

Zukrowska, Katarzyna; Sobczak, Dominik; Marzo, Massimiliano

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FINAL REPORT: MONETARY AND FISCAL POLICY

Vladimir Lavrač (ed.)
Katarzyna Żukrowska
Dominik Sobczak
Massimiliano Marzo

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Jean Monnet Centre of Excellence

Freie Universität Berlin
Hnestr. 22, 14195 Berlin, Germany
Phone: +49 (30) 838 – 54966
Fax: +49 (30) 838 – 52357
Email: info@ezoneplus.org



The Eastward Enlargement of the Eurozone

Berlin Evora Helsinki Ljubljana Bologna Tartu Warsaw

FINAL REPORT: MONETARY AND FISCAL POLICY

Abstract

This report reflects on recent trends in fiscal and monetary policies at the onset of EU-enlargement. Particularly, the authors focus on necessary adjustment processes for future EU-members. How to smooth best the transition period between “normal” EU-accession and eventual participation in the Eurozone? Having conducted empirical regional reports, the Ezoneplus research consortium combines the results in two main parts: Katarzyna Żukrowska and Dominik Sobczak reveal trends and risks in fiscal policy issues, such as divergent consolidation policies in Western Europe, possible lessons for CEE countries and the importance of the Stability and Growth Pact. Then, Massimiliano Marzo elaborates a comprehensive picture of the impact of monetary policy, especially inflation targeting in three CEE countries.

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Affiliations:

Vladimir Lavrač
Institute for Economic Research
Kardeljeva pl. 1 7
1000 Ljubljana, Slovenia
tel.: (+386 1) 5303 838
fax.: (+386 1) 5303 874
Email: lavracy@ier.si

Massimiliano Marzo
Dipartimento di Scienze Economiche
Università di Bologna
2, Piazza Scaravilli,
40126 Bologna, Italy
Email: marzo@economia.unibo.it

Katarzyna Żukrowska;
Dominik Sobczak
International Security Department
Warsaw School of Economics
ul. Wisniowa 41 lok. 63
02-520 Warsaw
Poland
Email: dsobcz@yahoo.com

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FINAL REPORT: MONETARY AND FISCAL POLICY

Vladimir Lavrač (ed.)

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Introduction

The aim of this report is to give some insight into recent, current and forthcoming changes and adjustments in the monetary and fiscal policies of both the EU member countries and the accession countries, particularly from the viewpoint of challenges of the Eastward enlargement of the eurozone. This report tries to summarize a more detailed analysis from the regional inputs to monetary and fiscal policy workpackage, where project's research partners from both the EU and accession countries provided their country-specific views on most challenging issues of monetary and fiscal policies for individual countries and/or groups of countries in their process of Eastward enlargement of the eurozone. This final report summarizes the results and draws some general conclusions from these regional inputs.

Monetary and fiscal policies in the EU countries have been reshaped dramatically in the recent few years in response to the switchover to EMU and introduction of the euro. Transition to the single monetary policy called for a redefinition of national fiscal policies and of the optimal policy mix between monetary and fiscal policy. On the other hand, accession countries are preparing to join the EU in 2004 and the euro area a few years later. This brings new challenges to their current and prospective monetary and fiscal policies. The future Eastward enlargement of the eurozone poses opportunities and risks for both groups of countries and requires adjustments in their monetary and fiscal policies in order to enable a soft landing of accession countries in the euro area.

In the area of monetary policy it turned out that reshaping of monetary policies due to challenges of the Eastward enlargement of the eurozone could not be approached in an uniform fashion for both group of countries, EU member countries and accession countries. The common denominator simply could not be found, as both groups of countries are facing different issues, problems and challenges. The focus of monetary policy in the EU countries is different from the one in the accession countries.

Even for the EU countries, obviously there are two groups of countries, EMU countries and those not participating in the euro area, which face different problems with monetary policy. For obvious reasons this report concentrates on EMU countries. The “outs” retain their more or less independent national monetary policies. For them the main challenge is to decide if and when to join the eurozone, therefore for them the issues of the Eastward enlargement of the eurozone seem more remote and thus less relevant for the moment. However, there is an important link between the inclusion of “outs” in the eurozone and the Eastward enlargement of the eurozone. If the introduction of the euro precedes the Eastward enlargement of the eurozone it will be interesting to see whether according to the “same rules principle” actually the same rules and procedures would be applied to both groups of countries, or there would be some exemptions given to current EU “outs” (based on political bargaining and balance of powers) which could not be available for the accession countries.

In the EMU countries, the fundamental reshaping of their monetary policies took place with the introduction of the euro, when national monetary policies were given up in favour of a single monetary policy. Centralisation of the monetary policy in the EMU meant that from the viewpoint of monetary policies countries became similar to regional economies instead of national economies. In the process they first had to prepare for the adoption of the euro and fulfil the Maastricht convergence criteria and then had to learn to live in a monetary union by adjusting to possible symmetric and asymmetric shocks without the instruments of national monetary and exchange rate policy.

The single European monetary policy now functions, although not without problems. There is an ongoing discussion on various issues of the single monetary policy of the ECB, not only in the academic literature. It concerns issues such as the objectives of the monetary policy (price stability as the primary, the only or just one of the goals of the monetary policy), rules versus discretion (application of rules such as Taylor rule in determination of the basic interest rate), monetary strategy (two pillars or inflation targeting), inflation target (0-2% or close to 2%), problems of low nominal and possibly

negative real interest rate, the role of asset prices and their bubbles in the conduct of monetary policy, transparency and accountability of the ECB, etc. At this moment, the main debate seems to be focused around the question whether the European monetary policy is capable of dealing not only with problems of inflation, but also with current dangers of more persistent recession and deflation. While these problems of the European single monetary policy are not in the center of this report, they can not be completely disregarded, since they represent the framework upon which the issues of the Eastward enlargement of the eurozone will be superimposed.

From the point of view of the EMU countries the main challenge related to the Eastward enlargement of the eurozone is the absorption of new and somewhat different member countries in the eurozone, without endangering the functioning of the European single monetary policy and its quality. There are two questions involved here: First, are the accession countries really that different in terms of monetary policy, and second, if so, can their inclusion in the euro area really represent a threat to the quality of the single European monetary policy, to the credibility of the ECB and to the stability of the euro.

Inclusion of accession countries in the eurozone will by definition mean additional problems for the single monetary policy, first, by the mere fact that the eurozone will be enlarged (more countries participating), and second, by the fact that it will become more heterogenous. The inclusion of new and somewhat different countries in the eurozone definitely complicates the single monetary policy in the euro area. The accession countries are coming from the transition process and in the process of their preparations for the accession to the EU have not finished all structural reforms which would make their economies more similar to those of the current EU member countries. They are definitely lagging in real convergence (if we take GDP per capita as the usual measure of real convergence) compared to the EU average and are at the moment not fulfilling nominal convergence criteria (Maastricht monetary and fiscal criteria). However, it should be mentioned that that they are not further away from fulfilling the nominal convergence criteria than were some EU countries at a

comparable time distance before their inclusion in the EMU. Also, inclusion in the EU and in the ERM 2 will for accession countries be a source of a potentially significant asymmetric shock. Definitely, accession countries are somewhat different from the EU member countries. The question remains, however, how relevant this is for the European single monetary policy. Can it be a priori assumed that they will by definition be less inclined to macroeconomic stability and to responsible (conservative) monetary policy? Will they be asking for assistance through various channels of redistribution and transfers which exist in the EU, including political bargaining, in case of asymmetric shocks once in the EMU, thus burdening EU countries with additional costs? Probably it is too soon to give a definitive answer. It might be, however, that the real threat to the smooth functioning of the single monetary policy could come not so much from their needs or wishes for an easier monetary policy in the euro area, but from the weaknesses in their financial sectors and payments systems. In other words, the risks from admitting the accession countries to the eurozone could be more in the implementation than in the stance of the single monetary policy. Dangers of admitting the accession countries to the eurozone for the conduct of the European single monetary policy should not be overemphasised. Their combined share in terms of monetary aggregates or GDP is almost negligible.

Decision-making process in the ECB will have to be adjusted to absorb the accession countries as new coming members of the eurozone. The eurozone membership may increase up to 25 countries till the end of this decade if EU “outs” also decide to join and adopt the euro. This would technically complicate the decision making process in the Governing board of the ECB. Reaching consensus or even letting every member of the board express his position would become extremely difficult. One country one vote principle would have to be adjusted to preserve the existing balance of powers between large and small countries and to prevent some possible “instability coalitions” between some groups of countries. The need for such readjustments is recognised, but alternative technical solutions are still discussed and the final agreement has not been reached so far.

European single monetary policy is determined with the view on the EU as a whole, in other words, with a view on the EU (or EMU, to be more precise) average. From individual countries' point of view it is by definition not optimal. Economic and financial structures, demand for money, transmission mechanisms of monetary policy and phases of economic cycles differ among individual member countries. The main refinancing interest rate of the ECB is too high for countries in a recession and too low for countries going through an expansionary phase of the cycle. There is no such thing as a "European cycle" which would make the formulation of the single monetary policy much easier. Anyway, this is a situation well known between different regions within a country. Inclusion of the accession countries in the eurozone will increase the size of this problem, particularly if their economic cycles are less synchronised with the EU average.

The risks of Eastward enlargement of the eurozone for the single monetary policy therefore derive not only from non-synchronised economic cycles in the accession countries, but also more generally from their exposure to asymmetric shocks (or even from differing responses to symmetric shocks as a result of differing transmission mechanisms) and from their ability to activate alternative mechanisms of adjustment which can absorb these shocks in the framework of the EMU. There are some safeguard mechanisms prepared for the accession countries in their run up to the eurozone: coordination and surveillance of their economic policies after their EU accession, participation in the ERM 2 in the interim period before the adoption of the euro, compliance with the nominal convergence criteria and with real convergence requirements. These safeguard mechanisms should enable soft landing of the accession countries in the EMU. The problems for the single monetary policy from the Eastward enlargement of the eurozone would in this case be more of a quantitative nature (up to 25 countries, more heterogeneity by definition) than of a qualitative nature (inclusion of "problematic" member countries). The final outcome depends on successful preparations, and, last but not least, on the optimal timing of the inclusion of the accession countries in the eurozone.

As far as the accession countries are concerned, they have for the moment full monetary sovereignty, at least formally, and can lead independent monetary policies. Factually, independence of their monetary policies is constrained by the progress in the liberalisation of their capital flows and is dependent on their choice of the exchange rate regimes. In the process of adopting the *acquis communautaire* the accession countries committed themselves to liberalise capital flows completely by the time of their EU accession (exemptions and transitional periods required and granted were insignificant), but have already by now eliminated practically all capital controls. There is also a link between the exchange rate regime and the autonomy of the monetary policy. Those accession countries which are relying on fixed exchange rates, particularly on hard pegs like currency boards, have tied hands in monetary policy. On the other hand, those accession countries which opted for floating exchange rate regimes, particularly free floaters with inflation targeting, retain independence in their monetary policies, while those relying on intermediate regimes, such as managed floating, are somewhere in between.

Monetary policies of the accession countries will change with their inclusion in the EU. Their economic policies, including monetary and exchange rate policies, will become a matter of common concern, subject to coordination and surveillance within the EU. It is expected they will join ERM 2 rather soon after their EU accession. Participation in ERM 2 will shift the focus of their monetary policies which will retain some flexibility, but will be oriented to preserving the exchange rate stability required in ERM 2 framework in order to fulfil the Maastricht convergence criterion on exchange rate stability.

As ERM 2 is an intermediate soft peg exchange rate regime whose rules, procedures and interpretations are for the moment not defined precisely enough, accession countries perceive it as a potentially dangerous mechanism which can lead to speculative attacks and currency crisis and not necessarily to a soft landing in the eurozone. Their strategies seem to be to stay in ERM 2 as short as possible, for two years only, as is the required minimum period of participation to demonstrate the exchange rate stability

before the adoption of the euro. In line with their ambitions for an early inclusion in the eurozone they also seem to favour an early entry in ERM 2, although this is not a riskless strategy.

At this moment monetary policies of the accession countries are focused on preparations for meeting the Maastricht convergence criteria, as the time is running out fast. In the recent period the process of disinflation has been rather successful in most of the accession countries. In those where the inflation rates are still rather high, lowering of the inflation rate is the priority of their monetary and other economic policies. The question remains whether the results in disinflation are sustainable, as most of the accession countries register some serious underlying macroeconomic imbalances (fiscal disequilibrium, balance of payments disequilibrium) of substantial proportions. Monetary policy alone may not be enough, coordination of macroeconomic policies is required for the fulfilment of the Maastricht convergence criteria on a healthy and sustainable basis, which can then lead to a soft landing in ERM 2 and to an early inclusion in the eurozone. Monetary policies of the accession countries will in the interim period have to deal with the challenges of capital flows, Balassa-Samuelson effects of real exchange rate appreciation and tasks of achieving nominal and real convergence in parallel. Their readiness for the inclusion in the eurozone can be approached in terms of their nominal convergence, real convergence and optimum currency area criteria. Optimal timing of the Eastward enlargement of the eurozone and its success will depend on the readiness of the accession countries to adopt the euro, which is dependent on their exposure to asymmetric shocks and on the flexibility of alternative mechanisms of adjustment they can activate and thus compensate for the loss of monetary and exchange rate policy once in the monetary union.

Contrary to the situation with respect to monetary policy, issues in fiscal policy are basically the same or at least similar for both groups of countries, EU member countries and accession countries, although its objectives and tasks may differ somewhat and although fiscal policy in both groups of countries is for the moment subject to a different set of rules. For both groups of countries, regardless of the

differences, key words are the same: fiscal discipline, fiscal consolidation and fiscal sustainability. The common denominator is that various tasks of fiscal policies in both countries have to be performed within the sustainability framework given by the common EU rules.

The link between the Eastward enlargement of the eurozone and fiscal policy is less clear and direct than in the case of monetary policy. In the EU countries reshaping of fiscal policies resulted mainly from redefining the role of national fiscal policies after the centralisation of monetary policy and transition to the single monetary policy, and, presently, is determined by the obligation to keep the fiscal policies within the limits of the Stability and growth pact (SGP). Inclusion of the accession countries in the EU will mean additional fiscal costs to which EU budget and accordingly national fiscal policies of the EU countries will have to adjust. However, inclusion of the accession countries in the eurozone per se will not represent an additional fiscal burden for the EU member countries, at least not directly. However, there are risks of indirect fiscal costs and redistributions which may occur through various possible mechanisms and channels, in case if accession countries meet serious problems once in the eurozone which the EU countries would be willing to finance or in the final instance would have to finance.

In the EU countries (in fact throughout this text we have in mind EMU countries in particular) fiscal policy had to be redefined as a response to the transition to EMU. The first issue is should there also be, in parallel to the single monetary policy, a “single fiscal policy”, centralisation of national fiscal policies at the EU level. From the point of view of finding an optimal policy mix for the EU economy this at first sight might seem as a sound idea. However, while there are some economic arguments to support an EU-wide fiscal policy, this remains an academic idea. Political realities in the EU are such that countries want to retain their fiscal responsibilities. EU budget is, compared to the similar federal states, very limited in size and inflexible, since most of the expenditures are devoted to agriculture and structural policies, so that the EU budget can not support the roles of the EU-wide fiscal policy.

Instead of centralisation of fiscal policies in the EU, the concept of co-ordination or harmonisation of national fiscal policies was adopted. The responsibility for the fiscal policy remains at the national level. From the point of view of EU member countries, giving up their national monetary policies should in principle result in more flexibility of their national fiscal policies, merely to compensate for the loss of an instrument of macroeconomic management (adjustment mechanism). However, there are important externalities, spillovers from national fiscal policies, related to their unsustainable fiscal position (excessive fiscal deficits leading to unsustainable debt dynamics), which can harm other member countries and in the final instance also the quality of the single monetary policy. Therefore, national fiscal policies have to be co-ordinated or harmonised, in other words constrained by the common EU rules. This was the approach adopted for the EMU. National fiscal policies remain independent, but severely restrained by the EU-determined rules.

