	107.8	6227	20539.4	5670
2003	27618.9	106.6	7646	24049.8	6658
2004	32031.8	107.4	8890	29652.6	8229
2005	37651.9	107.5	10475	34434.6	9580
2006	44754.4	104.8	12483	39453.4	11005
2007	53353.7	103	14916	46091.6	12886

Source: National Bureau of Statistics of the Republic of Moldova
<http://www.statistica.md/category.php?l=ro&idc=191&>

After the adoption by the Parliament of the Republic of Moldova on August 27 1991 of the Law on the Declaration of the Independence of the Republic of Moldova, our country has become a sovereign, independent and democrat state.⁶¹ Starting that year the evolution of the transition in the Republic of Moldova may be divided into three periods:⁶²

1990-1994 the ‘collapse’, when the rate of decline worsened in each successive year;
 1995-2000, ‘stagnation’, when growth remained negative, but tended towards zero; and
 2001-2004, ‘recovery’, when growth rates were positive.

In 1990, after a long period of relatively stable growth, real GDP registered a decline of 1.5%, despite the increase in production volumes in the industrial sector and to a lesser extent in construction. Since 1991, Moldova's economy has been subject to internal and external shocks. On the internal level stagflation processes of 1989-1990 have continued, and the decrease in the growth rate of production activity in all branches has placed the national economy at the macroeconomic indicators level of many years ago.

⁶¹ Unofficial translation from the *Law of the Republic of Moldova nr.691-XII of August 27, 1991 on the Declaration of the independence of the Republic of Moldova*. Monitorul Oficial nr. 11-12/103 of 30 December, 1991

⁶² UNDP Moldova, *Republic of Moldova: Economic Policies for growth, employment and poverty reduction* (UNDP Publications, 2005), 51

All these factors have resulted in maintaining the trend of continuous growth of prices, and a decrease of GDP by 14% from the previous year.

In the following year, 1992, the country's economic situation has worsened considerably. In response to the 1992 liberalization of prices and due to the increased import prices, inflationary pressures increased triggering the galloping inflation.

The conclusion is that despite the significant changes undertaken in the financial system of the country in 1991 and 1992, membership of ruble zone and the lack of the money issue function of the central bank marginalized the promotion of an independent monetary policy meanwhile the fiscal policy was considered to be the main instrument through which the Government would maintain the macroeconomic stability of the country. Government continues to promote the old concept of credit allocation of resources. Outside this, the National Bank of Moldova's possibilities to control inflation were also limited.

The next step in achieving the objectives of stabilizing the national economy was the introduction on 29 November 1993 of the national currency - the Moldovan Leu⁶³ and the signing of the agreements with the IMF and World Bank on developing and implementing a program of economic reform.

1995 was the year of the beginning of the creation of necessary conditions for economic growth. With the development and adoption by the Moldovan Parliament in the summer of 1995 of the Law on National Bank of Moldova⁶⁴ and the Law on Financial Institutions⁶⁵, has been established the legislative independence of the NBM from the executive state bodies on four major dimensions: personal, institutional, operational and financial, and accountability to Parliament.

The adoption in 1995 of the above-mentioned laws enshrined the creation of a two levels banking system, the National Bank at the top of the pyramid, as the country's central bank, and

⁶³ The Decree of the President of the Republic of Moldova related to the introduction of the national currency of the Republic of Moldova, nr.200 from November 24, 1993

⁶⁴ Law of the Republic of Moldova on the National Bank of Moldova nr.548-XIII from July 21, 1995, Official Monitor of the Republic of Moldova nr. 56-57 from October 12, 1995.

⁶⁵ Law on Financial Institutions nr.330-XIII from July 21, 1995, Official Monitor of the Republic of Moldova nr.1 from January 1, 1996

single body issuing the national currency, empowered to establish and conduct monetary and credit policy.

Starting with this period, we analyze the evolution of monetary policy of the Republic of Moldova and its impact on the evolution of the real economy. We'll start from the analysis of monetary policy of the NBM, which is presented by two levels: tactical and strategic. Tactical level includes instruments of monetary policy and operational objectives and the strategic level includes intermediate objectives and the ultimate goal of the monetary policy (**Annex 3**). In accordance with Article 4 of the Law on the National Bank of Moldova the main objective of the NBM until June 2006 was to achieve and maintain currency stability.

Setting this final objective of the NBM monetary policy foresaw the establishment of conditions for macroeconomic stability that would encourage the promotion of sustained economic growth. All measures taken by the NBM were directed to resolving the crisis in the real sector, stimulate the domestic demand in the economy, accelerate the increase in the supply of goods and services by reducing inflation and strengthening the banking system. For this purpose, NBM has adopted the targeting of monetary aggregates and has set as an intermediate target of monetary policy the monetary aggregate M3, based on the fact that between inflation and money is a long term relationship.

Instruments of the Monetary Policy used

In the following period the National Bank of Moldova has tried to calibrate the supply of money to GDP (forecasted by the Ministry of Economy) in order to ensure the exchange rate stability and to achieve the desired level of inflation. In this regard, NBM has used a series of direct instruments of monetary policy, such as refinancing loans and a number of indirect instruments.

Refinancing credits as an instrument of monetary policy were used by the NBM up to 1 July 1998. The essence of this instrument consists in determining the volume of credits proposed by the NBM to commercial banks at the refinancing auctions depending on the supply and demand of credits, thereby effectively managing the monetary dynamics. Since the introduction of the national currency, the refinancing rate although having a different dynamics, showed a continuous downward trend.

Another basic tool of monetary policy is the **reserve requirement** that represent 'the minimum level of attracted means that a licensed bank is requested to maintain with NBM. In order to

evaluate the realization of this requirement, the average value of daily balances of the reserve account for a certain period of time is used'⁶⁶. NBM has used this tool to increase or decrease the volume of loans granted by commercial banks to the real economy and to maintain liquidity. Following the introduction of the national currency, BNM introduced the reserve requirements, establishing the initial rate of 20%. During the entire period of use, the reserves were subject to significant changes.

During 1994, for a more efficient regulation of the money NBM amended three times the reserves requirement. Subsequently, taking into account the recommendations of the IMF and the need to decrease the reserves cost of commercial banks, during the 1995-1997 NBM reduced the rate of reserves up to 12% and later to 8% (**Table 3.4.**).

Table 3.4.: Evolution of the required reserves rate, %

Period	Required reserves rate (%)
01/12/93-01/02/94	20.0
01/02/94-01/06/94	28.0
01/06/94-01/01/95	20.0
01/01/95-10/07/97	12.0
17/07/97-01/10/98	8.0
01/10/98-20/09/00	15.0
20/09/00-31/06/01	13.0
01/07/01-31/07/01	12.0
01/08/01-31/08/01	11.0
01/09/01-31/12/02	10.0
01/01/03-31/06/04	12.0
01/07/04-31/10/07	10.0
01/11/07-05/04/08	15.0
06/04/08-20/06/08	16.0
21/06/08-05/07/08	20.0
06/07/08-20/07/08	21.0
21/07/08-05/10/08	22.0
06/10/08-20/11/08	20.5
21/11/08-20/12/08	19.0
21/12/08-present	17.5

Source: http://www.bnm.md/md/obligatory_reserves⁶⁷

The Financial crisis of September 1998, which affected the money market of the country, required the administration of some exceptional measures to stabilize the situation. To reduce the possibilities of commercial banks to make speculative transactions, the National Bank decided to

⁶⁶National Bank of Moldova website, http://www.bnm.md/en/money_politics_tools, (accessed May 20, 2009).

⁶⁷ National Bank of Moldova website, http://www.bnm.md/md/obligatory_reserves, (accessed May 20, 2009).

increase the reserves quota by 15%, while requesting from the banks to keep not less than 13% of the reserves in the NOSTRO at NBM and 2% in bank cashiers. This regulation was kept also during year 2000.

The decrease of the reserves rate shows that during these years NBM has helped increase the efficiency of banks assets and promoted a policy to boost the process of crediting the real sector of the economy by commercial banks, which ultimately had a positive effect on the growth rate of GDP (Table 2.3.).

During 2003 there has been an upward trend in the rate of reserves, caused by the increase in the balance of funds attracted by banks, by the upward trend of inflation and intensifications of inflationary expectations. Thus, pursuing the aim of absorption of liquidity excess from the banking system and mitigation of speculative pressures on the national currency, the National Bank increased in April 2003 the required reserve ratio from 10% to 12%.

Since July 2004, in the establishment and maintenance of reserves essential changes have occurred. According to the Regulation on the reserves starting with 1-15 July 2004 commercial banks make separate reserves in Moldovan lei and freely convertible currency and keep the reserves at the National Bank accounts. At the same time NBM decreased the reserves rate from 12% to 10%.

Of the outlined above it can be said that although NBM commonly used the reserves rate as an instrument of monetary policy in order to increase the liquidity reserves of commercial banks and activate the credit process, the rather rigid character of the above mentioned policy has not always contributed to the achievement of the pursued aim. On the contrary, some decisions to modify the reserves have led to tensions on the money market, inducing banks in an unhealthy atmosphere of uncertainty.

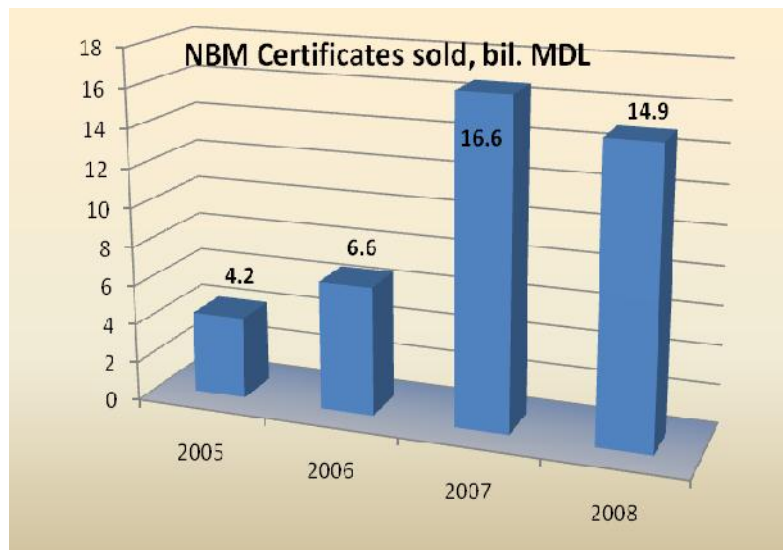
In this respect one would believe that NBM should be more prudent in the decisions it adopts with regard to changes in the reserves rate and to take account of the fact that these changes have important long-term repercussions on the liquidity of commercial banks.

Unlike the refinancing loans and the reserve requirements, **open market operations** (OPO) is the most flexible and effective operational instrument of monetary policy. These transactions include the buying/ selling of state securities, REPO agreements of selling/ buying and placement of NBM certificates.

In the 1999-2004 were conducted 240 open-market operations, for temporary absorption of surplus liquidity, with short maturities, normally up to a month in the volume of 3.6 bil. lei.⁶⁸

In 2005, NBM has implemented a new tool to sterilize the liquidity on the money market – the **NBM certificates**. (**Chart 3.5.**) The findings show that during 1997-2008 NBM was mainly on the position of the debtor of the banking system, focusing on neutralizing the excess of liquidity in the banking system, caused by the buying of foreign currency on the interbank market from the repatriation of massive currency flows and remittances. (**Annex 6**)

Chart 3.5. NBM sterilization operations, 2005-2008, bil.MDL



Source: National Bank of Moldova website, http://www.bnm.md/md/bnm_operations_on_money_market

The conclusion here is that aiming to sterilize the liquidity in the short term, the role of the NBM to guide commercial banks to target available resources on a longer term in the real economy was small and had no contribution to the GDP increase.

In order to maintain the money market NBM performs deposit operations through auctions of deposit and acceptance of overnight deposits from commercial banks. In the period 2002-2007 BNM has conducted 174 deposit auctions with a maturity of 3 to 69 days during which were accepted a volume of 11.5 bil. lei (**Table 3.6.**). The decrease in the volume of deposit operations in 2007 is due to the fact that starting March 2007 NBM gave up the practice the attraction of

⁶⁸ According to National Bank of Moldova Annual Reports, years 1999-2004.

deposits though auctions from commercial banks in favor of a new more liquid instrument- NBM certificates, about which we discussed earlier.

Table 3.6.: Deposit operations developed by NBM, 2002-2007

Period	Number of operations	Weighted average rate min/max, %	Min/max term of operations, days	Total volume, mil MDL
2002	32	0.86/3.0	6/28	1030.0
2003	3	2.56/7.5	3/14	35.0
2004	43	9.7/13.5	14/57	1491.9
2005	42	1.77/6.13	56	4715.0
2006	42	2.55/14.27	62	3189.6
January-March 2007	12	14.2/14.49	69	1040.0

Source: NBM Annual Reports 2002-2007

Although during 2000-2007 in the banking system there was quite a significant surplus of liquidity, sterilized continuously by the NBM open market operations, exception was 2003, a year with a major credit demand from economic agents that caused a shortage of liquidity in commercial banks. For the purpose of providing the necessary liquidity to commercial banks NBM used Lombard facilities and overnight loans.

An important tool of the NBM by the use of which it may influence the volume of loans granted by commercial banks to the economy, and respectively, increase or decrease the monetary is the **interest rates**. Thus, by increasing the interest rates, NBM diminishes the lending to banks, controlling in such a way the inflationary process and vice versa, when inflation and other monetary indicators correspond to the NBM's monetary policy and there is a growing demand for credit, NBM increases the volume of loans offered decreasing the base rate. During 1994-2008 the interest rates policy was based on the analysis of the dynamics of inflationary processes, monetary and macroeconomic indicators, of the situation on financial markets and was oriented to maintain the interest rates at a lower positive level. Thus, the NBM has set the interest rates through the use of the rates corridor, limited by the rate of overnight deposits and the rate on overnight loans.