These fiscal rules are first and in the most general manner determined in the Treaty (TEU) in the form of excessive deficit rules and procedures. More concretely, they are defined as the fiscal part of the Maastricht convergence criteria (budgetary deficit, public debt) as a precondition in qualifying for EMU membership. And finally, later on, provisions of Growth and Stability Pact (GSP) were defined so as to protect the sustainability of public finance also after inclusion in EMU. SGP defines general fiscal rules of TEU more concretely, in terms of procedures, including sanctions for non-compliance. EMU countries after joining the eurozone have to comply with SGP rules. In their stability reports they have to present their current fiscal situation and explain how they plan to sustain their fiscal position in terms of compliance with SGP rules in the medium-term.

SGP basically limits public finance deficit (for practical reasons in the following we use the term budgetary deficit as a shortcut approximation) to maximum 3% of GDP annually, except in the case of a precisely defined severe downturn in economic activity. However, in the medium-term the budget should be balanced or even in surplus. Other elements of SGP are rules and procedures, such as on detection of the

problem, on early warning system, on the timing of the elimination of the problem and on sanctions if the problem is not eliminated in time.

The idea is that in normal times budgetary deficits should be close to zero, so that in bad times countries can afford more expansionary fiscal policy and increase their budgetary deficits up to 3% of GDP (but not above this benchmark, except in severe recessions). Ideally, in the medium term the budgets should be balanced, while within economic cycles they should move according to the phases of the cycles from surpluses to deficits, but within the 3% budgetary deficit limit of SGP. Obviously, the idea is that fiscal policy within the cycle should primarily reflect the working of built-in or automatic stabilisers of the fiscal policy (increase of public spending such as unemployment benefits and/or decrease of collected taxes in times of recession, and vice versa in times of booming economic activity). The functioning of such automatic fiscal stabilisers within the cycles itself contributes to stabilising the economy. More discretionary or activist fiscal policies are subject to much scepticism anyway, as there are problems with timing and fine tuning of such fiscal measures, since various lags are operating here.

There was considerable fiscal consolidation in the run-up to the EMU in the EU countries in the nineties. Among different strategies of fiscal consolidation more successful and sustainable proved to be those which relied on public expenditures cutting. However, some of the EMU countries remained close to their limits of budgetary deficits of 3% of GDP. In the good times, a couple of years after the introduction of the euro, these countries did not proceed with fiscal consolidation which would bring their fiscal deficits close to zero or even in surplus. In other words, they avoided needed structural reforms which could improve their fiscal position and perspectives. In the present bad times their fiscal position naturally worsened and started to breach the rules of SGP, triggering reactions from the EU Commission.

At the moment EMU countries are obviously stuck with SGP problem. Who is to be blamed and where is the way out? Is SGP just a “stupid” rule, as any rule which is too

rigid and does not adjust to the realities of the (changed) situation? Of course it is perverse to expect from countries to restrain their fiscal policies in times of recession, when they would require just the opposite, fiscal stimulus to help their economies getting out of the recession. In case of sanctions such as fines, countries would be from the point of view of fiscal policy additionally hurt in the wrong direction, even worsening the situation in their economies. There are serious calls from different countries to change SGP, or least to interpret it more flexibly, like “temporary softening”, to take more account of the economic situation (and of political realities?). Ideas range from exempting some types of public expenditures, such as investment in infrastructure, widen the 3% limit somewhat, or to adjust it to take explicitly account of the economic cycle, to concentrate on public debt instead of budgetary deficits, to focus more on medium-term target of fiscal sustainability rather than on strict yearly limits of budgetary deficits, etc. The common denominator of alternative solutions is that automatic fiscal stabilisers should be allowed to work themselves out during economic cycles so that fiscal policy could be counter-cyclical and not pro-cyclical as it would be in some cases if SGP rules were strictly applied.

On the other hand, there are reasons for sticking to SGP rules. First, not all EMU countries violate SGP rules or are close to that. Adjustments of SGP rules would implicitly punish their prudent fiscal policies. Lessons from this for the future could be devastating, not only for the credibility of the rules and institutions in the EU, but also in terms of moral hazard. Second, the rules were known in advance, but some countries did not do their homework in the good times when they still could. Problems of their budgetary position are more of a structural than of a cyclical nature. So they should concentrate on structural reforms, painful as they may be. Unfavourable demographic trends, such as ageing of population and forthcoming problems of migrations are not exactly easing the fiscal problems, but rather call for undertaking the needed structural reforms without delays in order to support sustainability of their public finance in the medium-term.

From the point of the accession countries their national fiscal policies are being reshaped as they prepare for the EU membership and will adjust further when they approach and later on join the eurozone. For the moment, before their inclusion in the EU, accession countries can lead independent fiscal policies, at least formally speaking. They are, however, subject to various mechanisms of surveillance and assessment of their fiscal policies (such as pre-accession programmes, fiscal notifications, etc.). With their EU accession the formal situation concerning their fiscal policies will change radically. As EU member countries with the derogation from adopting the euro they will become subject to EU fiscal rules. They will become subject to excessive deficit procedures as defined in the Treaty (TEU). Furthermore, if they have an ambition for an early inclusion in the eurozone, they would have to comply with the Maastricht convergence criteria, including their fiscal part, relatively soon (almost immediately) after the EU accession. And finally, they would be subject to some, but not all, of the requirements of the SGP. After joining the eurozone, they would ultimately have to comply with the SGP rules and procedures, including sanctions, fully. From the time of their EU accession they will have to prepare convergence programmes about their fiscal situation and forthcoming challenges, particularly about their plans how and when they would fulfil the fiscal part of the Maastricht convergence criteria.

At present, even before their EU accession and ERM 2 membership, their fiscal policies are already conducted with a view of preparing to meet the Maastricht fiscal criteria, as fiscal consolidation usually takes some time. Most probably, they will not be given some exemptions and favourable interpretation as was the case for some EU countries before their eurozone membership. As the EU side is not exactly rushing them into the eurozone, it is in their own interest to take care of the timely compliance with the Maastricht fiscal criteria if they want to be prepared for an early eurozone membership. Therefore, the issues of fiscal discipline, fiscal consolidation and fiscal sustainability become equally relevant and pressing for them as are for the EMU member countries. At this moment, fiscal position in the accession countries is somewhat diversified. In terms of fiscal deficits, some countries are in a better position and practically meet the Maastricht fiscal convergence criteria. Others (particularly some Central European

accession countries, like Hungary and the Czech republic) have considerable problems and substantially exceed the 3% limit of the fiscal deficit. The situation has worsened in the last period. Furthermore, as the structure of their budgets is unfavourable in terms of inflexibility of the large part of the public expenditures, there is not much hope for an early and smooth consolidation of the fiscal policy. The sustainability of their fiscal position may be the main reason for somewhat less enthusiastic recent statements in some of these countries concerning dynamics of their ERM 2 and eurozone membership. As far as their public debt is concerned, the situation is not critical. Their public debt is below the Maastricht benchmark of 60% with a sufficient safety margin. The level of public debt in accession countries is determined with its low initial level at the beginning of transition, which reflects specific concept of “public finance” before the transition and does not reflect accumulated past deficits as in the market economies.

Fiscal policies in the accession countries are burdened with multiple tasks. Apart from their traditional roles of allocation, stabilisation and redistribution in the economy, in the accession countries they have to support economic growth and real convergence, provide investment for the catching-up in infrastructure, support macroeconomic stability (dealing with volatile capital flows), finance adoption of the acquis communautaire and other institutional adjustments in the process of EU approximation and accession, etc. Just like in the EU countries, in the accession countries current recession and some demographic trends (like population ageing) are causing tensions in the public finance and require structural reforms, including reforms in the pensions and health systems.

After their EU accession, fiscal position in the accession countries will also be determined by the net transfers from the EU budget. All accession countries will be net receivers from the EU budget, at least in this period until the new financial framework is determined for the period from 2006 on. The actual level of net financial inflows from the EU will depend on the absorption capacity of the recipients (availability of programmes, co-financing). There are some other problems with net transfers from the EU (dynamics, as outflows come first and are unconditional, while inflows follow later

and are conditional, and redistribution within national budgets, as outflows are from the overall budget, while inflows are earmarked for certain sectors/ministries), but this is beyond the scope of this report.

Part A: Fiscal policy

Katarzyna Żukrowska, Dominik Sobczak

Warsaw School of Economics, Poland

Introduction

On May 1st, 2004, ten new countries are going to accede to the European Union. This will be the milestone in integration of Central and Eastern European Countries with the economically developed Europe, but not the end of this process. In a few years time, the accession of these countries into the Economic and Monetary Union can be expected, which will pose a great challenge as well.

There are numerous dimensions in which this process should be analyzed, however, this particular report will concentrate on such an important, and still only to a certain extent coordinated, issue as fiscal policy. In relation to the Eastward Enlargement of the Eurozone, it is crucial to take into account the experiences of current EMU Member States, the fiscal stances in candidate countries, together with their development perspectives, as well as the Community influence on shaping national fiscal policies. All these subjects will be tackled in this report.

1. Fiscal situation and middle-term perspectives in EMU Member States

Fiscal situation and its development over the recent years in current EMU Member States was closely related with the requirements of Economic and Monetary Union. Therefore, it is important to elaborate on the fiscal criteria in order to understand the factors which were influencing the shaping of fiscal policy in these countries, as well as challenges which await states eager to join the EMU in the future.

1.1. The rationale behind EMU fiscal rules

One of the vital features of the institutional framework of the EMU is strong fiscal discipline, which is necessary to support the independent monetary authority European Central Bank (ECB) in its mandate of preserving price stability. The authors of the Treaty were particularly concerned about preventing a repeat of fiscal policy failures, which occurred in Europe in the 1970s and 1980s (Buti and Giudice, 2002). These years

were an era of rapidly rising share of the general government sector in the economy. In countries belonging to the euro area, the relation of government expenditures to GDP had risen from 36% in 1970 to a high of over 52% in 1993 (European Commission, 2000). Government revenues also increased very significantly during that time, but not quite as fast as spending. As a result, net borrowing of euro area countries grew from almost nil in 1970 to a range of 4-5% in the 1980s. This had inevitably resulted in a quickly rising stock of public debt, which in late 1970s totaled less than 30% of GDP, but by early 1990s its relation to GDP had more than doubled. Growing debt had in turn fuelled a further rise in expenditure in the form of interest payments, which by 1990 amounted to around 4% of GDP.

To make matters worse, fiscal policy in Europe in the 1970s and 1980s has tended to be pro-cyclical. This means that government budgets did not help to dampen cyclical fluctuations of the economy as they could and should have, but instead have contributed to amplifying output swings. The budget should be anti-cyclical primarily through the working of automatic stabilizers. In a situation of a cyclical downturn, tax revenues are lower, while unemployment-related and social spending tends to be higher, resulting in a higher deficit and helping the economy come out of recession. Meanwhile, during an upturn, tax revenues are buoyant, fewer citizens require social assistance of the state and the deficit is thus automatically reduced. However, this was not the case in the period in question. Deficits did not fall as expected during economic upturns, implying that rather than allow for automatic stabilizers to work, policymakers opted for tax cuts or spending increases in periods of boom. This has in turn forced them to tighten fiscal policy in times of recession, as they could not let the deficit and public debt rise indefinitely.

There are two main conclusions to be drawn from these developments, which imply that a radical change in fiscal policy was required. The first one is that policies carried out in the 1970s and 1980s were simply unsustainable, as evidenced by the rapid growth of public debt. The second is that such pro-cyclical policies would have been much more dangerous in a monetary union, where an excessively lax fiscal policy stance in

one country cannot be countered by restrictive monetary policy, which is the same for all countries. Similarly, if one country conducted a restrictive fiscal policy during a downturn, because its public debt had risen to extremely high levels already, a single monetary authority could not focus on reviving the economy of that one particular country.

1.2. The fiscal criteria of Economic and Monetary Union

The fiscal story of the 1970s and 1980s, outlined above, was an important factor in the design of the rather rigid fiscal framework of the Maastricht Treaty and, consequently, the Stability and Growth Pact, which is meant to ensure fiscal prudence within the Eurozone.

There are two basic types of fiscal rules, which can help enforce fiscal discipline (Buti and Giudice, 2002):

- a) Numerical targets, namely explicit constraints on fiscal variables, such as spending, deficit and debt or their growth
- b) Procedural measures conducive to formulation of disciplined fiscal policy

Numerical targets are simple to implement and monitor, provided there are good fiscal accounting standards. The drawback of tight numerical rules is that they enforce strict discipline also during economic downturns, which can lead to pro-cyclical fiscal policy, if policymakers are not prudent enough to lower the deficit during a boom. A possible solution to this problem would be using numerical targets for structural budget balances, but this is methodologically difficult, as it would involve a numerical target based on an unobservable variable – the output gap. Another important drawback of numerical targets is that they encourage using one-off measures or even creative accounting measures in order to attain the right figure on paper. Such measures are not conducive to prudent fiscal policy and thus do not comply with the objectives which fiscal rules are supposed to achieve in the first place. As shown later on in this discussion, such measures were in fact employed by some EMU candidates to attain an illusory improvement in their fiscal position.

Procedural measures are aimed at creating “hierarchical” budgeting procedures, in which the supreme fiscal authority has strong power to maintain spending limits set. At supra-national level, a supra-national body is assigned the power to assess the fiscal position of national governments and sanction them for failure to meet numerical targets.

The institutional framework of the Maastricht Treaty is a combination of numerical and procedural measures. On one hand, the Treaty stipulates that Member States shall attain a high degree of sustainable convergence in order to be admitted to a monetary union. One of the elements of this convergence is sustainability of the government financial position, specified as a deficit below 3% of GDP and public debt not higher than 60% or in case of higher debt, it should be approaching the reference value at a satisfactory pace.

1.3. Fiscal problems and policy reforms in the chosen EMU countries

The Maastricht Treaty was a powerful stimulus for European Union countries to consolidate their budgets. The role of the Treaty and the ‘carrot’ of future EMU membership is particularly evident, when considering the unfavorable economic climate of the early 1990s in spite of which a remarkable fiscal consolidation has been achieved (European Commission, 2000). All 11 future members of the EMU,¹ had embarked on a fiscal consolidation path, although for example Ireland need not have done so, since it had already reduced its budget deficit significantly in the late 1980s. This means that there are at least 11 interesting cases of fiscal retrenchment to analyze.

Considering that each of these 11 countries began its consolidation process from a different starting point, in a different economic and political setting, there is no surprise in the fact that they have pursued very diverse strategies. There are different ways of classifying these strategies, with the most common division being that into revenue- and expenditure-based retrenchment strategies. The European Commission distinguished

¹ Luxembourg is being excluded from this analysis due to its unique features as a micro state.

also a third path – the “switching” strategy in which countries first resort to revenue adjustments and then switch to expenditure cuts.

However, another classification can be offered, one which relates to the numerical nature of Maastricht Treaty targets. As mentioned earlier, these can also be attained through superficial measures. We would therefore propose to divide the consolidation strategies into three groups:

- expenditure-based consolidations,
- revenue-based consolidations,
- mixed strategies featuring one-off measures and, in some cases, creative accounting.

Expenditure-based consolidations

Austria

Following the failure of Austria’s first EMU-aimed budgetary retrenchment effort in 1995, when the deficit turned out at 5,1% of GDP, a comprehensive reform package was introduced in the following year. Consolidation measures were introduced for most categories of revenues and expenditure, however, the bulk of the adjustment occurred on the spending side. Expenditure decreased by 2,8 percentage points of GDP between 1994 and 1997. The cuts were focused in such areas as public administration wages, family allowances, other welfare transfer payments, unemployment benefits, subsidies to the business sector, reduction of health care costs. Furthermore, early retirement options were restricted. In spite of the need to reduce the deficit within a short period of time, the Austrian government implemented several systemic measures, rather than resorting to temporary tax increases or spending cuts. Taxes were also adjusted, through elimination of some concessions and allowances, mainly in the area of direct taxes. These measures allowed Austria to lower its deficit to 1,7% in 1997, comfortably meeting the Maastricht deficit criterion.

Finland

At the beginning of the 1990s, Finland was undergoing quite pronounced economic difficulties, caused by the breakdown of trade with the former Soviet Union and a

banking crisis. As a result, the country ran a high budget deficit, exceeding 5% of GDP. However, in 1995 a determined fiscal consolidation strategy was implemented, leading to quick reduction of the deficit in subsequent years and achievement of a budget surplus in 1998. This strategy involved radical measures on the expenditure side, as public spending decreased by 12 percentage points between 1992 and 1999. The government undertook firm measures to lower social transfers and intergovernmental transfers. The pension system had undergone a comprehensive overhaul, including lowering accrual factors, less favorable calculation of pensionable wage and lower indexation. Access to unemployment benefits was tightened and the policy of subsidizing industries altered. Thanks to such extensive measures on the expenditure side of the budget, the government was able to not only attain a budget surplus, but also to lower social security contributions, with the aim of promoting employment.

Ireland

The “Irish miracle” is a well-established phrase in economic literature, which says a lot about Ireland’s macroeconomic performance over the past two decades. The country has achieved a spectacular turnaround by implementing a host of bold structural reforms, one of which was a major overhaul of public expenditure, conducted already back in the 1980s. This made Ireland the only EU country meeting the Maastricht fiscal deficit criterion on the day the Treaty was signed. However, prior to its spending reforms, Ireland’s fiscal policy was very lax and public debt soared to levels in excess of 100% of GDP. The government was therefore intent on maintaining prudent fiscal policy, so as to facilitate a steady reduction of the debt level, while at the same promoting employment. At the beginning of the 1990s, additional fiscal adjustment took place, but this time on the revenue side of the budget, primarily through broadening of the corporate tax rate. However, between 1994 and 1999 public spending was further lowered by 5,9 percentage points of GDP. This was attained thanks to a reduction in wage compensation of public employees, agreed with trade unions, as well as lower transfers. As a result, Ireland attained a budget surplus of 2% of GDP in 1999, while reducing its debt level to 43,9%, half of what it was barely five years earlier.

The Netherlands

Although the budget deficit of Netherlands exceeded the Maastricht reference value only by a marginal 0,1 of percentage point of GDP in 1993, in the following years the deficit deteriorated, reaching 4,2% in 1995, as a result of an economic downturn. However, already in 1994 the government accepted a fiscal consolidation strategy focused on reducing real expenditure by 0,7% per year on average, with the bulk of the adjustment coming in the area of social security. A health care financing reform was undertaken and a law introduced to limit the number of disability claimants. Unemployment eligibility was then tightened and social assistance structure simplified. As a result of these measures, primary expenditure decreased by more than 5 percentage points of GDP between 1992 and 1999. Meanwhile, the tax burden had increased in 1993, but in the subsequent years personal income taxes for the lowest earners were lowered, as were social security contributions, both with the aim of promoting employment. Some of the ensuing revenue loss was offset by an upward adjustment of indirect taxes. From 1997 onwards the consolidation effort was additionally supported by a decrease in interest payments.

Spain

The Spanish consolidation effort was somewhat delayed, in comparison to other euro area countries. At the beginning of the 1990s the country's macroeconomic situation deteriorated, leading to shortfalls in tax revenues and causing the government to undertake discretionary measures to counter the crisis, such as higher transfers to social security funds and public companies. This had resulted in a high budget deficit, which peaked at 7% of GDP in 1995, with just two years to meet the Maastricht target of 3%. However, in 1994 the government initiated its expenditure-based fiscal consolidation, aimed at meeting the reference value. Retrenchment measures had been undertaken in several spending categories, including agreements on wage moderation and a public employment freeze, agreement on containing growth of health care spending, restricting access to unemployment benefits, adjustments in the pension system, causing lowering of replacement rates. As a result of these steps, primary expenditure declined

by more than 5 percentage points of GDP between 1993 and 1999. On the revenue side, indirect tax rates were raised, while social security contributions and direct taxes decreased as a proportion of GDP.

Revenue-based consolidations

Belgium

The European Commission classified Belgium's consolidation effort as an example of a so-called "switching" strategy, in which tax increases are followed by expenditure restraint (European Commission, 2000). The Belgian authorities provided the following explanation for such a strategy – hard measures on the revenue side would stabilize market expectations and thus facilitate the ensuing expenditure restraint. This rationale was particularly valid for Belgium, which had accumulated a stock of public debt exceeding 120% of GDP, meaning that market expectations about the success of the consolidation strategy had important implications for debt servicing costs. However, for the purpose of this classification, Belgium is included among countries pursuing revenue-based consolidation, as revenue measures outweighed those on the expenditure side, in terms of adjustment in relation to GDP.

At the beginning of the previous decade, Belgium introduced hard measures on the revenue side, causing all major tax categories to increase as a proportion of GDP. Corporate taxes were raised by limiting deductions and depreciation write-offs. Taxes on pension and life insurance payments were introduced and indexation of personal income tax thresholds suspended. Indirect taxes were also raised. However, after 1994, the government introduced some tax lowering measures, aimed at long-term creation of unemployment. Contributions to social security were thus reduced, particularly for lowest earners, young unemployed and sectors most exposed to international competition. The government also introduced some short- and long-term expenditure restraint measures. The latter initiatives were focused in the areas of health care financing, unemployment benefits, as well as the growth of wage compensation.

Greece

In the first half of the 1990s, the situation of Greek public finances was one of the worst in Europe, casting serious doubt over the country's ability to meet the Maastricht criteria. Throughout that period, the public sector deficit exceeded 10% of GDP, leading public debt to rise above 100%. Interestingly enough, despite a radical increase in taxes, enacted at the beginning of the decade, the deficit remained above 10% until 1995. This was due to a moderate increase in public expenditure and rising costs of servicing the piling public debt. The revenue-raising effort included excise tax increases, VAT harmonization, and several measures aimed at limiting tax evasion, as well as introduction of new principles of taxing farmers. Tax deductions and exemptions in corporate income taxation had been abolished or limited. As a consequence of these sweeping tax changes, the current revenue to GDP ratio expanded from 31,9% of GDP to 48% of GDP. Expenditures were reduced only modestly after 1995, although some of this adjustment had been achieved by moving public investment off budget (Von Hagen et al., 2001). These steps, combined with significantly reduced interest payments, have allowed Greece to stabilize its deficit well below the 3% reference ratio towards the end of the 1990s.

Portugal

This is another example of a country with a high budget deficit of over 6% at the beginning of the Maastricht consolidation process. In 1992 the first fiscal consolidation program was implemented, with several measures aimed at raising tax revenue, such as changes in income taxes, VAT rates and efforts to improve tax administration. However, these steps did not yield a lasting fiscal improvement, as in 1993 the government increased public spending in reaction to an economic crisis, raising subsidies to farmers, exporters and enacting a program of low cost housing loans. A second wave of revenue-based consolidation began in 1994, supported by moderate expenditure reduction in the form of wage and transfer moderation. However, these measures were soon reversed, as the spending policy yet again became expansionary. In spite of this, the government did manage to effectively lower the fiscal balance to -2,6% of GDP in 1997, thanks to strongly falling interest rate payments from 1995 onwards.

Mixed consolidation strategies featuring one-off measures

As mentioned previously, the numerical nature of the Maastricht fiscal deficit criterion can cause attempts to satisfy it using superficial measures, rather than firm and lasting fiscal consolidation strategies. In case of some of the euro area countries, it can be argued that the desire to meet the Maastricht criteria and join the EMU was stronger than the desire to actually attain a sustainable improvement of the fiscal position. This inconsistency of objectives manifested itself in resorting to emergency measures and in some cases even creative accounting in order to show a sufficiently low deficit in 1997. Although emergency measures appeared in several countries, which had to curb high deficits, perhaps the three countries outlined below relied on them to greatest extent.

France

At the beginning of the 1990s France's fiscal policy was an expansionary one, which, coupled with unfavorable economic conditions, has led to a general government deficit of 6% in 1993. The government proposed an expenditure-based consolidation strategy, but it has not been successful, as evidenced by the deficit of 5,5% of GDP in 1995. This is because long-term spending reduction measures such as the pension reform of 1994, were accompanied by various subsidies granted to specific sectors of the economy and new social security benefits. At the same time, indirect taxes were raised, but the effects of this step were offset by introduction of a tax scheme supporting small and medium sized businesses. Since the deficit remained excessive, the government resorted to emergency short-term measures to meet the Maastricht criteria. These included blocking appropriations, temporary freezing of wages, introducing a social security debt repayment levy and raising the corporate tax rate on larger firms. Finally, the government took on the pension obligations of France Telecom, in return for a one-time payment equal to 0,5% of GDP, which improved the budget balance in 1997. As a result, France managed to meet the reference value for the deficit. (Milesi-Ferretti, 2000).

Germany

Although Germany showed relatively low budget deficits at the beginning of the 1990s, the true picture of fiscal stance was obscured by several special funds and semi-governmental entities which provided off-budget unification support to East Germany. The government initiated a consolidation effort in 1993, but it turned out not to be very effective, due to conflicting objectives. The government did not want to lower social transfers, which would affect particularly the Eastern part of the country, but at the same time it sought to reduce tax burden on businesses, which had increased in previous years in order to finance the unification process. Furthermore, economic conditions were not conducive to achieving a reduction in the deficit. This had pushed policymakers to resort to emergency measures, such as spending restraints, in order to meet the Maastricht target in 1997.

Italy

At the beginning of the 1990s, the fiscal picture of Italy was one of the most troublesome in all of Europe, with a deficit close to 10% of GDP and public debt higher than the GDP. A tremendous consolidation effort appeared necessary and the Italian government began with a revenue-based retrenchment, as a result of which revenues increased from 41,7% of GDP in 1990 to 48,3% in 1993. However, these measures were mostly of a short-term nature and ended in 1994, following which revenues fell sharply. This is when decisive efforts were undertaken to lower expenditures, including a health care reform and a second pension reform, after the previous attempt did not succeed in significantly lowering spending. Expenditure decreased by 2,5 percentage points of GDP, but as the initial deficit had been very high, by 1996 it had only been reduced to 7,1% of GDP – more than double the Maastricht reference value. Facing the need to achieve an improvement in the budget balance of 4 percentage points of GDP in one year, the government resorted to numerous emergency measures. Spending restraints were introduced on intergovernmental transfers, access to early retirement benefits postponed and indexation of high pensions suspended. Limits were introduced on health care expenses, particularly on

pharmaceuticals. On the revenue side, some of the tax deductions had been abolished and property, corporate, VAT taxes and social security contribution rates were all raised. The previously introduced extraordinary tax on firm assets had been extended. In 1997 a special one-year, progressive “Euro” tax had been introduced, with rates varying from 1,5% to 3,5%. Interestingly, the tax was partly reimbursed in 1999. Measures, which could be considered creative accounting, were also employed in Italy. For example court-ordered payments of pension outlays, which were made in 1997-2000, were retroactively imputed back to the years when the liabilities were incurred (1993-1995) leaving the deficit in 1997-2000 unchanged (Milesi-Ferretti,2000).

Fiscal consolidation in the 1990s - recapitulation

The table below shows the remarkable improvement in the budget balances of the 11 members of the EMU.

Table 1. Budget balances (in % of GDP) of EMU countries in the 1990s

	1993	1994	1995	1996	1997	1998
Austria	-4,2	-4,8	-5,1	-3,8	-1,7	-2,3
Belgium	-7,3	-5,0	-4,3	-3,8	-1,9	-0,9
Finland	-7,3	-5,7	-3,7	-3,2	-1,5	1,3
France	-6,0	-5,5	-5,5	-4,1	-3,0	-2,7
Germany	-3,1	-2,4	-3,3	-3,4	-2,7	-2,1
Greece	-13,8	-10,0	-10,2	-7,4	-4,0	-2,5
Ireland	-2,3	-1,7	-2,2	-0,2	0,7	2,1
Italy	-9,4	-9,1	-7,6	-7,1	-2,7	-2,8
Netherlands	-3,1	-3,6	-4,2	-1,8	-1,1	-0,7
Portugal	-6,1	-6,0	-4,6	-4,0	-2,6	-1,9
Spain	-6,7	-6,1	-7,0	-4,9	-3,2	-2,6

Source: IMF World Economic Outlook, 2001

The Maastricht Treaty turned out to be a very effective impulse leading to successful reversal of the 25-year deterioration in the public finances of EU countries. The deficit of the euro area fell by 3,5 percentage points of GDP between 1993 and 1997 to reach a level below the 3% of GDP threshold. Was this a sufficient adjustment? It may appear so considering that all countries except for Greece, attained a deficit below 3% of GDP in 1997. This means that EMU countries consolidated their budgets sufficiently to enter the EMU. Nevertheless, the results do not reveal the whole information on how they were achieved. Four different methods were possible. First, increasing revenues by increasing taxes (direct or indirect). Second, increasing revenues by liberalizing fiscal policy, i.e. reducing both personal income tax and corporate income tax and thus increasing revenues by entrepreneurship growth. Third, by reducing expenditures. Another method could contain a mixed approach with reducing taxes and cutting expenditures. The latter three methods were effective and resulted in sustainable solving of the problem, while first of them proved a temporary measure.

As far as the level of public debt is concerned, only few countries managed to achieve the required value, however, the Commission treated this criterion more flexibly due to the possibility of “approaching the reference level at satisfactory pace”, and qualified all countries fulfilling the remaining criteria. Table 2. presents the levels of public debt in 1997 (which was the reference year for fiscal criteria) in countries qualified for joining the EMU.

Table 2. The level of public debt in EMU countries in 1997

Country	Public debt (in % of GDP)
Luxembourg	6,7
Finland	55,8
France	58,0
Germany	61,3
Portugal	62,0
Austria	66,1
Ireland	66,3
Spain	68,8
Netherlands	72,1
Italy	121,6
Belgium	122,2

Source: L. Oręziak, *Euro: nowy pieniądz*, Wydawnictwo Naukowe PWN, Warszawa 1999, pg. 44

However, it is important to note that after EMU candidates meet the entrance criteria and join the Union, they need to continue to maintain fiscal discipline. In fact, they are bound by even stricter rules of the Stability and Growth Pact (SGP). The Pact was adopted by the European Council in 1997 as a means of ensuring budgetary discipline inside of the EMU. It includes measures to strengthen surveillance of budgetary positions as well as detailed regulations on the excessive deficit procedure of the Maastricht Treaty. Moreover, as far as the numerical target for the deficit is concerned, the SGP constitutes a very important interpretation of the Maastricht reference

criterion. The Pact states that Member States should achieve a medium-term budget position “close to balance or in surplus.” This is crucially important, because it means that the 3% of GDP limit is not a target, but an absolute ceiling, which may not be violated, except for exceptional situations. The SGP therefore imposes the following fiscal strategy on Member States: their budgets should be close to balance or in surplus when their economies grow at the trend rate. This would ensure, that the deficit does not breach the 3% of GDP level during normal cyclical downturns.

However, there seems to be one flaw in this design. All countries are generally permitted to have a budget deficit of up to 3%. Due to this such level of deficit may also be maintained during the economic upturns. However, when recession comes there is no room for movement, as the deficit is already close to the set ceiling. Due to this there is a question whether SGP should not be reshaped in such a way that it imposes more balanced budget, and only during economic slowdown the government would be permitted to raise the deficit slightly. This would especially be useful when the aim of constant reduction of public debt is concerned, as its decrease over a year’s period can only be achieved if it is paid back at a pace exceeding the average interest rate of the public debt. Therefore, in the situation when the current interest rate is lower than the average interest rate of the debt, it is profitable to increase deficit in order to pay back more debt, as this lowers the debt’s servicing costs. It thus appears, that what really matters for fiscal stabilization is the primary budget situation, excluding the debt servicing costs. Due to this it also seems sensible to treat the primary budget balance more stringently, while allowing some more room for deficit by which the public debt is being reduced. It is especially significant in the situation of countries with over 100% of GDP worth of public debt, in which reduction of public debt seems to be one of key economic goals in order to decrease payments in the future.

Aside from an economic downturn which could undermine the newly improved budgetary positions of EMU countries, another key issue is the quality of the consolidation strategies. For example, if an adjustment is attained through short-lived measures such as introduction of special temporary taxes or suspension of indexation of

public sector wages for one or two years, the budget position is likely to deteriorate after these measures are revoked. Therefore, it is important to look at the quality of the fiscal adjustment achieved in EMU countries.

1.4. Results of fiscal consolidation in EMU countries

The fiscal position of EMU countries in the years following their consolidation effort is a telling indicator of the quality of the fiscal adjustment. The fiscal imbalance of most euro area countries deteriorated between 1998 and 2002 and in some cases it is expected to deteriorate further by 2004. To some extent, this is due to negative cyclical developments. However, those countries which have consolidated their budgets to reach a position close to balance or in surplus in the late 1990s, shall have no problem maintaining their deficit within the 3% of GDP limit, even during an economic downturn.

Let us examine the fiscal situation in EMU countries, divided into the same three groups as above – according to their consolidation strategies.