Dynamics of the inflationary process during 2000-2008 resulted in the restrictive policy regarding the interest rates, different decisions being taken on increasing or decreasing the rates

for the instruments used by BNM. Thus, according to NBM reports the rates for the base instruments were modified about 50 times. However, the base rate could be considered a less effective monetary policy that NBM uses to control the volume of demand and money supply in order to establish the balance between them.

Another set of instruments of monetary policy for the NBM's foreign exchange interventions, represent **buying and selling operations of foreign currency, forward transactions and swaps**. NBM intervention in the forex market are aimed at reducing excessive fluctuations of the national currency versus the currency of reference, the U.S. dollar, completing the international currency reserves, and where necessary, covering a minimum of three months of imports by the international currency reserves.

In 2000-2008 the Moldovan economy has had an increased influx of foreign currency in direct and portfolio investments (including banking), the repatriation of foreign exchange from exports and remittances transfers (Annex 6). In these circumstances, to not allow a sharp appreciation of the national currency and to alleviate the excessive fluctuations of the official rate of national currency against the U.S. dollar, the National Bank intervened in the forex market as a domestic buyer, using tools as: buying currency operations (including forward transactions) and reversible instruments such as swap.

In conclusion to the above said, one could say that in the analyzed transition period NBM widely used the full spectrum of monetary policy instruments at its disposal to reduce the inflation rate, maintain and ensure national currency stability, increase the lending volume for population and economic agents and creation of favorable conditions for economic growth.

The trend of economic development of Moldova registered last transition years, and its orientation towards the European Union has led NBM to amend the Law on National Bank of Moldova. Setting this goal involves primarily the achievement of conditions, such as:

- assuming unequivocal commitment to price stability as the fundamental objective of monetary policy;
- changing the monetary policy and review operational and intermediate objectives of the NBM monetary policy;
- ensure central bank independence and responsibility for achieving the inflation target;

- ensure the strategy of monetary policy transparency through public communication of objectives and decisions;
- availability of relevant indicators for the four macroeconomic blocks (real, monetary, fiscal and external).

It is believed that the performance by the NBM of these conditions will increase NBM's role in creating favorable conditions to ensure economic growth by keeping inflation low, ensuring currency stability and growth of the banking sector in accordance with the requirements of a market economy.

As a result analysis in this chapter we have identified a number of instruments that are used in order to reflect the effects of monetary policy of the NBM on the development of national economy.

3.2. Key monetary development in Slovakia during the transition period

The starting of the transition process to market economy imposed from the beginning the liberalization of prices, so that market mechanisms begin to operate. Ensuring price stability became the ultimate objective, unanimously agreed by all the monetary authorities in developing their own monetary policy.

Becoming independent in 1993, Slovakia (one of the successors of Czechoslovakia) has assumed the continuation of the macro-stability program that was initiated by the Czecho-Slovak growth policy, which compared with other countries, ensured a favorable economic framework for a more rapid elimination of macroeconomic imbalances. Even if the first year marked deterioration of the key macroeconomic indicators (**Annex 5**), the shaping and announcement of the reform program what was to be applied has led to increased credibility of the authorities involved in the macro-stabilization program. It was that "after two years of macroeconomic and monetary stabilization (1993-1994), Slovakia represented the central European country in which the process of disinflation was simultaneously followed by a rapid economic growth"*.

The National Bank of Slovakia was aiming, through monetary policy, to reach internal and external stability of the national currency (which requires on the one hand, price stability and, on the other hand the support of the external balance of payments equilibrium, by balancing its current account), the final objective dealing with economic growth promotion. As a result,

monetary policy, as with any country in transition, was to reduce inflation which, for once, is ensured by setting two intermediate objectives:

- Fixed exchange rate of the Slovak currency (as a long-term target);
- the annual rate of increase in the supply of currency in the economy, represented by the monetary aggregate M2.

Achieving these objectives involved structuring the monetary strategy in three phases which were, first of all, ensuring the monetary stability and the macroeconomic framework, and then to create conditions to ensure a certain level of growth, finally, in terms of balance the possibility to ensure the currency liberalization.

What is specific to transition countries in central Europe is that they have opted for a monetary policy strategy focused on maintaining fixed exchange rates (as a nominal anchor). Thus, the exchange rate of the Slovak koruna was set by a currency basket whose original structure was: USD (49.06%), DEM (36.16%), ATS (8.07%), CHF (3.79%), FRF (3.79%), weights were based on the main directions of international trade orientation of Slovakia. Starting with 1994, the stack was reduced to just two currencies: USD (40%) and DEM (60%) (**Table 3.7.**). During this period, the Slovak currency has had a limited convertibility, the maintenance of the nominal anchor leading to a rapid decrease in the inflation rate.

Table 3.7. Composition of the Currency basket in Slovakia

Period	Composition of the currency basket
January 1991-December 1991	USD 31.3%, DEM 45.5%, ATS 12.4%, GBP 4.2%, CHF 6.6%
January 1992-June 1994	USD 49.1%, DEM 36.2%, ATS 8.1%, FRF 2.9%, CHF 3.8%
July 1994-October 1998	USD 40%, DEM 60%

Source: National Bank of Slovakia

Monetary stability recorded in 1995, combined with the economic growth (important for the Slovak economy) have allowed for the introduction of account current convertibility of the Slovak koruna, that caused a certain relaxation in the foreign currency regime by adopting a band of currency exchange fluctuation around $\pm 1.5\%$. Later on, as soon as the economy had allowed