Table 3. Post-consolidation budget balances (in % of GDP) of countries which pursued expenditure-based retrenchment strategies

	1998	1999	2000	2001	2002	2003	2004
Austria	-2,4	-2,0	-1,5	0,1	-0,6	-1,1	-0,4
Finland	1,3	2,3	6,7	5,1	4,7	3,3	3,0
Ireland	2,1	2,0	2,4	1,2	-0,3	-0,6	-0,9
Netherlands	-0,8	0,5	1,3	0,2	-1,1	-1,6	-2,4
Spain	-2,5	-1,1	-0,4	0,0	-0,1	-0,4	-0,1

Source: European Commission (2000, 2001, 2002, 2003)

Note: excluding UMTS revenues

As the above table shows, the improvement of fiscal positions in this group of countries appears to be quite permanent. In 2001 none of the countries from the group recorded a public finance deficit. In the following years their balances have deteriorated somewhat

due to the economic downturn, however, none of them has, or is expected to breach the 3% of GDP reference value for the deficit.

Table 4. Post-consolidation budget balances (in % of GDP) of countries which pursued revenue-based retrenchment strategies

	1998	1999	2000	2001	2002	2003	2004
Belgium	-1,1	-0,9	0,0	0,2	0,1	-0,2	-0,1
Greece	-2,5	-1,8	-0,8	-0,4	-1,2	-1,1	-1,0
Portugal	-2,1	-2,0	-1,7	-4,2	-2,7	-3,5	-3,2

Source: European Commission (2000, 2001, 2002, 2003), OECD Economic Outlook (for Greece in 1998-2000 period) Note: excluding UMTS revenues

The fiscal situation in this group of countries is diverse. Belgium and Greece continued to reduce their deficits following the pre-EMU consolidation period and are expected to maintain low deficits until 2004. Meanwhile, Portugal's fiscal balance slipped considerably in 2001. Although the deficit was initially forecasted to be under 3% in that year, it actually turned out above 4%. Portugal quickly took measures, partly of one-off nature, to reduce it in the following year, but according to European Commission forecasts, the situation was not fixed permanently and further problems are expected in 2003 and 2004. It is worth pointing out, that while all of these countries relied mainly on raising revenues to lower their deficit in the 1990s, their behavior on the expenditure side differed. Belgium supported its consolidation effort by a moderate cut in spending. Greece allowed its expenditure to rise, but only by a modest 2 percentage points between 1989 and 1999. Meanwhile, Portugal's public spending grew by well over 5 percentage points between 1991 and 1998. This could help explain why the consolidation effort of that country proved to be insufficient to permanently keep the deficit under 3% of GDP.

The present fiscal picture of this group of countries is the most troubling. All three countries are expected to breach the Maastricht deficit criterion at some point in the 2002-2004 period. This casts a doubt over the quality of their adjustment effort.

Table 5. Post-consolidation budget balances (in % of GDP) of countries which pursued mixed retrenchment strategies, including one-off measures and creative accounting

	1998	1999	2000	2001	2002	2003	2004
France	-2,7	-1,8	-1,4	-1,5	-3,1	-3,7	-3,5
Germany	-1,8	-1,1	-1,0	-2,7	-3,6	-3,4	-2,9
Italy	-2,8	-1,9	-1,5	-2,6	-2,3	-2,3	-3,1

Source: European Commission (2000, 2001, 2002, 2003)

Note: excluding UMTS revenues

2. Fiscal position and its middle-term perspectives in candidate countries

Having described the evolution of fiscal stance of current EMU Member States in the period of adjustment to the Maastricht fiscal criteria, as well as after the accession to the Eurozone, we should analyze the current fiscal position of candidate countries in order to conclude on the perspectives of them fulfilling the criteria in the next few years. It is important to identify the main problems, as well as evaluate the consolidation programs which governments of these countries are going to implement.

2.1. Current fiscal position in candidate countries

The budgetary situation in the accession countries shows significant differences. Deficit ratios to GDP vary between a balanced budget (Estonia) and a considerable deficit (Hungary, the Czech Republic). But still some general observations can be made and similarities found. This is particularly true for the group of four Central European countries – Czech Republic, Hungary, Poland and Slovakia, which had the highest deficits in 2001. The budgets of these countries are characterized by a high proportion of so-called mandatory expenditure, for example on pensions and social benefits, which means that they are inflexible and difficult to reform. As a result, efforts to reduce expenditure in those countries were not sufficient to attain low deficits. Together with country-specific problems such as costs of restructuring of the banking sector (most notably in Slovakia and Czech Republic), a pronounced economic slowdown (Poland) and political pressures to increase spending (Hungary), this has led to high deficits in

those countries in 2001. Slovenia has also had to deal with the problem of high level of fixed spending in the budget, but its overall fiscal stance had been tighter than that of the four Central European accession countries. Moreover, the phase of buoyant growth in recent years was not used for reducing deficit to GDP ratios in the Central Europe. In fact, deficits in most Central European countries were unchanged or on the rise in the period implying that the positive cyclical impact was offset or even overcompensated by a worsening of structural balances. This contrasts with the developments in the Baltic countries. The Baltic countries faced a rapid increase in deficit ratios in 1999 attributable to the shock caused by the Russian crisis. Although the Russian crisis led to economic slowdown, fiscal positions were brought under control very quickly as growth re-gained momentum. Whereas the Central European countries followed obviously a pro-cyclical fiscal stance, this has not been the case for the Baltic countries, although the fiscal positions of Latvia and Lithuania could be facing pressures of planned tax and pension reforms, both causing deterioration of the budget balance in the short-term.

In sum, two types of policies, which explain the increase in budgetary deficits, were applied in these countries. First, additional cost appeared due to the second phase of budgetary reforms, which in medium term should bring some relaxation to the public finances. Second, these were pro-cyclical expenses, which are a doubtful remedy for the economic slowdown and problems with public finances.

On the other hand, current public debt levels in the candidate countries depend very much on initial levels. The countries which started with high debt levels (41,8% in Poland in 2002) are still heavily indebted. On the other hand, the countries with a low level at the beginning of transformation have kept a lower indebtedness (in Latvia, for example, it is only around 16%). In some countries, however, notably in the Czech Republic, debt ratios started to rise. Nevertheless, none of the countries in question is seriously threatened with surpassing the reference value of 60% of GDP.

Table 6. General government balances (in % of GDP) of accession countries in 1997-2001

	1997	1998	1999	2000	2001
Cyprus	-5,2				-3,0
Czech Republic	-2,7	-4,5	-3,2	-3,3	-5,5
Estonia	2,0	-0,4	-4,0	-0,4	0,2
Hungary	-6,8	-8,0	-5,3	-3,0	-4,1
Latvia	1,8	-0,7	-5,3	-2,7	-1,6
Lithuania	-1,1	-3,1	-5,6	-2,7	-1,9
Poland	-4,3	-2,3	-1,5	-1,8	-3,9
Slovakia	-5,7	-4,7	-6,4	-12,8	-5,6
Slovenia	-1,2	-2,3	-2,2	-3,2	-2,5

Source: European Commission Regular Reports (2002)

2.2. Fiscal costs of accession to the European Union

In all candidate countries accession to the European Union incurs certain costs which can have some influence on their fiscal position. A significant part of fiscal burden consists of costs of implementation of the *acquis communautaire* in the run-up to the EU membership. Such costs however will not disappear once the accession countries join EU. The applicants negotiated a bulk of transition periods which allow them to spread the necessary adjustments over longer periods. This means that the impact on budget will be felt longer. The Polish Ministry of Finance estimates that the transfers from the central government budget to the EU will amount to about 1,7 to 1,8% of GDP per year. Poland will be net recipient but many of the EU payments require contributions from the national budget. Actually, according to the estimates of the Ministry of Finance, the net transfers in the period 2004-2006 should be positive, provided that will be able to take advantage of the assigned structural funds.

Table 7. Transfer to Poland in the period 2004-2006 (in billion EUR)

	Inflows	Costs	Surplus
2004	2,59	1,75	0,84

2005	4,98	2,70	2,27
2006	6,80	2,89	3,91

Source: Ministry of Finance estimations.

Also some remarks are needed at this point. Resources for cofinancing the projects can be obtained not only from the national budget, but also from a public-private partnership, which actually lowers budgetary expenses in this respect. In the future there is a possibility of renationalisation of regional policy, which would than increase the costs of membership. If such decision is taken, direct transfers could be replaced by FDI, which is a more effective and less costly solution.

Moreover, some EU financial instruments require that a payment is made primarily from national sources and later, after obtaining approval from an eligible EU institution, is reimbursed to the country. Such a mechanism, characteristic of the Common Agricultural Policy, could pose an additional pressure on the central budget in the first years of the EU membership.

Table 7. Summary of fiscal effects of EU membership¹ (% of GDP)

	Czech Republic	Poland
Direct effects		
Contribution to EU budget	-1,25	-1,25
Structural Fund transfers ²	-1,5	-1,5
Cohesion Fund transfers	0,5	0,5
Reform of public administration ³	-1,5	-1,5
Phase-out of production subsidies	1,0	2,0
Realignment of customs duties ⁴	-0,5	-0,5
Tax harmonization	0	0,25
Infrastructure expenditures	-1,5	-1,5
Indirect effects		
Structural reforms	+	+
Tax competition	-	-
Tax revenue windfall	+	+
Decline in interest rates	+	+

¹ Annual effect on the fiscal balance over the medium term, following accession.

² National contribution. ³ Including legal approximation.

⁴ Including liberalization commitment under WTO.

Source: Kopits and Szekely (2002)

The above table summarizes the impact of fiscal costs of EU accession on national budgets in Czech Republic and Poland.

2.3. Perspectives of fulfillment of the Maastricht fiscal criteria

It is as yet too early for definite declarations regarding future euro adoption by the accession countries. However, all of these countries, with the single exception of the Czech Republic, intend to meet the Maastricht Treaty fiscal criteria by 2005 (European Commission, 2003). In cases of some of them, a considerable adjustment shall be required, but overall, their fiscal situation is better than that of current EMU members at the beginning of their consolidation process.

Table 8. General government balances in accession countries (% of GDP)

	2001 Turnout	PEP forecasts		
		2002	2004	2005
Cyprus	-3,0	-2,6	-0,6	-0,3
Czech Republic	-5,5	-6,4	-5,7	-5,5
Estonia	0,5	-0,2	0,0	0,0
Hungary	-4,2	-5,7	-3,0	-2,5
Latvia	-1,9	-1,8	-2,2	-2,0
Lithuania	-2,3	-1,9	-1,6	-1,5
Malta	-7,0	-5,2	-3,9	-3,1
Poland	-3,1	-4,1	-3,3	-2,2
Slovakia	-5,4	-7,8	-3,8	-2,0
Slovenia	-2,5	-1,8	-1,0	-0,8

Source: European Commission (2003)

None of the ten accession countries, except for Malta, has a public debt to GDP ratio exceeding 60%. Furthermore, the three Baltic states and Slovenia had a deficit below the Maastricht reference value already in 2002. The pre-accession program of Cyprus also forecast a deficit under 3% of GDP for 2002 (and its further reduction in the following year), although the European Commission expects the reference deficit level to be exceeded in 2003 and 2004. On the other hand, the four Central European accession countries – Czech Republic, Hungary, Poland and Slovakia, have let their fiscal positions deteriorate considerably in recent years. Three of those countries – Hungary, Poland and Slovakia – are aiming for a deficit reduction in the next few years. Their consolidation strategies are outlined in their Pre-accession Economic Programs (PEPs). It would thus be interesting to consider how these strategies compare to those employed by EU countries in the 1990s and how likely they are to succeed in attaining a lasting improvement in the budget balance.

Hungary

The budget deficit of Hungary was, next to that of Slovakia, the largest among the all accession countries in 2002. The deficit target in the 2002 PEP was 5,7% of GDP, but the turnout could well have been considerably higher. By 2005, the government of Hungary intends to reduce the deficit to 2,5% of GDP. The proposed consolidation strategy is entirely expenditure-based, as revenues are actually forecasted to decrease by around 2-3 percentage points of GDP between 2002 and 2005. Part of the spending reduction will come from lower interest payments. The PEP lists three possible other solutions to lower expenditure: improving efficiency of management of public funds, reduction of the rate of growth of government investments and reforming the system of subsidies to the corporate sector. At the same time, the government apparently intends to increase its spending on health care, education, public administration and public security, in particular by raising public wages.

The strategy presented in Hungary's PEP does not include any sweeping measures to significantly reduce public spending. Instead, it promises higher spending in some areas. Such formulation of the consolidation strategy casts a doubt over feasibility of attaining the target of a reduction in public expenditure equal to 6 percentage points of GDP. Combined with a pledge to cut several categories of taxes, the deficit target also appears to be rather ambitious.

Poland

According to Poland's PEP, the public finance deficit was 4,1%² of GDP in 2002, indicating that a relatively small adjustment was required to reduce it below 3%. The deficit appears to be particularly moderate when considering that Poland is in a much different macroeconomic situation, than other Central European accession countries. GDP growth was only 1,3% in 2002, the lowest out of all accession countries. This implies, that if the economy begins to recover in the coming years, as the government is

² According to Polish authorities' interpretation of ESA 95 accounting rules. This interpretation is still subject to consultation with Eurostat.

expecting it to, the budget balance shall improve automatically. However, the PEP does specify some measures on the expenditure side of the budget, facilitating a reduction of the deficit to 2,2%. Spending is set to decrease by 2,5 percentage points of GDP between 2002 and 2005. This includes such measures as consolidation of some of the public sector entities, such as funds and agencies, tightening eligibility for benefits from the former social security scheme, change in the formula for indexation of benefits.

If the economy does indeed recover and spending is restrained as the government proposes, Poland should be able to meet the reference value for the budget deficit. However, the example of some EMU countries shows that it may not be sufficient to lower the deficit to barely less than 3% of GDP when economic growth is buoyant, as this implies an excessive deficit during a recession.

Slovakia

As mentioned previously, Slovakia is also facing a high general government deficit, reaching almost 8% of GDP in 2002 (European Commission, 2003). Similarly as in the case of Hungary, the target deficit for 2005 is 2,6% of GDP. Slovakia also intends to pursue an expenditure-based consolidation strategy, with revenues expected to decrease in relation to GDP by 1,6 percentage points, almost exclusively due to lower social security contributions. In order to achieve the deficit target, spending will therefore have to be reduced by around 6 percentage points of GDP. Slovakia's PEP calls for numerous measures to help achieve this goal. They include balancing of the health care budget and rationalization of social benefits via improved control over these transfers and consolidation of the various institutions, which are paying out the benefits. Education is to be reformed through increasing the role of the private sector in its financing. Above all, Slovakia is pursuing a significant public finance management reform, including measures to improve control and auditing of public spending, implementation of program budgeting, new classification of the budget and establishment of the State Treasury, coordinating and supervising disbursement of public funds. The government of Slovakia is therefore pursuing several systemic measures to limit public spending.

Having examined the cases of three Central European accession countries looking to consolidate their budgets in order to meet the Maastricht criteria for EMU membership, the positive conclusion is that all three are planning to rely on spending reductions, rather than raising taxes, to achieve this goal. As evidence of consolidations in EU countries in the 1990s shows, such strategies are more likely to succeed. However, another important factor determining the success of fiscal consolidations is their size and persistence. Half-hearted measures, particularly those based on one-off measures, are likely to only cause a short-term contraction of demand and then be reversed. Considering these arguments, the fiscal consolidation plans of Hungary may be a cause for concern. The strategy calls for reduction of some spending, but at the same time for increases in other categories and sweeping tax cuts. This raises doubts whether a considerable adjustment will actually be attained.

The strategy outlined in the Polish PEP also does not fully satisfy the criteria of a successful fiscal consolidation. The strategy relies to some extent on the anticipated cyclical upturn to attain an improvement in the budget balance. Meanwhile, the presented forecast of public expenditure suggests that the adjustment on the expenditure side will occur more in the form of small steps, than an extensive overhaul. Although this may be sufficient to lower the deficit below 3% of GDP, the improvement may prove not to be lasting.

Out of the three consolidation programs presented above, that of Slovakia appears to be the closest to the model approach. It includes several systemic measures aimed at lowering expenditures. If these measures are bold enough, the consolidation strategy could well attain the objective of a lasting reduction in the deficit together with all its positive consequences seen in those euro countries where such a strategy had succeeded.

3. Other issues related to fiscal stability in the future

Both in countries already in the Eurozone and in future Member States, fiscal position will also depend on other factors than the necessity to comply with the Maastricht

fiscal criteria. Some of them are tightly connected with the EMU, like Stability and Growth Pact, while others, such as general aging of the society, have more general character. These issues will be discussed in this part.

3.1. Influence of demographic situation on fiscal position in discussed countries

Evolution of the demographic situation has been slightly different in the current Eurozone states and in accession countries. Due to this, hitherto burdens on public finances connected with ageing population were not very similar. However, in the nearest future, both of these groups of countries will have to face the challenge of increasing number of elderly people.

There are several areas in which growing outlays will be necessary. Prospective boosts in public health expenditure, which has already increased by up to percentage points in the period 1970-1998 are attributed to increasing life expectancy over the next 50 years of approximately 5 years and technological advances in health-care systems. Corresponding low mortality rates, which were steadily decreasing by 4-5% annually since 1960, accompanied by low fertility contribute to a constant growth of the elderly, whose share of around 15% in 1999 increased by 35-55%, depending on the country, since 1960. This fact is also expressed by the growing old-age dependency ratio, defined as the number of people over 65 years of age divided by those 20-64 years of age. The figure in 2000 averaged in EU-15 countries 0,27, but is said to increase to 0,53 until 2050. Public pension systems will be charged on this account, as the expenditures on pensions are forecasted to increase by 2,9 percentage points of GDP until 2050 in the Eurozone, amounting to 13,3% of GDP.³

In the current EMU members, the ageing population will post a difficult challenge in the coming years, as hitherto pension systems are threatened with unsustainability due lack of reforms in most countries in question. Taking into account the baseline scenario, in which no reform is implemented, IMF predicts, that growing outlays on pensions, together with public debt interest payments, the deficit of the French budget

³ The presented forecasts were prepared by OECD in 2002.

will be on constant rise up to 12% of GDP in 2050. This example shows the seriousness of situation and necessity of changing the rules of pension system financing. Some countries, however, like the Netherlands are in more favorable situation as they have a relatively better balanced population structure, lower public debt and already advanced private pension funds system.

The accession countries, similar to current EU members, are facing similar pressures for higher spending on pensions due to an ageing population. However, economic transformation puts a pension system under additional strain. Most of these countries, like Poland and the Czech Republic inherited mature pay-as-you-go schemes with rather generous benefits that were confronted with pressures on both the expenditure and the revenue side due to economic transition. In order to contain a serious escalation in the number of unemployed and to ease the social and political costs of restructuring state-owned enterprises many countries resorted to early retirement programs. At the same time, the contribution base shrank due to a decline in labour force participation, the rise in unemployment and the expansion of the shadow economy. Many countries, have since then introduced reforms and set up voluntary private pension funds. Additionally, Poland introduced mandatory pension system modelled on Latin American funds.

Although in comparison to EU standards Central and Eastern Countries' societies are fairly young, yet there have already appeared some symptoms of adverse changes in the demographic structure. For example, in Poland in 2000 the public pension system experienced a deficit of 2,3% of GDP and is predicted to maintain similar level within the next 50 years. On the other hand, the Czech public system experienced a deficit of 0,9% of GDP in 2000, but this value is believed to rise to the deficit of 8,7% of GDP in 2050. The new pension systems, approved in recent years, are thought to be flexible enough to adjust to growing demographic demands but ageing population still poses significant challenges not only for the public pillar, but also for other policies, specifically health care systems and education.

3.2. Evaluation of the proceedings of Stability and Growth Pact

When the start of stage III of EMU was approaching, some Member States (mainly Germany) felt that those provisions of the Treaty are not sufficient to ensure sound public finance that would not endanger the stability of the common currency. After a long debate a consensus was reached at 1997 Amsterdam European Council which on 17 June 1997 adopted a *Resolution on the Stability and Growth Pact*. Based on that political agreement the Council adopted two regulations, which together with the above *Resolution* form the Stability and Growth Pact. The Pact took effect in full only after the euro was launched in January 1999. The three documents consisting the Pact correspond to its three main functions:

- preventive function - Council Regulation (EC) 1466/97 reinforcing the multilateral surveillance of budget positions and the co-ordination of economic policies;
- dissuasive function - Council Regulation (EC) 1467/97, accelerating and clarifying the implementation of the excessive deficit procedure;
- political commitment - contained in the Resolution of the Amsterdam European Council – that all parties involved in the implementation of the Pact (Commission, Member States, Council) will endeavor to implement the budget surveillance process in a full and timely manner according to the clearly defined responsibilities. The political commitment included in the Resolution should not be undervalued. Although it has no legal power, the budgetary process is of political nature and hence the political commitment is important.

The controversies about the SGP has surged lately when some Member States broke the reference value of budget deficit. The discussion escalated when the President of the Commission called the Pact “stupid”. But are such restrictions really necessary? The benefits of budgetary discipline are obvious:

- sound public finance help maintain low interest rates which foster investment and growth,
- together with monetary policy they stabilize inflation expectations,
- by reducing the interest burden, help to restructure public spending and reduce taxation,

- allow an increase in public saving in order to cope with adverse economic consequences of ageing population,
- create room for maneuver in case of adverse economic disturbances and asymmetric shocks.

Before the imposing of the fiscal discipline on countries wanting to participate in the EMU, the state budgets in the EU mostly run considerable deficits. In a monetary union there are even greater incentives to keep the public finance in the red. The cost-and-benefits calculus of running a deficit is evidently positive for the individual country, while for the union as a whole – negative. Consequently, some restrictions had to be applied in order to prevent EMU, from falling apart. Excessive deficit procedure and SGP were, as P. de Grauwe pointed it, “a vote of no-confidence” of Member States to one other, but the lack of trust was underpinned by the historical evidence, that many European countries failed to keep their houses in order.

Current fiscal developments in EMU countries support, not diminish the importance of SGP as it is sometimes considered by its critics. If, in the presence of SGP - its objectives, rules and sanctions - some countries did break the deficit limits, how it would be in case of absence of any rules?

Most of arguments against SGP concern the fact, that currently, in the situation of not yet fully consolidated budgets in the EMU countries, with most of them still running deficits and obliged to service a considerable public debt, during economic slowdown, which results in smaller budget revenues, the provisions of the Pact, with a 3% ceiling and financial penalties imposed for surpassing it, actually create additional burdens for the budgets, making them even harder to balance.

The European Commission indicates (Public Finance 2002) that euro area countries missed the opportunity to exploit favorable growth conditions of the years 1999 and 2000 and to consolidate their public finance. In the euro area as a whole cyclically-adjusted primary balance deteriorated in 2000 and 2001. Taking into account positive output gap during those years the conclusion is that the policy in the euro area was pro-

cyclical. Failure to consolidate public finances in times of rapid growth constitutes the main reason of inadequate room for automatic stabilizers and rapidly deteriorated budgetary stance in consecutive slowdown. The current troubles with SGP point out to a failure of enforcement mechanism based on peer pressure rather than of rule-based fiscal policy strategy. Moreover, fiscal policy could learn a lot from monetary policy, where rule-based strategies have been successfully applied for at least a decade.

The questions whether the quantitative rules provided by SGP are adequate for all Member States are, however, justified. The numbers of 3% and 60% concerning deficit and debt levels, as well as 2%, which determines the amount of growth fall justifying the breach of deficit limit, seem arbitrary. Nevertheless, this should not overshadow the usefulness of the whole fiscal policy framework proposed by the Treaty, and Stability and Growth Pact.

3.3. Fiscal centralization in the European Union

Government budgets are responsible for the functions of resource allocation, income redistribution and economic stabilization. As a consequence, much of the debate on the need of fiscal integration evolves around the question of whether these functions should be provided by national or by supranational authorities. In the past, most crucial decisions in the shaping of European integration were taken by political, rather than by economic motives. Although there are no reasons to believe that the decision making process will be substantially changed in the future, it is important to ascertain if the rationale for or against fiscal integration can be established in terms of economic efficiency. The researchers' attention has been recurrently drawn to this issue, in the European and in other contexts. As Robson (1998) refers, theoretical assessments of the appropriate level of responsibility over fiscal instruments essentially consist of analyzing the three budgetary functions on the light of three criteria: the existence of significant cross-border spillovers, of economies of scale and of political homogeneity.

In the EU, and in most other market economies, the allocation function of domestic budgets is mainly directed to the supply of public goods such as defense, health and

education, which are usually responsible for the majority of public expenses. Defense activities generate important externalities and economies of scale could be exploited by a provision at the EU level. On the contrary, in relation to health and education, not only are the spillovers less important, but there also appears to be a lack of homogeneity in preferences across member states, thus suggesting that responsibility over these issues should remain national.

The distribution function contributes to the spatial harmonization of incomes and to the abolishment of economic disparities. It is particularly important in regions prevented from using some macroeconomic instruments, as is the case of members of a monetary union. In fact, the absence of redistribution mechanisms may submit economic blocs to social, political and economic tensions that may become unbearable if too extended in time. In purely theoretical terms, it is suggested that this function should be performed by the higher tiers of government, which in the case of the EU, would be the Community level. However, in the absence of a common budget, the transfers necessary to assure an efficient distribution function would have to be provided by the richer countries. Such a situation, if prolonged, is also unsustainable as it is not easily defensible upon those countries' public opinion and is therefore prone to political exploitation. As a result, the distribution function is implemented mainly in the context of the EU regional policy.

The existence of considerable externalities deriving from domestic fiscal policy actions is one of the most often cited arguments for the centralization of fiscal policies in a context of integration. Another justification relates to the benefits of sharing the risks of random symmetric shocks (Goodhart and Smith, 1993). In fact, if such disturbances occur, member states may lack the incentive to take the appropriate measures, as part of their effort will be reflected in their partners' economies, thus reducing the effectiveness of national fiscal procedures. In such circumstances a more adequate reaction would result from a centralized fiscal policy.

This analysis produces arguments that are mostly in favor of a centralization of fiscal policies in a context of economic integration. Moreover, such conclusion is reinforced in the particular case of monetary integration given that, in such context, the instruments available to provide economic adjustment and stabilization following specific disturbances are scarce and the externalities of domestic policy measures are increased. Nevertheless, fiscal centralization was not an option in EU. It has been considered that, even in cases of evident externalities, scale economies and political homogeneity, fiscal policy centralization would be a solution only if the alternative hypotheses of policy co-ordination or policy harmonization could not be envisaged (vide the subsidiary principle in the Maastricht Treaty). This was the case despite the fact that economic theory suggests that policy co-ordination or harmonization are valid strategies only when the monitoring by involved parties is possible. If this is not the case, non-compliance could be the rational option, thus making the decision to centralize the most appropriate one.

In spite of the many arguments for fiscal centralization, it is also possible to find in the economic literature a rationale for the decisions of EU authorities. This is the case, for instance, of the work developed by Alesina, Angeloni and Etro (2001) who model an integrated group of countries and conclude that there appears to be a bias towards centralization in small size unions, and vice versa. The authors uncover a trade off between the advantages of coordinating economic policies and the costs of lost autonomy, and deduce that such trade-off determines the nature and the dimension of unions. In the light of these conclusions, it is expected that an already large union such as the EU, which will be further enlarged in the near future, would tend to be less (rather than more) centralized, thus reducing to a minimum the number of policies whose responsibility are to be transferred to a supranational level.

3.4. Optimal policy mix in the EMU

A policy regime is defined by a specific combination of fiscal and monetary policy behavior. Since monetary and fiscal policy are closely connected, any positive or normative conclusion about one branch of policy depends on assumptions about the

behavior of the other branch. So, fiscal policy can be called “passive” or “Ricardian” if its primary aim is to preserve solvency. It is the case of all the economies trying to achieve Maastricht criteria. A “passive” fiscal policy has been observed during the period preceding the single currency among the member states of the EU. Similarly, this kind of a fiscal policy is being conducted in a majority of the candidate states, more or less depending of the extend of the independence of their central banks.

The after-EMU policy regime tends to strengthen the relations between an “active” monetary policy and a “passive” fiscal policy. It is an effect of an institutional framework within the Eurozone⁴. On one side, a single independent bank, the ECB, is in charge of conducting monetary policy with a strong mandate of preserving price stability, explicitly defined as an inflation rate below 2% over the medium term. On the other side, the Stability and Growth Pact constrains the behavior of the various independent national governments in conducting fiscal policy. In other words, the Pact calls for fiscal policy to be “passive” in member states.

Conclusions

The analysis of the fiscal developments in EMU countries brings up some very important conclusions for the process of eastward enlargement of the Eurozone. Certainly, the new member states will meet a much stricter environment than during the pre-accession period. The macroeconomic policy options compatible with the framework of new “member state with a derogation” could be severely limited, in particular if one country aims at a prompt adoption of the euro. A member state will be of course still free in its monetary and fiscal policy. However, the aspiration to adopt the common currency will push the national central bank to define price stability as its overriding goal, in order to meet the Treaty criteria on inflation and interest rate. Fiscal policy, under these constrains, could become unduly restrictive, in order to avoid an excessive deficit while still having to bear the burden of any adjustments necessary for

the catching-up process, countering external imbalances, external shocks or simply reversible capital movements.

It is then apparent that the most important period for any candidate country will start just after its accession but will not finish automatically after adoption of the euro. The attempts to comply with the EMU *acquis* can imply substantial changes in the institutional macroeconomic framework in majority of candidate countries. We can say that the budgetary policy will play a crucial role in this process. Fiscal adjustment will be the key instrument to contain internal and external imbalances given the freedom of capital flows, the aim of the independent monetary authorities towards price stability and the progressive reduction in the flexibility of exchange rate policy.

⁴ *ibidem*

Part B: Monetary policy

Massimiliano Marzo

Dipartimento di Scienze Economiche
Università di Bologna, Italy

**Inflation Targeting and Monetary Policy: Some Preliminary
considerations for Three Accession Countries**

1. Introduction

The recent developments in monetary economics jointly with the issue of Accession Countries to European Union, brings to discuss a very important issue, related with the role of monetary policy in both transition and advanced economies. We have seen a recent explosion of papers working on monetary policy: all of them aim to evaluate and discuss a specific aspect linked to monetary policy rule. In general, the focus of such rules is about an instrument rate where the short term nominal interest rate is set as to react to other variables, typically assumed to be the inflation rate and the level of output (or output gap). The example of such simple feedback rule is the famous Taylor rule. All the recent research had the scope of examining the performance of such simple instrument rules to discuss whether such rule are a good representation of central bank behavior.

We can briefly summarize the results from such research by focusing on three distinct aspects:

- 1) it is better to respond to the determinant of the target variables rather than to target themselves. Under this view, it appears to be good to target both inflation and output, since output is the determinant of the inflation rate).
- 2) it is absolutely desirable to have history dependence in such targeting rule, because such approach will help to affect the expectation formations of the private sector.
- 3) Taylor principle and determinacy: in order to get a determinacy equilibrium we need that the coefficient on inflation targeting is bigger than one.

A crucial question is to understand under which conditions we can say that Taylor rules are robust. And what should be the policy rule followed by a central bank. The first answer to this question is very simple: if the Taylor rule is the rule we are looking for, then the central bank should mechanically follow it, by targeting inflation and output in a fashionable way.

Therefore, a full commitment to an instrument rule is not fully desirable. In some sense, some deviations from the simple Taylor principle is desirable, but at the current state of the art we do not have any prescriptions about the type of rules that should be

followed when the instrument are appropriate. Thus flexibility in implementing such rules is good, but how much flexibility we need?

Moreover, central banks have elaborated a complex set of data collection that if implemented can help to result in an appropriate forecasting horizon. The question we need to ask is whether such operation conduct has been fruitful especially for the Accession countries. Moreover, we need also to ask what has to be done in order to improve the ability of the central bank of transition economies to improve their performance in the monetary policy conduct.

The present paper is articulated as follows: in the next section I will discuss general features of the monetary policy targeting in accession countries. In the following section I will examine the specific experience of Czech Republic, Poland and Hungary, respectively. In a separate section are collected some considerations about the technicalities of the infaltio ntargeting regime and the possible ways of reform. A final section concludes.