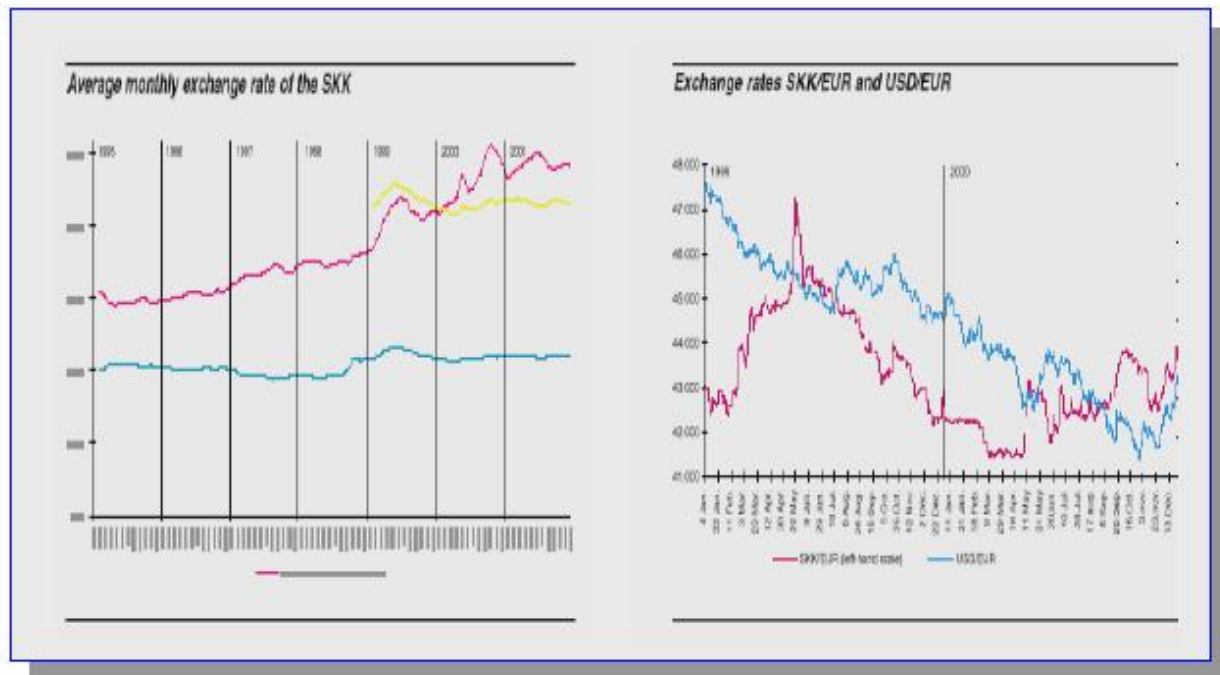
it, the fluctuation range was expanded, reaching in 1997 $\pm 7\%$ (moving from ± 3 and later on to $\pm 5\%$).

This measure was aimed at widening the possibility of National Bank of Slovakia intervention in exercising pressure by developments in the external balance of payments.

However, 1996 was characterized by the emergence of important speculative financial flows, thus obliging the Central Bank to regulate the introduction of "monetary position for banks for monetary purposes" according to which banks were imposed to follow the performance of a certain level of relationship between external assets and liabilities, the foreign currency position being adjusted depending on the origin of assets and liabilities (resident or non-residents). Meanwhile, the exchange rate of the national currency has reacted quite strongly to shocks arising from external financial instability, which caused a depreciation of the national currency, a depreciation that has been continuous. The decision adopted in this regard was that of ensuring a free flow of the Slovak koruna, which rate was set against the German mark. This has become the currency of reference in monitoring the exchange rate developments. The first reaction of the exchange rate at the time of switching to free flotation was a strong devaluation (at the end of 1998 the depreciation registering 18% compared with the former fixed exchange rate determined on the basis of currency basket), reaction that was then followed by a trend towards stabilization (fluctuations having a small intensity).

Introducing the new European currency imposed the anchoring of the Slovak koruna to the Euro, and maintaining a relatively stable level. The evolution of the Slovak crown exchange rate can be

seen in **Chart 3.8**.



Source: National Bank of Slovakia, 2000 Annual Report

The other anchor of monetary policy of the National Bank of Slovakia, represented by the monetary aggregates was responsible, in fact, to ensure the achievement of long-term intermediary objective, NBS setting for each year levels of growth for the supply of currency afferent to the exchange rate determined on the basis of the currency basket. It is believed that “the reaching of the final objective regarding inflation was subject to currency rate stability and annual growth of M2 (and hence by the growth of internal credit) against the expected growth of GDP and the money rate of rotation ". (**Table 3.9.**)

Table 3.9. Monetary targets of the National Bank of Slovakia, 1993-1998

Year	Monetary policy program		Effective values	
	Monetary aggregate, %	Inflation rate, %	Monetary aggregate, %	Inflation rate, %
1993	12	17	18.3	25.1
1994	13.2	10-13.2	18.9	11.7
1995	12.3	8	21.2	7.6
1996	13.2	6-7.5	16.5	5.4

1997	10.7	4.9-5.8	8.7	6.4
1998	9.4	5.6-5.9	2.7	5.6

Source: National Bank of Slovakia, Annual Report 1998

In the strategy based on the nominal and money anchor, the control of monetary aggregates has played the key role of monetary policy, the expansion of liquidity in the economy being regarded as the main cause for imbalances and hence inflationary pressures. This was also the reason for the National Bank of Slovakia to get heavily involved in the operations of monetary sterilization.

Since 1999, Slovakia has followed a strategy based on direct inflation targeting, the pressures on the exchange rate of crown leading to the adoption of a free flow exchange rate. In forecasting the inflation rate, the focus is on highlighting the pure inflation level (determined by the core inflation to which is added the corresponding price index of the specific products' basket). For 1999 was expected an inflation from 5-7%, the actual inflation registering values very little beyond the ones expected. In perspective, the target is its gradual reduction in order for it to reach the level required by the accession to the European Union (2%).

Achieving these objectives involved, initially, the control of money mass, being considered that only through such level intervention would be possible to reach the intermediate objectives level. In order to speak about the effects generated by monetary policy adopted by the NBS we have to consider the mix of instruments used. The initial monetary policy actions have been based on direct interventions of the Central Bank in the economy, aimed, first, to limit the credit level, and on the other hand, a temporary restriction of the convertibility, in order to ensure stability of the national currency.

On the other hand, the increased economic development, which led to a rapid implementation of the macro-stabilization program with notable results, allowed the Central Bank to focus more on qualitative tools (such as interest rate), limiting the quantitative ones (the credit limit, and instruments denominated in terms of absolute amounts). The use of the credit ceiling lasted until 1996, as a temporary rule of bank management (originally applying to the entire banking system and in the past two years only to banks whose lending activity exceeded 20 million crowns). To this tool have been added the refinancing loans represented by the Lombard credit, the auction loans, and not the last the rediscount operations. The major role however had the indirect

instruments: the interest rate policy and open market operations, to them adding also the reserves requirement mechanism.

In the interest policy NBS has considered the practice the banking system of positive real interest rates, allowing the re-monetization of the economy and at the same time, reducing the supply of currency. In this direction, the Slovak Central Bank has used the official discounted fee and the interest rate for Lombard loans, the purpose being to stop the rapid credit expansion in the economy.

The minimal required reserves were based initially on the use of a dual rate: 3% for deposit accounts and 9% for the current accounts. The existence of strong fluctuations in the level of minimal constituting reserves led NBS to unify the two rates, establishing a single level of 9%.

These measures were supplemented by market transactions, which had as support both the securities issued by state and own securities of National Bank of Slovakia. Even starting 1993, NBS has introduced REPO market operations (with a minimum term of 1 day) and the direct trading of state securities (SS). The monetary sterilization has imposed the renunciation to directly trade SS (the primary market) and the circulation of their own securities (starting with 1996 we can also speak about NBS bills with greater maturities).

All this come to highlight the efforts undertaken by the National Bank of Slovakia to guide the economy towards the performance to allow the accession to the European Union.

While in 1997 European Commissions' s answer to the EU application membership of Slovakia was that it did not fulfill political criteria in sufficient ways, after 1998 election Slovakia showed perseverance and began to fulfill not only political , but also economic, and macroeconomic that were needed for the EU membership.⁶⁹

Aiming for the adoption of the single European currency, Slovak economic and monetary policies were quite stable and up to 1998 the inflation targets were achieved. After the currency crisis Slovakia moved from the exchange rate targeting to a 'target net inflation' program and in its "2000 Monetary Program the NBS stated that 'development of headline inflation will be a

⁶⁹ Menbere Workie, *Slovakia's Growth Performance in the Regional Context during the 1990s-An Empirical Investigation*, in *the Slovak Economy and EU Membership*, edited by Bruno S.Sergi and William T.Bagatelas (Bratislava: IURA Edition, 2004), 25-27.

subject of predictions, while the core inflation will gradually become a target of NBS” which proves the inflationist concerns of the central monetary authority.⁷⁰

Another concern of the NBS was to supervise and look after the movements of the exchange rate, its program containing the readiness of the central monetary authority to intervene against the excessive volatility, however at a ‘no precise level and band for intervention’. Later on in 2001-2002 while aiming for a gradual appreciation, NBS Monetary Program was still very much concerned about the elimination of volatility.

During this period also the high interest rates were causing distortions and the unevenly access of the economic enterprises to the foreign currency credits were worsening these distortions. Probably under these circumstances, a harsher monetary policy would have been required in order to eliminate these imbalances.⁷¹

“Macroeconomic developments in Slovakia in 2004 were affected by several crucial factors, including primarily the country’s entry into the European Union and the completion of its tax reform”. By joining the EU on 1 May 2004 Slovakia will eventually become a member of the monetary union and become part of the Eurosystem. In the same year the National Bank of Slovakia became a member of the European System of Central Banks.

By joining the European Union, Slovakia also agreed to comply to the Common Agricultural Policy, which form a set of economic, financial, legislative, and institutional instruments.

Also in 2004, a Convergence Program for the period of 2004 – 2010 was designed and approved to be followed.⁷²

As with regard to the future single currency adoption, the Ministry of Finance and the NBS approved a common document called ‘Specification of the Strategy for Adopting the Euro’.

The main idea here was that the future introduction of the euro in 2009 was realistic and that the Maastricht criteria would be met by 2007.⁷³

In 2006-7, NBS continued its monetary policy implementation using the same instruments. The essential ‘parameter of the monetary policy was to set the target value for inflation, defined as inflation targeting in the ERM II conditions’ and this was to be accomplished by the use of the

⁷⁰ Miroslav Beblavy, *Monetary Policy in Central Europe* (Oxon: Routledge, 2007), 74.

⁷¹ Miroslav Beblavy, *Monetary Policy in Central Europe* (Oxon: Routledge, 2007), 78.

⁷² National Bank of Slovakia, “Annual report for 2004” under “Report on Monetary developments”, http://www.nbs.sk/_img/Documents/VS/ENG2004/AR_NBS04.PDF (accessed May 29), 25.

⁷³ Ibid.

interest rates instrument and fighting the volatility of the exchange rate. At the same time the Central Bank conducted its monetary policy using the basic set of instruments, open market operations including the issuance of short-term securities and O/N operations.⁷⁴

Even though Slovakia was governed by strange coalitions since 2006, this did not stop the country towards its successful implementation of macro and monetary policies that finalized with the adoption of the Euro currency at the beginning of the 2009 year. The mixture of the populist government and Prime Minister Fico has proven to be surprisingly stable and more longeviv than the country's population and its neighbors' were expecting. The success of this young Prime Minister was mainly the result of careful planned and socially oriented economic policies.⁷⁵ While modifying some of the unpopular economic reforms, smartly enough he did not overturn them entirely that would have caused the slowing down of the overall economic development of the country which again leads us to the conclusion that in order for a country to have a successful transition and economic growth, together with proper institutional conditions there has to be a stable approach towards development and policy sustainability, and Slovakia is a sound example of that, an example to follow.

⁷⁴ National Bank of Slovakia, "Annual report for 2007" under "Monetary policy operations", http://www.nbs.sk/_img/Documents/VS/VSNBS07A.PDF (accessed May 29), 48.

⁷⁵ Andrew Rhys Thompson, *Slovakia: Surprising stability* (International relations and security network, November 2008), <http://www.isn.ethz.ch/isn/Current-Affairs/Security-Watch/Detail/?lng=en&id=93950> (accessed May 29).

CONCLUDING REMARKS

By writing this paper, my aim was to look into the question how transition countries are able to overcome the challenges posed by the transition period from state to market economy, what were the good and bad roads in the monetary policies' implementation and what lessons are there to be learned.

As a general role, the monetary policy aims to secure macroeconomic stability. By looking at the above analysis it is clear that for all transition countries price stability and disinflation were the preconditions for market economic orientations to start to happen. At the same time in order to reach the goal of the European Union and European Monetary Union accession transition countries have to prove that they register sustainable growth that comes hand in hand with stabilization and market equilibrium.

As for the two dissimilar countries researched, Moldova and Slovakia, even though the transition for them started at the same time the mico- and macro-economic conditions of the above mentioned states were totally different.

Moldova entered the transition period as a country that had to suffer from civil unrest, soft economic policies and a state that was not able to built and deliver developmental policies. On the contrary Slovakia, inherited from Czechoslovakia a sound macroeconomic policy. The fiscal as well as monetary prudence that was characteristic even during communism in Slovakia had its echo during the first transformations from a command to market economy. Moldova, an 'outlayer', caught in debt and poor fiscal regime was doing its best to stand up and face the challenges the independence was bringing, but then again the returning of the communists to power in 2001 had triggered the slowing down of the development of macroeconomic programs and worsening of the relations with international financial organizations.⁷⁶

Some of the lessons to mention for the theory of monetary policy looking at the analyzed countries would be that during the implementation of economic and monetary policies, transition

⁷⁶ Laszlo Csaba, *The New Political Economy of Emerging Europe* (Hungary: 2007), 40.

countries have to ensure that the disinflation is sustainable and long term oriented, that there is a coordination of monetary and fiscal policies, that there exists a combination between central bank independence and the public announcement of the targets followed, that there has to be a constraining in the policy making of that country, and if that is not the case then the hard peg would be the only solution and finally ensure that that monetary authorities are sustainable.

Referring to the strategies to ensure price stability, the finding is that for the most transition countries the exchange was a sound instrument while they were using the fixed exchange rate. At the same time while monetary targets tend to be problematic in environments that face financial innovations, inflation targeting became the most used policy framework in successful transition countries, with a gradual move to targeting control of volatility and gradual appreciation of the national currency. However it is still believed that under inflation targeting there is a low degree of central bank independence and the economy tends to resemble a closed one.⁷⁷

That being said Slovakia, despite past problems related to political shocks makes a successful transition story while countries like Moldova, even though characterized by relative strength of the government, are still lagging behind. Thus while the communist past of the both countries no longer serves as a defining moment⁷⁸, amongst the factors that might have led to different results in the delivery of the monetary policies could be included the dissimilar conditions at the time of embarking on the road to market economy and different expectations; unequal potential and abilities to implement the proposed policies in a rapid and successful way. But probably the most important factor to mention here would be the possibility and expectation of the future joining of the European Union and European Monetary Union.