2. Monetary Policy in Accession Countries

The recent assessment about the entry into the Euro area by Accession countries poses new challenges in the conduct of monetary policy for the European Central Bank. In particular, the newcomers will have to experience a two-year transition period where their exchange rate is fixed against the Euro. The role of the exchange rate combined with monetary policy appears to be crucial for such countries which have experienced a wide spectrum of exchange rate regime and monetary policy regime since the complete liberalization phase, ranging from the currency board to managed float.

The E-zone accession countries include: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia. The monetary history of all these countries is characterized by a wide spectrum of exchange rate regime constantly evolving over time, according to the need to balance exchange rate stability with the

control of the inflation rate. In the current situation, three countries adopted an inflation targeting regime: Czech Republic, Hungary and Poland. Two countries experienced a currency board regime: Estonia and Lithuania. Two countries adopted a managed floating regime: Slovak Republic and Slovenia. Finally, Latvia adopted a flexible exchange regime. In particular, as it will be discussed later, the adoption of inflation targeting regime for Czech Republic, Hungary and Poland has been motivated by the need to control both the inflation rate and the exchange rate after currency turbulence of the past years.

In this paper I am going to present a preliminary assessment of the inflation targeting policies for Czech Republic, Hungary and Poland, stressing also the possible way to reform the conduct of their respective central bank, by using also the results from the recent development in the literature on monetary policy rules elaborated by Svensson (2003) and Svensson and Woodford (2003).

A key element defining the change in monetary policy targeting regime in Eastern European Countries is represented by implementation of a Flexible Exchange Rate peg in place of a Fixed Exchange rate regime. Thus, as described by Mishkin (2000), the issue of inflation targeting has to be strictly analyzed together with the role of exchange rate targeting regime. This aspect is even more important if we consider the fact that immediately after the joining of EMU the Accession countries will experience a fixed exchange rate period against the Euro. This is a potentially dangerous period, because it might originate balance of payment crisis, if the international financial markets will realize that the economic fundamentals of such economies are not in line with what they are expected to be.

During the change in the exchange rate regime, a key fact has been represented by the change in the operating procedure adopted by a large part of accession countries, mainly characterized towards an inflation targeting procedure, in place of monetary aggregate targeting. The topics of the present paper regards an analysis of the efficacy of the inflation targeting procedure adopted by accession countries during the transition to European Monetary Union.

Let us start by saying that a monetary aggregate targeting regime is not an appealing monetary policy regime for transition economies. This is because of weak link existing between money supply and price level, because of the presence of a large set of administered prices. The question we need to answer in the following pages is if the inflation targeting procedures adopted by accession countries have been really effective in bringing down the inflation rate and favoring the convergence process.

The inflation targeting regime has several advantages over the monetary targeting or currency board solution. The first advantage, in fact, is that in order to have a key element for success for such policy initiative, we do not need a strong stable relationship between money and inflation. A second advantage is given by the accountability of such regime and the fact that it is clearly understood by the public and it is easily to be implemented. In fact, the setting up of a specific targeting rule enables a judgment on actions implemented by the Central Bank, based on objective information, not subjective. As discussed by Mishkin (2000) and Jonas and Mishkin (2003), we can identify six key elements of requirements necessary to make inflation targeting procedure fully successful. Such requirements are: (i) strong fiscal position; (ii) a well understood transmission mechanism between monetary policy and inflation; (iii) Central Bank independence; (iv) a well developed financial system; (v) ability of forecast the inflation rate; (vi) absence of any other nominal targets.

In a broad sense, the countries which seem to be closer to respect such requirements are Czech Republic, Poland and Hungary. The other countries have made substantial efforts indeveloping some of the key characteristics above mentioned, but they are at the beginning of the process. In particular, as it will become clear in the following pages, the biggest trouble is in the lack of the development of a full financial system, with short term, medium and long term interest rate actively managed and fully representative of the money market (or bond market) situation. The discussion about the characteristics of such countries different from the three leader countries form the subject of the following pages.

As I said before, the main pre-requisite for a successful implementation of inflation targeting is given by a sound fiscal policy, as discussed by Leeper (1991), Sims (1994) and Woodford (1996, 2003). On the other hand, the magnitude of such deficit is mainly temporary and also the market understood that the magnitude of such deficit is not so high to prevent the operating of a good inflation targeting policy. An important element in this context is represented by the fact that after joining EMU, accession countries will be forced to adopt the Stability and Growth Pact, which is going to push all of them to adopt a sound fiscal position.

Among the various pre-requisites for inflation targeting policies mentioned before, probably the more difficult to be fulfilled is given by the limited ability from Accession Countries Central Banks to have a good ability in forecasting the inflation rate. This is an important point, as discussed in fact by Svensson and Woodford (2003) and by Svensson (2003), especially if we think that an inflation targeting policy is obtained necessarily over a period of two-years length, making the intermediate inflation targets as forecasted inflation targets. Therefore, if the ability in targeting the quarterly inflation rate is scarce, there might also be strong consequences in fulfilling the long term target, too. The scarce ability in realizing a sound expected inflation targeting is in fact one of reasons of the large undershooting and overshooting phenomena of the inflation swings characterizing such countries.

3. The Czech Republic

The Czech Republic was the first country among the Accession Countries in implementing the inflation targeting policy, after the currency turbulence of 1996/1997. The fear of the inflation expectations raised immediately after the currency devaluation in 1996 pushed the Czech National Bank to adopt a strong inflation targeting procedure which was announced in December 1997. In the announcement made by CZ monetary authority it was made clear that the Central Bank chosen to target the inflation rate with a band of one percentage point - widened to 2 percentage

point in 2000 – rather than targeting a single pointwise value. The inflation to be targeted has been chosen to be computed on the basis of the CPI (Consumer Price Index) changes, excluding the contributions coming from changes in regulated prices. This number was further adapted to take into account changing in indirect taxes or subsidies. As it will become clear later, the type of inflation rate is crucial because this can generate a very imprecise estimation of the expected inflation rate and a missing the targets of the inflation rate target over several periods.

As it will be described later, the missing of the inflation rate has forced the CNB to introduce some exceptions that could justify the missed inflation targets. Among such exceptions, the CNB listed significant differences between actual and predicted exchange rate that do not reflect the development of domestic monetary policy and significant changes in the agricultural products. It is also worth to note that in December 1999, the Czech National Bank has adopted long term inflation targets for 2005. Undoubtedly, this had the effect of involving the public in the process of evaluating the performance of the policy effect. At the same time, given the strong impact on the level of aggregate output and employment, the CNB announced that the long term target, together with the speed of the disinflation process had to be considered jointly together with a Governmental decision. A final modification of the inflation targeting procedure occurred in 2002 when the Czech National Bank announced that it will target the headline of the CPI, in order to be more able to affect inflationary expectations.

It is now worthwhile to analyze some of the characteristics of the time series for a group of selected variables for Czech Republic. The CR is characterized by a relatively high degree of development of the domestic financial market, if compared with many other accession countries. This is also proven by the existence of several time series for the money market interest rates. In Table 1 I collected some statistics about selected variables.

Table 1. Statistics for selected variables of Czech Republic Sample 1994:1-2003:4, monthly obs.

	Mean	St. Dev.	Skewness	Kurtosis	J.B.
Interest Rates					
1 day	9.03	7.32	5.88	48.11	11450.2
14 days	9.16	5.48	2.31	10.11	577.82
1 month	9.11	5.018	1.47	4.41	131.66
2 months	9.05	4.72	1	1.89	35.43
3 months	9.018	4.52	0.7	0.54	4.98
6 months	8.94	4.27	0.4	-0.65	5.03
9 months	8.94	4.16	0.31	-0.85	5.13
1 Year	9	4.124	0.26	-0.87	4.88
1 month Treasury Bill Ret.	9.088	4.98	1.5	4.59	140.57
3 month Treasury Bill Ret.	9.011	4.49	0.66	0.39	8.99
Inflation Rate (CPI-based)	5.53	8.11	2.29	8.29	415.38
Growth Rate of Monetary Base	7.46	12.86	0.27	-1.05	5.92
Growth Rate of M1	7.59	8.15	-0.98	-0.12	16.1
Growth Rate of M2	9.45	5	1.05	0.01	18.52

The numbers reported in the above table refer to the sample 1994:1- 2003:4. All the data were collected on a monthly basis, by mixing up the information obtained from Datastream and from the Website of the Czech National Bank (CNB, henceforth). A positive aspect is given by the high number of short and long term interest rates: this is a sign of a good and well developed financial market. In Table 1 I reported the Mean, the Standard Deviation and Skewness and the Kurtosis index for each time series. I also reported a preliminary test of normality according to the procedure described by Jarque and Bera, indicated in the table with J.B. Recall for completeness that the Jarque and Bera test is distributed with a chi-square distribution with two degree of freedom: at 5% the value of the distribution is 5.99. All the interest rates reported in the Table 1 are money market interest rates. According to the numbers reported in Table 1, we find that the more volatile interest rate is given by the short term (one day) interest rate, while that more stable interest rate is given by the one year money market interest

rates. It also worth to note that shorter is the maturity, and higher is volatility and the skewness and the kurtosis. In fact the one day interest rate is far from being normal, given the high value assumed by the skewness and the kurtosis. This is also confirmed by the values of the Jarque and Bera test given by 11450.2, which is largely bigger than the critical value. The distribution of the short term interest rate is far from being normal. Things are different, for money market interest rate for longer horizon: in particular, from the three-months interest rate, as well as the six, nine months and one year interest rate we get low volatility and full normality. From Table 1 we also get that the Government bond treasury bill are also far from being normal. Also the inflation rate is a non-normal process (the J.B. test is 415.38), and the standard deviation is 8.11. Over the full sample we observe that on average the nominal interest rates are higher than the inflation rate. However, the inflation rate is very volatility if compared also the nominal interest rate. Finally, the growth rate of money aggregates over the sample has been quite high (surely higher than the requirement prescribed by European Central Bank): only monetary base growth rate shows to have a fully normal distribution.

To have an idea of the development of the variables over time, we can also have a look at Figure 1, where I represented the revolution pattern of the growth rate of M1 and M2 over time, since the beginning of the sample. It is interesting to note the very strong monetary restriction occurred since may 1997, when the growth rate of M1 became negative. We can also observe that the money growth rate in the following periods is continuously increasing. The strong contraction of money supply is due to the strong currency crises experienced by Czech Republic in 1997: the monetary contraction is the natural consequence of the initial of an inflation targeting procedure in the management of monetary policy. The presence of the currency crisis in the data can be also recovered in Figure 2, where reported the evolution pattern of two interest rates: the one day and the one month inters rates: from Figure 2 we observe the high peak observed by both interest rates, when in July 1997 the one-day interest rate reached 71 per cent and the one month peaked at 41 per cent, in order to contrast speculative attack on the currency.

If we represent the nominal rate after the implementation of the inflation targeting we observe, instead a steady pattern converging towards low values, starting from 1998, as reported in Figure 3, where I represented the one day interest rate, the 6-months and the one year interest rates: they tend to show very strong and interrelated co movement. The lines reported in Figure 3 start from January 1998, after the introduction of the inflation targeting procedure in Czech Republic and after the currency crisis. Like all the other Accession Countries, the adoption of a strict inflation targeting policy can be a source of several problems, especially on the side of volatility of output and interest rates. As a general judgment, we can say that the main problems experienced by such countries derive just from the fact that the Czech National Bank decided very strong adherence to the inflation targeting principle, without considering a more flexible approach as described by Svensson and Woodford (2003) and Svensson (2003).

In general, inflation targeting procedure can be evaluated under two aspects: in terms of the adherence of the actual inflation targets to the forecasted targets and in terms of their ability in keeping under control the level and especially the volatility of the inflation rate, output and the interest rate, in order to avoid the unpleasant consequence of instrument instability. From what concern the first aspect, I reported in Table 2 both the targets and the actual values for the inflation rate.

Table 2. Target and Actual inflation in Czech Republic

	Target	Actual
1996-1997	5.5-6.5	8.2
1999	4 - 5%	2
2000	3.5 - 5.5	3.85
2001	2 - 4 %	4.11
2002	2.75 - 4.75	0.54

From the above table we see that CNB understate very much the inflation rate during the past years. To understand the reason behind this, we can focus on two crucial aspects: (i) business cycle fluctuations; (ii) technical difficulties in targeting inflation, or

a proper measure of it, as discussed by Svensson and Woodford (2003) and Svensson (2003).

The first set of reason, due to business cycle fluctuations has to do with the difficult structural situation characterizing the Czech Republic during the transition period. This is strictly linked to the second aspect, i.e. the difficulty in adequately forecasting the inflation rate. This is mainly due to the different definition of the inflation: initially, the inflation was measured as the rate of change of domestic price level, net of controlled prices. Since the economy was subjected to a substantial amount of controlled price level, it is clear that the actual inflation rate is lower than the estimated one. In particular, when inflation targeting was introduced, the inflation rate was high. In the subsequent years, during the occurrence of a banking crisis, the economic activity experienced a long recession, making the inflation rate to decrease substantially. At the same time, the large capital inflows due to the large amount of foreign investment contributed to an appreciation of the exchange rate and to a worsen of the economic situation.

Although the strong reduction of the inflation rate can be considered as a clear success, we need to ask if this result was obtained efficiently or not, i.e. by avoiding to have an excessive volatility of the interest rate, usually referred as instrument instability, or of output. To understand this, I reported in Table 3, the mean and standard deviations (s.d. in the table) of some selected variables over two subsamples. The first subsample is preliminary to the introduction of the inflation targeting, while the second includes the full inflation targeting period. From the numbers reported in Table 3 we find that after the introduction of inflation targeting we observe a strong reduction of the inflation rate in the second sub sample where the inflation rate dropped from an average value of 8.35 reported in 1994-1997 to 3.5 per cent in 1998-2002, at the expenses of an increase of its volatility going from 6.9 per cent to 8.35 per cent. At the same time, all the sequence of interest rates (both short and long term) shows a marked reduction passing from a crawling peg regime to inflation targeting regime. This, however, did not properly

imply an increase of the volatility of the nominal rate over time. In fact, the short term interest rate do not show instrument instability phenomena. Only medium term interest rates (3, 6 months, one year and 3-months Treasury Bills) show the instrument instability phenomena.

Finally, the behavior of monetary aggregates show a contradictory phenomena: after the introduction of inflation targeting, M2 shows a strong reduction right after the introduction of the inflation targeting regime. However, this was partly counterbalanced by an increase of M1 in the last part of the sample: in this period, CNB tried to keep under control M2, releasing the control over M1, in order to limit the negative consequences of the adoption of inflation targeting on the level of output. For what concerns the speed of the disinflation process, Czech Republic, opted for a fast path. In fact, immediately after the introduction of the inflation targeting regime, the inflation moved from 8.2% on average computed over the sample 1996:1-1997:11, to 6.52% in 1998. This reduction of the inflation rate continued also in the following years: in 1999 the inflation dropped further until 2%. Since then the inflation remained well below the values assumed in the period 1996/1997. From one side, the strong reduction of the inflation rate can be viewed as a clear success of CNP. On the other hand, the strong reduction of the inflation rate coupled to the difficulties experienced on the demand's side posited a large pressure on the Czech National Bank from the political authority's side. In fact, although the independence of Czech National Bank is guaranteed by the Constitution, in 2002 the Act of the Constitution of Central Bank was amended by including the qualifications that the goal of maintaining price stability should be accompanied to support Government policies aiming to lead to a sustainable growth. In a broad sense, this amendment can be interpreted as a slight reduction of the degree of independence of the Czech Central Bank.

Table 3. Statistics for selected variables of Czech Republic for two distinct sub-samples, monthly obs

		1994:1 - 1997:11	1998:1 - 2003:04
Growth Rate of M1	<i>mean</i>	4.91	9.28
	<i>s.d.</i>	7.69	7.9
Growth Rate of M2	<i>mean</i>	13.46	7.27
	<i>s.d.</i>	5.94	2.55

Interest Rates			
1 day	<i>mean</i>	12.32	6.56
	<i>s.d.</i>	9.45	3.66
14 days	<i>mean</i>	12.4	6.73
	<i>s.d.</i>	5.65	3.89
1 month	<i>mean</i>	12.15	6.75
	<i>s.d.</i>	4.56	3.94
3 months	<i>mean</i>	11.9	6.77
	<i>s.d.</i>	3.27	3.97
6 months	<i>mean</i>	11.71	6.78
	<i>s.d.</i>	2.61	3.95
1 Year	<i>mean</i>	11.73	6.86
	<i>s.d.</i>	2.14	3.9
1 month Treasury Bill Ret.	<i>mean</i>	12.15	6.7
	<i>s.d.</i>	4.55	3.84
3 month Treasury Bill Ret.	<i>mean</i>	11.88	6.77
	<i>s.d.</i>	3.19	3.97
Inflation Rate	<i>mean</i>	8.35	3.45
	<i>s.d.</i>	6.9	8.35

In fact, the too fast disinflation process created several tensions in the Czech Republic: the undershooting of the inflation rate caused economic growth to become negative. After a change in the government occurred in mid 1998, when the President of CNP became Prime Minister, and after an electoral campaign where the party formerly leading the country lost the elections, the Central Bank was considered responsible for the large economic downturn and implicitly for the electoral loss. This brought into question the degree of independence of the CNB, no longer sustainable.