While going through a tough post-election political phase the results of which are yet to be seen, hopefully Moldova will find the fiscal, economic and political will to follow the EU integration steps, prioritize the strategies of European integration thus aiming to a future EU/EMU accession.

⁷⁷ Miroslav Beblavy, *Monetary Policy in Central Europe* (Oxon: Routledge, 2007), 184-186.

⁷⁸ Laszlo Csaba, *The New Political Economy of Emerging Europe* (Hungary: 2007), 32.

Annexes

Annex 1:

Consumer price indices in eastern Europe and the CIS, 1990-2002
(Annual average, percentage change over preceding year)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Albania .....	..	35.5	193.1	85.0	21.5	8.0	12.7	33.1	20.3	-0.1	-	3.1	5.3
Bosnia and Herzegovina	594.0	116.2	64 218.3	38 825.1	553.5	-12.1	-21.2	11.8	4.9	-0.6	1.7	1.8	0.9
Bulgaria	23.8	338.5	91.3	72.9	96.2	62.0	121.7	1 058.3	18.7	2.6	10.2	7.3	5.8
Croatia	597.1	124.2	663.6	1 516.6	97.5	2.0	3.6	3.7	5.2	3.5	5.4	4.7	1.8
Czech Republic	9.9	56.7	11.1	20.8	10.0	9.1	8.9	8.4	10.6	2.1	3.9	4.7	1.8
Estonia	18.0	202.0	1 078.2	89.6	47.9	28.9	23.1	11.1	10.6	3.5	3.9	5.8	3.5
Hungary	28.9	35.0	23.0	22.6	19.1	28.5	23.6	18.4	14.2	10.1	9.9	9.2	5.4
Latvia	10.9	172.2	951.2	109.1	35.7	25.0	17.7	8.5	4.7	2.4	2.8	2.4	1.9
Lithuania	9.1	216.4	1 020.5	410.1	72.0	39.5	24.7	8.8	5.1	0.8	1.0	1.5	0.4
Poland	585.8	70.3	45.3	36.9	33.2	28.1	19.8	15.1	11.7	7.4	10.2	5.5	1.9
Romania	5.1	170.2	210.7	256.2	137.1	32.2	38.8	154.9	59.3	45.9	45.7	34.5	22.5
Serbia and Montenegro	580.0	122.0	8 926.0	2.2E+14	7.9E+10	71.8	90.5	23.2	30.4	44.1	77.5	90.4	19.3
Slovakia	10.4	61.2	10.2	23.1	13.4	10.0	6.1	6.1	6.7	10.5	12.0	7.0	3.3
Slovenia	551.6	115.0	207.3	31.7	21.0	13.5	9.9	8.4	8.1	6.3	9.0	8.6	7.6
The former Yugoslav Republic of Macedonia	596.6	110.8	1 511.0	352.0	126.6	16.4	2.5	0.9	-1.4	-1.3	6.6	5.2	2.3
Armenia	6.9	174.1	728.7	3 731.8	4 964.0	175.5	18.7	13.8	8.7	0.7	-0.8	3.2	1.0
Azerbaijan	6.1	106.6	912.6	1 129.7	1 663.9	411.5	19.8	3.6	-0.8	-8.6	1.8	1.5	2.8
Belarus	4.7	94.1	971.2	1 190.9	2 219.6	709.3	52.7	63.9	73.2	293.7	168.9	61.4	42.8
Georgia	4.2	78.7	1 176.9	4 084.9	22 286.1	261.4	39.4	7.1	3.5	19.3	4.2	4.6	5.7
Kazakhstan	5.6	114.5	1 504.3	1 662.7	1 880.1	176.3	39.2	17.5	7.3	8.4	13.4	8.5	6.0
Kyrgyzstan	5.5	113.9	854.6	1 208.7	278.1	42.9	31.3	23.4	10.3	35.7	18.7	7.0	2.1
Republic of Moldova	5.7	114.4	1 308.0	1 751.0	486.4	29.9	23.5	11.8	7.7	39.3	31.3	9.8	5.3
Russian Federation	5.2	160.0	1 528.7	875.0	309.0	197.4	47.8	14.7	27.8	85.7	20.8	21.6	16.0
Tajikistan	5.9	112.9	822.0	2 884.8	350.3	682.1	422.4	85.4	43.1	27.5	32.9	38.6	12.2
Turkmenistan	5.7	88.5	483.2	3 128.4	2 562.1	1 105.3	714.0	83.7	16.8	..	..	..	..
Ukraine	5.4	94.0	1 485.8	4 734.9	891.2	376.7	80.2	15.9	10.6	22.7	28.2	12.0	0.8
Uzbekistan	5.8	97.3	414.5	1 231.8	1 550.0	76.5	54.0	58.8	17.7	29.0	24.9	..	..

Source: UNECE Common Database, derived from national statistics.

Note: From 1992 onwards indices derived from monthly data except for Armenia, Georgia, Hungary, Slovenia and Yugoslavia (from 1993), Turkmenistan (from 1995) and Uzbekistan (from 1996).

Annex 2:

Real GDP/NMP in eastern Europe and the CIS, 1980, 1989, 1991-2003
(Indices, 1989=100)

	1980	1989	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Eastern Europe .....	..	100.0	83.3	78.3	77.0	79.8	84.6	88.1	90.4	92.7	94.1	97.8	100.9	103.9	107.9
Albania	79.4	100.0	64.8	60.1	65.9	71.4	80.9	88.2	79.1	89.2	97.1	104.6	111.4	116.6	123.6
Bosnia and Herzegovina .....	..	..	..	..	..	..	100.0	154.2	210.7	243.1	266.3	280.7	293.3	304.3	314.0
Bulgaria	76.2	100.0	83.3	77.2	76.1	77.5	79.7	72.2	68.2	70.9	72.5	76.4	79.6	83.3	87.3
Croatia	99.0	100.0	73.3	64.7	59.5	63.0	67.3	71.3	76.2	78.1	77.4	79.6	83.1	86.9	91.0
Czech Republic .....	..	100.0	87.3	86.9	86.9	88.9	94.1	98.2	97.4	96.4	96.9	100.0	103.1	105.1	108.3
Estonia	74.5	100.0	82.7	71.0	65.0	63.7	66.4	69.0	75.7	79.2	78.7	84.5	89.9	95.3	99.6
Hungary	86.3	100.0	85.0	82.4	81.9	84.4	85.6	86.8	90.7	95.1	99.1	104.2	108.3	112.0	115.1
Latvia	68.5	100.0	89.9	61.1	54.1	55.3	54.7	56.8	61.5	64.4	66.3	70.8	76.4	81.1	86.7
Lithuania	64.7	100.0	91.2	71.8	60.2	54.3	56.1	58.7	62.8	67.4	66.2	68.8	73.3	78.3	85.2
Poland	91.1	100.0	82.2	84.4	87.6	92.1	98.6	104.5	111.7	117.1	121.8	126.7	128.0	129.8	134.6
Romania	88.5	100.0	82.2	75.0	76.2	79.2	84.8	88.2	82.8	78.8	77.9	79.6	84.2	88.2	92.4
Serbia and Montenegro ^a	95.7	100.0	81.4	58.7	40.6	41.7	44.2	46.8	50.3	51.5	42.4	45.1	47.6	49.4	49.9
Slovakia .....	..	100.0	83.3	78.0	75.1	79.7	84.4	89.6	93.7	97.7	99.1	101.1	104.9	109.6	114.0
Slovenia	98.9	100.0	83.7	79.1	81.4	85.7	89.3	92.4	96.6	100.3	105.5	110.4	113.5	116.9	119.9
The former Yugoslav Republic of Macedonia	93.3	100.0	84.3	78.7	72.8	71.6	70.8	71.6	72.6	75.1	78.4	81.9	78.2	78.9	81.4
CIS ^b	77.5	100.0	91.0	78.3	70.7	60.5	57.1	55.1	55.9	54.1	56.9	62.0	65.7	69.2	74.4
Armenia	73.5	100.0	83.5	48.6	44.3	46.7	49.9	52.9	54.6	58.6	60.5	64.1	70.2	79.3	89.6
Azerbaijan	79.6	100.0	87.7	67.9	52.2	41.9	37.0	37.4	39.6	43.6	46.8	52.0	57.1	63.1	70.2
Belarus	65.7	100.0	96.7	87.4	80.8	71.4	63.9	65.7	73.2	79.4	82.1	86.8	91.0	95.5	102.0
Georgia	79.4	100.0	67.0	36.9	26.1	23.4	24.0	26.7	29.5	30.4	31.3	31.8	33.4	35.2	38.2
Kazakhstan	87.0	100.0	88.2	83.5	75.8	66.2	60.8	61.1	62.1	60.9	62.6	68.7	77.8	85.5	93.3
Kyrgyzstan	69.1	100.0	96.5	83.1	70.3	56.2	53.1	56.9	62.5	63.8	66.2	69.8	73.5	73.5	78.4
Republic of Moldova ^c	72.1	100.0	80.5	57.2	56.5	39.0	38.5	36.2	36.8	34.4	33.2	34.0	36.0	38.8	41.3
Russian Federation	78.1	100.0	92.2	78.8	71.9	62.8	60.2	58.1	58.9	55.7	59.2	65.2	68.5	71.7	77.0
Tajikistan	80.8	100.0	91.7	62.1	52.0	40.9	35.8	29.8	30.3	32.0	33.1	35.9	39.5	43.3	47.7
Turkmenistan	80.7	100.0	97.0	82.5	83.7	69.2	64.2	68.5	60.7	65.0	75.8	83.3	90.0	98.1	106.9
Ukraine	75.0	100.0	88.0	79.3	68.0	52.4	46.0	41.4	40.2	39.4	39.3	41.6	45.5	47.9	51.9
Uzbekistan	76.0	100.0	98.7	87.7	85.7	81.2	80.5	81.9	86.1	89.9	93.9	97.6	102.0	106.3	111.0
Total above .....	..	100.0	88.7	78.3	72.6	66.3	65.3	65.0	66.2	65.6	68.0	72.7	76.2	79.6	84.4
Memorandum items:															
Baltic states (BS-3)	67.8	100.0	89.1	68.3	59.2	56.5	57.7	60.2	65.0	68.9	68.7	72.6	77.6	82.6	88.6
Central Europe (CE-5) .....	..	100.0	84.1	83.8	85.0	88.5	93.5	98.0	102.3	105.8	109.1	113.4	115.9	118.4	122.4
South-east Europe (SEE-7)	89.0	100.0	80.8	70.7	66.8	69.2	74.4	76.5	74.9	74.6	73.1	75.8	79.5	83.1	86.6
CIS without Russian Federation (CIS-11)	76.4	100.0	88.8	77.3	68.3	56.2	51.1	49.4	50.1	50.9	52.3	55.7	60.4	64.3	69.5
Caucasian CIS countries (CCIS-3)	78.6	100.0	77.7	51.1	39.3	34.3	33.0	34.9	37.3	39.8	41.8	44.7	48.3	52.9	58.6
Central Asian CIS countries (CACIS-5)	81.9	100.0	92.6	82.7	76.9	67.5	63.4	64.2	65.2	66.3	69.6	75.0	81.9	88.0	94.7
Three European CIS countries (ECIS-3)	73.4	100.0	89.1	79.7	69.6	54.9	48.6	45.2	45.4	45.7	46.1	48.7	52.5	55.3	59.7
Former GDR ^d .....	..	100.0	68.3	73.3	80.1	87.9	91.9	94.9	96.7	97.7	99.0	100.0	99.9	100.0	101.4

Source: UNECE Common Database, derived from national and Interstate Statistical Committee of the CIS statistics; DIW, *Wochenbericht*, No. 1-2/2003 (Berlin), 2001 for the former GDR since 1998.

Note: Data for the east European countries are based on a GDP measure, except where otherwise mentioned. For the countries of the former Soviet Union, NMP data for 1980-1990 were chain-linked to GDP data from 1990. Country indices were aggregated with previous year PPP-based weights obtained from the European Comparison Programme for 1996.