After several struggles between the Government and the IMF and EU/EMU, which requires an independent central bank as a prerequisite to EU Accession, the CNB retained its independence, but not completely, as explained before with the introduction of the 2002 Act. To sum up, the speed of the disinflation process shows that a too fast reduction of the inflation rate can create the risk of tensions between the Government and the Central Bank, leading to a loss of independence of the Central Bank. It is always true, however, that the external constraint – personified by the IMF and EU Accession requirements – acts as a break with respect to the temptation expressed by the Government to affect central bank actions.

4. Poland

The introduction of an inflation targeting procedure began in Poland in 1998. Before that date, Poland was under a crawling peg regime and experienced a strong real currency appreciation and a progressive widening of the nominal exchange rate band up to 15%. The introduction of inflation targeting in Poland was accompanied by the insertion of some rules forcing the National Bank of Poland (NBP, henceforth) to adopt economic policy initiatives in support of the Governmental Action. The inflation rate to be targeted by the Polish Central Bank is represented by a specific range which was initially set to be 0.5%, but later was widened to 1.2%. One of the main troubles of the NBP in achieving a successful inflation targeting without too large undershooting and overshooting was represented by a lack of a clear set of exceptions that have to be taken into account if the target is not satisfied.

The inflation rate in Poland has been defined on the basis of a broad Consumer Price Index: the NBP stressed very much that fact that targeting a different measure of the price index will not lead to a correct measurement of the inflation, because it would necessarily exclude some components, like administered prices, that form an important basis for having a correct representation of the inflation rate.

In Table 5 I reported the value of some selective statistics for two crucial variables: the three-months money market interest rate and the inflation rate in Poland for three time horizon: the Full sample (1997:1 – 2002:12), the period preceding the introduction of the inflation targeting (1997:1 – 1998:7) and the last sample period covering the full inflation targeting period⁵ (1998:9-2002:12).

Table 4. Statistics for selected variables of Poland for two distinct sub-samples, monthly obs

		Mean	St. Dev.	Skew.	Kurt.	J.B.
All Sample 1997:1 - 2002:12	3 months int. rate	17.19	5.28	-0.21	-0.79	2.41
	Inflation Rate	6.64	7.47	0.73	2.22	21.03
1997:1 - 1998:12	3 months int. rate	22.51	2.44			
	Inflation Rate	9.12	8.65			
1999:1 - 2002:12	3 months int. rate	14.53	4.05	-0.44	-1.03	3.7
	Inflation Rate	5.48	6.42	0.135	-0.35	0.39

From the numbers reported in the Table 4, we realize that after the implementation of the inflation targeting we observe a strong reduction of the average inflation and

⁵ It is important to mention that the month where the announcement of inflation targeting (August 1998) was made has been excluded from the sample in order to avoid unpleasant distortionary elements.

nominal interest rates. It is also easy to note that the volatility of the inflation rate became slightly lower than before.

Another element which is worth to be stressed out pertains to the change in volatility of the nominal rate employed in the analysis: after the introduction of inflation targeting, the volatility of nominal interest rate has increased a lot, if compared with the previous sample period, moving from 2.44 per cent to 4.05 per cent. Evidently, this indicates that the introduction of inflation targeting in Poland caused instrument instability phenomena. In Poland, the decline of the inflation rate after the change in monetary regime was substantial. We can analyze the disinflation process by looking at the pattern described in Table 5, where I reported the target and the actual inflation over the years following the introduction of the inflation targeting regime. However, a more careful analysis of the disinflation path reveals that the reduction of the inflation rate in Poland was not so steady as it happened for Czech Republic. In fact, in 1999 the inflation rate increased passing from an average rate of 8% in 1998 to an average rate of 9.32% in 1999. Since then, the inflation rate started to decrease approaching a valued well below the long run target set out by the NBP.

Table 5. Target and Actual inflation in Poland

	Target	Actual
1999	6.4 – 7.8%	9.32%
2000	5.4 – 6.8%	8.31%
2001	6-8%	3.57%
2002	4-6%	0.72%

From Table 5, we have the elements to judge the efficacy of inflation targeting in Poland. According to Table 5, we see that during 1999 and 2000 NBP the actual inflation rate overshoot the targeted values, while in 2001 and 2002 there was a clear undershooting of the actual inflation rate. It looks that NBP was not in the situation of achieving its goals in terms of inflation targeting. As a partial explanation of this situation, we can say that during the highlighted sample period, there have been a set of

remarkable changes in the structure of industry and business cycle. The increase of the inflation rate in 1999 and 2000 was mainly determined by a fast economic growth in domestic demand accompanied by an increase in import prices. It has to be remarked also, that the scarce success of the inflation targeting regime has also very much to do with the ability of NBP to set a credible inflation target. In fact, the central Bank of many accession countries does not always possess a clear situation about the true state of the economy of a specific country, because also of troubles in assessing data.

The next question regards the costs of inflation targeting policy. In this case, I reported in Table 6 the output volatility here computed as the standard deviation of the Industrial Production Index, computed on a monthly basis. By comparing also the numbers reported in Table 5 about the volatility of inflation and nominal rates, we observe that moving to an inflation targeting regime for Poland has implied an increase in output volatility (the Standard Deviation of output moved from 6.46 in the sample 1997:1 - 1998:7 (preceding the inflation targeting rule) to 10.75% in the following period. Therefore, other than instrument instability, the policy inflation targeting lead the country also to experience an excessive targeting of the output.

Table 6. Output volatility in Poland

Period	Output Volatility
1997:1 - 2002:12	12.65
1997:1 - 1998:7	6.46
1998:9 - 2002:12	10.75

Finally, in Table 7, I reported the evolution of the mean and the standard deviation of growth rate of monetary aggregates over the various samples considered in the paper: Monetary Base (MB), M1, M2, M3.

Table 7. Statistics for growth rate of monetary aggregates, Poland

		Growth Rate of MB	Growth Rate of M1	Growth Rate of M2	Growth Rate of M3
1997:1 - 2002:12	<i>mean</i>	8.61	10.95	14.35	14.4
	<i>s.d.</i>	6.56	7.49	8.17	7.93
1997:1 - 1998:7	<i>mean</i>	10.44	12.78	22.76	22.5
	<i>s.d.</i>	2.35	1.57	1.64	1.59
1998:9 - 2002:12	<i>mean</i>	8.15	10.49	12.25	12.36
	<i>s.d.</i>	7.19	8.3	7.79	7.56

From the numbers reported in Table 7, we observe a substantial reduction of the growth rates of monetary aggregates in the sample period where the inflation targeting was implemented. This is a sign of a good control over monetary aggregates. Overall, the inflation targeting policy was not implemented without a cost. In fact, the strong reduction of the inflation rate accompanied by a downturn of the economy's growth rate Output Period Volatility 1997:1 - 2002:12 12.65; 1997:1 - 1998:7 6.46; 1998:9 - 2002:12 10.75 generated several tensions between central Bank and the Government: the former was blamed by the latter for keeping interest rates too high. Such tensions led to create a pressure towards the reduction of the degree of independence of the Poland Central Bank, trying to include among his goals also economic growth and employment. In Poland the tension between Central Bank and the Government were also originated because of the attempt of NBP in trying to force the Government to adopt a tighter fiscal policy. The risk of this was that Central Bank acted as an antagonist with respect to the Government in the implementation of policy initiatives: this induced a sort of retaliation with the attempt to reduce the degree of independence of Central Bank.

Even for Poland, we observed a common phenomena occurring in many other central banks of accession countries: the changeability of roles between central bankers and politicians: in 2001 the NBP president Leszek Balcerowicz was a former politician. A

key element to introduce goods stabilization plans is given by strong separation between the roles of politicians and central bankers, in order to avoid credibility crises.

5. Hungary

The introduction of the inflation targeting for Hungary occurred quite in late if compared to the Czech Republic and Poland cases. In fact, even Hungary started the transition by adopting a currency peg against a basket of currencies, with a fluctuation band of ± 0.5 , successively widened to ± 2.25 percent. The period 1995-1999 was characterized by strong capital flows and currency appreciation. This helped the National Bank of Hungary (NBH) to keep under control the inflation rate by using the exchange rate as a nominal anchor. This task was made easier by the presence of capital control over short terms capital flows. However when domestic factors created the condition for the inflation to raise again, in order to reduce the pressure on exchange rates, the Central Bank accepted to cut interest rates. The result was that the exchange rate started to depreciate, but inflation did not reduce at all, even because the growth rate was high, as well as domestic demand. During 2000-2001 the strong tendency towards the appreciation of the exchange rate was mitigated by sterilized intervention. When the cost of such interventions became too high, in May 2001 Central Bank decided to widen the fluctuation band of the exchange rate, but in October 2001 NBH decided to adopt flexible exchange rate by the introduction of the inflation targeting regime. However, this change of the monetary policy regime was not clearly announced and it remained confused. The formal statement of the change in policy regime occurred with the emanation of an act on the National Bank of Hungary defining its main task the goal of maintaining price stability. In August 2001 NBH officially announced the starting of the inflation targeting regime, as explained in the inflation quarterly report.

As Czech Republic, Hungary adopted a fluctuation band of ± 1 percent tolerances around the

announced disinflation path. Let us consider now some basic statistics for Hungary as reported in Table 8.

Table 8. Statistics for selected variables of Hungary for two distinct sub-samples, monthly obs

	Mean	St. Dev.	Skewness	Kurtosis	J.B.
Interest Rates					
<i>Short Term</i>	13.97	4.69	0.26	-1.28	6.04
<i>3 months</i>	13.27	4.37	0.3	-1.12	5.08
<i>6 months</i>	13.24	4.36	0.33	-1.16	5.67
<i>1 Year</i>	13.16	4.38	0.33	-1.22	6.14
<i>3 Years</i>	12.07	3.93	0.38	-1.37	7.75
<i>5 Years</i>	11.18	3.6	0.47	-1.28	7.94
Inflation Rate (CPI-based)	9.31	7.78	0.72	1.27	11.71
Growth Rate of M1	16.93	4.01	0.84	1.2	11.2
Growth Rate of M2	13.33	3.26	-0.61	-0.63	5.055
Growth Rate of M3	13.9	3.03	-0.64	-0.68	5.59

From the numbers in Table 8 we observe that the series of nominal interest rates share means in the same range. Overall, the data generating process of the interest rate time series does not seem to have a normal distribution. In fact, for the short term interest rate, the one, three, five, years interest rates the Jarque Bera test reject the hypothesis of normality at 5%.

The inflation rate is also characterized by high standard deviation and by high values for the Jarque Bera test. Among the growth rates of monetary aggregates, the growth rate of M1 is the only one which shows values high values for skewness and kurtosis, as well as for the Jarque Bera test. Let us look now how the central Bank in Hungary was able to keep under control the inflation rate, by achieving the targets announced. Recall that the policy of inflation targeting for Hungary has been launched only in mid 2001. When inflation targeting was set, the inflation rate was declining and the effects coming

from nominal exchange rate targeting were strong. In table 9 I represented the discrepancy between Actual and Targeted inflation rate.

Table 9. Target and Actual inflation targeting in Hungary

Year	Target	Actual
2001	6 - 8 per cent	6.63 per cent
2002	3.5 - 5.5 per cent	4.8 per cent

From Table 9 we observe that Hungary centered the inflation rate almost perfectly over the various sub-samples. Let us consider now in Table 10 the evolution of the variables in the two subsamples: one without inflation targeting and the other with inflation targeting

Table 10. Statistics for selected variables of Hungary for two distinct sub-samples, monthly obs

		1997:1 - 2001:07	2001:9 - 2003:04
Growth Rate of M1	<i>mean</i>	16.25	18.06
	<i>s.d.</i>	3.15	5.08
Growth Rate of M2	<i>mean</i>	13.1	13.76
	<i>s.d.</i>	3.88	1.33
Growth Rate of M3	<i>mean</i>	15.42	10.68
	<i>s.d.</i>	1.89	2.49
Interest Rates			
Short Term	<i>mean</i>	15.94	8.78
	<i>s.d.</i>	3.98	1.36
3 months	<i>mean</i>	15.08	8.5
	<i>s.d.</i>	3.71	1.47
6 months	<i>mean</i>	15.04	8.53
	<i>s.d.</i>	3.75	1.37
1 Year	<i>mean</i>	14.96	8.45
	<i>s.d.</i>	3.8	1.3
3 Years	<i>mean</i>	13.62	8.035
	<i>s.d.</i>	3.52	0.99
5 Years	<i>mean</i>	12.58	7.52
	<i>s.d.</i>	3.26	0.73
Inflation Rate	<i>mean</i>	11.01	5.28
	<i>s.d.</i>	7.78	1.36

As before, the dataset includes variables for Hungary running from 1997:1 until 2003:04, monthly observations. The sample period is divided up into two subsamples: the first from 1997:1 to 2001:07 corresponds to the period without the inflation targeting, while the second subsample going from 2001:9 until 2003:04 corresponds to the period where Central Bank of Hungary adopted the inflation targeting. I left out the period of August 2001 when was released the official announcement of inflation targeting period in Hungary.

From the numbers reported in Table 10 we have that after the introduction of inflation targeting policy the mean and variance of all the variables dropped considerably. In

particular, the extent of the reduction of the inflation rate was quite remarkable: the inflation rate in the second subsample was half of the inflation rate recorded in the first, without inflation targeting. The only exception to this is represented by M2 and M1: their mean increases from the first subsample, to the second subsample, as well as their volatility.

The sharp reduction of the inflation rate and the strong control over M3 – the monetary aggregate crucial for joining the European union – are an explicit signal of the fact that the implementation of the inflation targeting strategy sorted out good results in Hungary. It is certainly true that the sharp reduction of the inflation rate cannot be considered as the unique

results of the implementation of inflation targeting policy. It is worth to mention the important role of the nominal exchange rate appreciation in the disinflation process. We can also visualize these effects by observing the pattern of some variables reported in two pictures. In Figure 4 I represented the pattern of the Hungarian Interest rates over the sample

period. From this figure we observe two crucial facts: first, the interest rate show a constant, steady reduction over time. Secondly, all interest rates seem to be characterized by a common set of factors. This can be seen by the fact that we do not observe significant differences among the pattern of the interest rates.

In Figure 5 I represented the evolution of the inflation rate the short term interest rate and the three-months money market interest rate. Even from this picture we observe a common evolution between the inflation rate and the interest rate, sign of the close relation existing between the two, reinforced by the introduction of the inflation targeting regime. Overall, it seems that the Hungarian Central Bank has chosen a fast disinflation path bringing to the convergence towards the Euro zone. Apart from M3, monetary aggregates did not respond too sharply to the changes in interest rates and inflation rate. This is another sign of the fact that the burden of reducing the inflation rate did not go exclusively on monetary policy in a strict sense, but also other factors, like the exchange rate played a crucial role in the disinflation process.

The main goal of Hungarian authority in fact has been to use the exchange rate channel in order to make substantial progress the achievement of the inflation targets. The evidence also show that in Hungary the exchange rate effects have a much stronger effects than in any other country of the E-zone. For this reason, Hungary represent a unique situation if compared with other E-zone countries.

A positive and innovative aspect is given by the publication of National Bank of Hungary inflation projections every quarter for the following six quarters. These aspects are also accompanied by a fan chart. This exerts a very positive effect on the reputation of the Central Bank and opens up to a much cleared discussion about the efficacy of the policy actions implemented by Hungarian Central Bank for a judgment about the efficacy of its policy actions.

Moreover, differently from Czech National Bank, the NBH started to target the headline inflation right from the beginning, rather than focusing on the adjusted or underlying inflation. However, a negative point is that NBH did not specify the exception by which there might be conflicts between inflation targeting and exchange rate targeting. Despite some successes in inflation targeting policy, with respect to the degree of independence of the Hungarian central bank there is still very much to be done. In fact, NBH has a supervisory committee including delegates from political parties leading the country,. The reintroduction of this Committee (existing previously, then abolished and finally re-introduced) was voted by a Government's bill against the opinion of the top management of the National Bank of Hungary. Even in Hungary, we observe the same type of behavior as in other accession countries where the president of the central bank was a former politician.

Overall, the policy of inflation targeting adopted in Hungary tended to be still imperfect and it needs some further specifications for the future. In many respects, this lack of fine tuning reveals that for Hungary an important aspects given by the importance still given by Hungarian Central bank to exchange rate movements. Therefore, as it will become clearer later a full inflation argeting procedure needs to be corroborated by a set of institutional measures with the scope of einforcing the control

of the inflation target and reduce the risk of losing the control on the inflation rate on the exchange rate management.

The next step is to understand what this kind of policy will imply in terms of stability, what are the implications of this type of inflation for the accession countries?

6. Inflation Targeting: A Preliminary Assessment

The role of inflation targeting in accession countries raises several additional issues. In what follows I am going to concentrate on two specific questions: (i) should a transition economy concentrate more on targeting a pointwise value or a range of values for the inflation rate?

Secondly, what kind of initiatives should be implemented when the actual inflation differs from the targeted disinflation path? Behind these aspects, there are many other additional issues that I am not going to touch in this work. Just to mention one of them: the type of price level to be targeted, in forming the inflation rate. This issue is crucial for Eastern European Countries where still many prices are regulated. Probably, the best measure of the inflation rate to be targeted is the headline inflation rate, measured as the rate of change of the Consumer Price Index, instead of considering a measure of the inflation computed net of regulated prices. In fact, a price including also induces Central Bank to adopt a too tight monetary policy.

With respect to the issue concerning the point vs. target issue, we can start by saying that targeting a point can be seriously dangerous for the credibility of the central bank. In fact, all the troubles come when this point is not respected: this could generate several pressure on the central bank that could force the president to resign and to limit the degree of independence of the central bank.

A related problem has to do with the timing of the disinflation process. As discussed by Svensson (2003) the time horizon for the inflation forecasts targeting should be no

shorter than two years. In fact, it has estimated that the lags from monetary policy actions to inflation are in general estimated to be of 2 years. A too short horizon could imply several misses of the inflation target, together with the risk of having instrument instability, and excessive output fluctuations. Such type of risks are more pronounced if we consider a small open economy where exchange rate fluctuations can have a stronger impact on the domestic inflation rate, causing an excessive reduction of the inflation rate. The two-year target implies a more gradualist approach in the disinflation path, without creating excessive output fluctuations.

The next question is related to the fluctuation of inflation around its target. From the experience of Poland, Hungary and Czech Republic it appears that all central banks have treated the ceiling and the floor of the inflation targeting range quite differently. If the inflation rate is above the target, the central bank can induce a strong reaction of nominal rates to curb the inflation rate. On the other hand, the undershooting of inflation below its target can create an opportunistic behavior from the central bank in trying to lock in the inflation rate in a low level. If this is the strategy preferred by Central Bank, it must be evaluated also against the costs in terms of both credibility and output fluctuations.

The analysis of the influence of the exchange rate in the experience of transition economies should be carefully examined, given its strong influence on the pattern of monetary policy conduct. Of course, the effectiveness of the exchange rate channel has to do with the degree of openness of the economy under analysis. In particular, Czech Republic and Hungary are very open economies, because the share of exports plus imports amount to more than 100 per cent of GDP. The role of exchange rate in the case of accession countries appears to be crucially important for two additional reasons: (i) the fact that during the ERM2 stage the exchange rate will be fixed against the Euro; (ii) transition economies often borrow in foreign currency denominated bonds or loans. For all these reasons, it seems natural to have a monetary policy high concern towards exchange rate fluctuations, which in some cases can push central bank to focus excessively on short term horizon.

Potentially, this situation can lead to instrument instability and excessive volatility of the real exchange rate. In general, the fluctuations of the exchange rate depend very much in the type of shocks hitting the economy during the transition phase. In this context, the large part of transition economies have to deal with a convergence plan which help to reduce the currency risk premium, as a first effect. During this period, it is then frequent to observe a currency appreciation, as the result of an international portfolio reallocation towards transition economies, because of both FDI (Foreign Direct Investment) and capital flows due to privatization process.

Such situation can make the task of leading monetary policy even more difficult. Things go well if the currency appreciation turn out to be not excessively strong and the growth rate of output is not affected too much by this: in this case, central bank can keep under control the inflation rate. However, if currency appreciation is too fast, it becomes largely advisable to manage a slow reduction of the nominal interest rate, together with a combined set of sterilized intervention in order to keep the exchange rate under control and minimize the impact on the corporate sector. It should also be stressed out that a too sharp currency appreciation can generate high current account deficits which in the medium run might induce a currency depreciation, which should be strongly avoided in order to prevent a financial crisis induced by the deterioration of the balance sheets.

To sum up, in accession countries there might be the need to mix together the concern towards inflation rate and the exchange rate, by taking into serious account the risk of generating strong impact on the aggregate activity.

7. Targeting Rule: A General Approach

According to Svensson (2003), and Svensson and Woodford (2003), the concept of monetary policy rule should be intended as a simple "prescribed guide for monetary

policy conduct". Under this view, the definition of monetary policy rule should be broadened. Before make any progress on this subject, it is worth to mention some specific terminological aspect.

First of all "target variables" are the operational goals and they represent the variables which enter into a loss function. A *general targeting rule* is a specification of a monetary policy rule that specifies, the operational objectives (the target variables), the targets (the specific values for the target variables) and the loss function to be minimized.

A *specific targeting rule* is a definite operational condition for the target variables, or their forecast. The role of forecast targeting consists in considering as operational objective the forecast of a specific variable. This also implies that such variable should enter as argument into the loss function. The basic ingredient to perform this exercise are: a quadratic intertemporal loss function; a set of additive future uncertain variables. In this case, monetary policy makes conditional mean forecast of the future target variables, conditional to information available to central bank in a given, specific moment about the current and the future state of the economy.

The steps are as follows:

- (i) compute conditional forecasts of inflation and output gap, conditional on different paths of the central bank's instrument rates, by using the relevant information about the current and the future state of the economy;
- (ii) raise the instrument path if the inflation forecast is too high relative to the inflation rate at the relevant horizon;
- (iii) Update the problem if new significant information has arrived. Therefore, a commitment to a general forecasting targeting rule means a commitment to minimize a loss function over the forecasts of the target variables. The result from this optimization process is a decision function relating the operating instrument to the central bank's information set. The first advantage of this type of monetary policy rule is given by the

fact that central bank is forced to clearly specify the goals via a proper specification of the loss function. This allows to use a discretionary approach in the choice of the targets, but not with respect to the ultimate goals. This is a remarkable achievement. A further advantage is given by the flexibility of this approach: in fact central Bank can make herself ready to react to the unforecastable events without losing credibility, by using extra model information.

One possible problem deriving from this approach, could be related with the fact the objectives can still be left quite vague, without a clear specification. As a practical example, the weight on output gap stabilization is never specified by any inflation targeting central bank. Moreover, another important problem is related with the stabilization bias and lack of history of dependence derived from the consequences of the discretionary optimization under commitment to a general targeting rule. It is also clear that the discretion can be constrained by few sophisticated mechanism, like for example increasing transparency of the decision of the same sort described by the approach "commitment to continuity and predictability". As an example of a simple specific targeting rule we can quote the rule adopted by the *Sveriges Riksbank* so that the instrument (i.e. the short term interest rate) has to be set in such a way that the constant interest rate inflation forecast about two years ahead equals the inflation target". Analytically, this idea can be formulated as follows:

$$\pi_{t+3, t} = \pi^*$$

This type of commitment is more easily verifiable than a commitment to a general targeting rule. In fact, this type of rule induces a stronger accountability and depends on the dynamic tradeoff between the target variables.

To sum up, the variants of simple Taylor rules are only incomplete monetary policy rules, because they do not specify the conditions under which central bank should or should not deviate from the simple instrument rules. This problem causes serious problems to the credibility of the monetary policy rule. Since the deviations from the rule should be frequent, in general we need a rule which is flexible enough but at the same time clear under the conditions of departures from the pre-specified path.

Instead, general targeting rules are more complete because they specify entirely the set of deviations and they take judgment and extra model information. The robustness of such rules depends only from dynamic tradeoffs between the variables. Moreover, they are compatible with the usage of extra-model information, entering in the construction of the forecasts. Therefore, once the dynamic tradeoffs between the variables and the transmission mechanism are well known (say because of the estimation), as stated by Svensson (2003), a good monetary policy can be implemented as follows:

- (i) specify the objectives: the target variables (those variables entering the loss function), the targets, and the weights by which such targets enter into the loss function;
- (ii) optimize the loss function and obtain a specific targeting rule: if the loss function is specified over a set of forecasts, then the specific targeting rule turns out to be an operational condition for the forecasts of the target variables.
- (iii) conditional on the estimated transmission mechanism, for each value of the instrument path compute the forecasted paths for the target variables and choose the level of the instrument which makes the path of forecasted target variables closest to their target.
- (iv) Reports the procedure followed in (i)-(iii) in specific reports of the same sort of the Monetary Policy Statements of the Reserve Bank of New Zealand, or the Inflation Reports of the Bank of England or the Swedish *Riksbank*.

I do personally think that many of these steps were not undertaken by many of the Accession countries during their stages of adoption of the interest rate targeting rule. Some authors said that one the difficulties of the performance of such accession countries is related with their troubles in realizing a good forecast of the inflation rate. However, as discussed previously, this is not necessary, because what is really important is a well grounded procedure to tackle down the inflation rate as that described above. Moreover, another trouble is related with the lack of a clear set of strategies and a clear description of the conditions under which the targets are fulfilled or not.

A final, more foundational reason about the missing targets of the accession countries is because under a variety of shocks and turbulence, like that occurred in those countries during the past years, the monetary policy rules adopted by those countries can be thought as obtained from a discretionary optimization. We have seen that with a forward looking behavior, the minimization of a loss function does not deliver an efficient response to the shocks. This is because of the lack of history dependence. In fact, via history dependence the central bank can adjust the short run trade-off according to private sector expectations, according to the pattern of past shocks: this in fact ensures a better ability to determine the evolution of the economy that people was expecting. This is just the result of discretion: central bank does not care about the past, because the past does not act as a constraint for the future.

8. Concluding Remarks

In this contribution I examine the impact of inflation targeting in the macroeconomic performance of three Accession countries. The analysis is conducted by examining recent data sets and by comparing the results and the experience of these countries with the prescriptions coming from recent contributions in Monetary Theory. The introduction of inflation targeting in such countries fulfilled to goal of reducing the inflation rate.

However, the main conclusion is that: (i) in some cases (Czech Republic and Poland) there is a marked undershooting of the inflation rate with respect to the target; (ii) the cost of disinflation cast some troubles in the attempt to keep central bank independence. Some proposal to amend the actual monetary regime with additional ideas are made. The analysis needs to be extended by estimating a monetary policy reaction function of also the other accession countries that plan to join EMU.

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Figure 1: growth rates of M1, M2, CR



Figure 2: one day and one month rates, Czech Republic

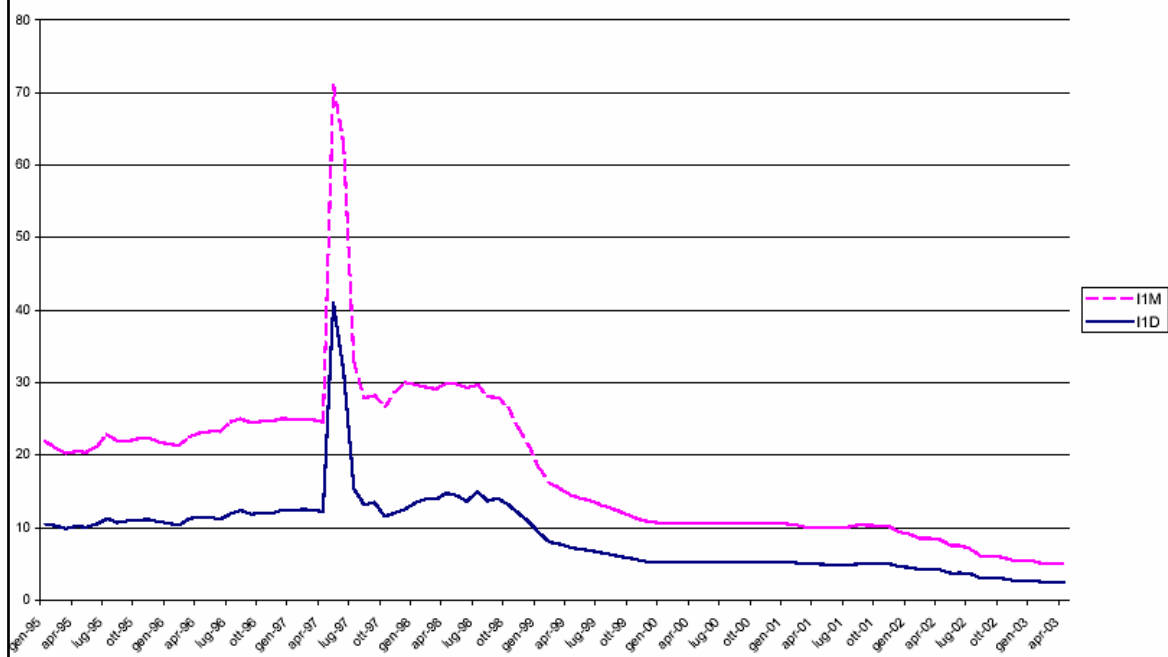


Figure 3: Interest Rates in Czech Republic since Jan. 1998

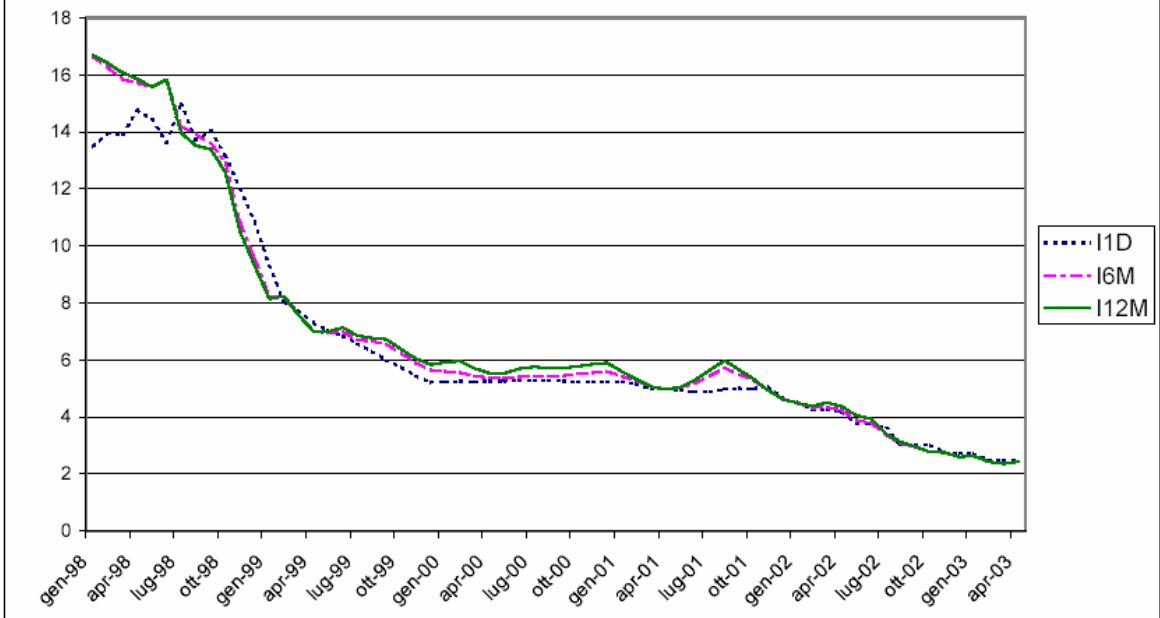


Figure 4: Hungary interes rates



Figure 5: Hungarian Inflation and Interest Rates