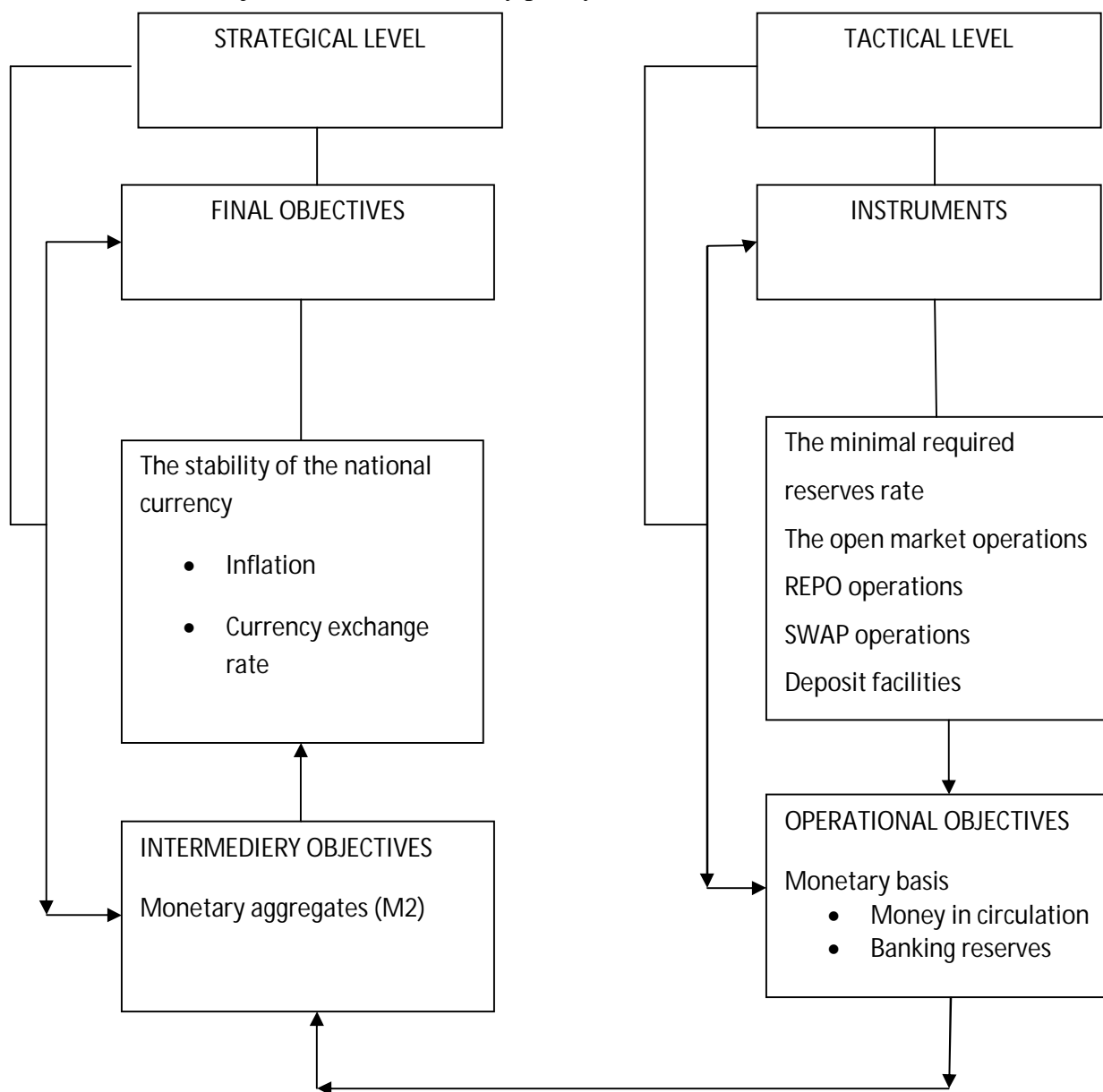
^a Gross material product (1980-1989 for Croatia, 1980-2000 for Serbia and Montenegro). Serbia and Montenegro: since 1999, without Kosovo and Metohia.

^b Net material product for 1980-1990 (until 1992 in the case of Turkmenistan).

^c Excluding Transnistria since 1993.

^d Excluding the former east Berlin since 1998.

Annex 3: Objectives of the monetary policy⁷⁹



⁷⁹ Developed in accordance with Paul Bran and Ionela Costica, *Economie monetara* (București: ASE, 2003), 117.

Annex 4: Comparative study of the final objectives concerning monetary policies of different states

Developed countries		Transition countries	
Country	Final Objective	Country	Final Objective
Australia	Price Stability	Armenia	Price Stability
Canada	Price Stability	Bulgaria	Stability of the national currency
China	Stability of the national currency and economic growth	Czech Republic	Price Stability
Denmark	External stability of the national currency	Estonia	Stability of the National currency
Switzerland	Price stability and economic growth	Kazakhstan	Price Stability
Finland	Price Stability	Mexico	Price Stability and economic growth
Ireland	Price Stability	Moldova	Price Stability
Japan	Price Stability and balance of payment equilibrium	Poland	Price Stability and economic growth
Great Britain	Price Stability and Economic growth	Romania	Price Stability
Norway	Inflation, unemployment rate and economic growth	Russia	Price Stability
New Zealand	Price Stability	Slovakia	Price Stability and economic growth
USA	Price Stability, economic growth and unemployment rate	Tajikistan	Internal and external stability of national currency
Sweden	Price Stability	Ukraine	Price Stability
Turkey	Price stability and economic growth	Hungary	Internal and external stability of national currency
European Union	Price Stability	Uzbekistan	Stability of the national currency

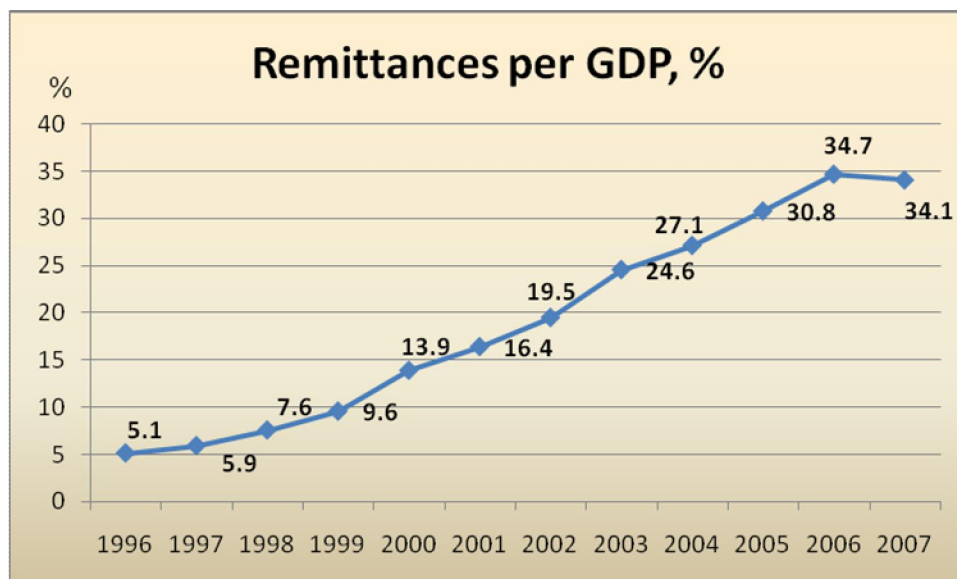
Source: Developed in accordance with annual report of the central banks of the respective countries.

Annex 5: Macroeconomic data, Slovakia 1993-2008

Macroeconomic Indicators	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Unemployment rate	..	13.7	13.1	11.3	11.9	12.6	16.4	18.8	19.3	18.7	17.6	18.2	16.3	13.4	11.1	9.6
GDP at prices and PPPs of 2005, growth rate	..	6.2	7.9	6.9	4.4	4.4	0	1.4	3.4	4.8	4.7	5.2	6.5	8.5	10.4	6.4
Balance of current account, per cent of GDP	-4.3	5.6	2.2	-10.8	-9.6	-10.8	-4.4	-2.5	-8.1	-7.2	-1.8	-2.7	-4.6	-3.8	-1	-2.4
Consumer price index, growth rate	..	13.4	9.9	5.8	6.1	6.7	10.6	12	7.3	3.3	8.6	7.5	2.7	4.5	2.8	4.6

Source: UNECE Statistical Database, compiled from national and international official sources.

Annex 6: Workers' remittances and compensations of employees/ GDP, %



Source: According to WB data

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