EUROPEAN PARLIAMENT



Directorate-General for Research

WORKING PAPER

EMU and Enlargement: a review of policy issues

Economic Affairs Series ECON 117 EN This publication is available in EN, FR and DE

A summary will be available in all the Community languages.

A list of the most recent Economic Affairs Series publications can be found at the end of this document.

PUBLISHER:	European Parliament		
	L-2929 Luxembourg		

AUTHORS: Holger van Eden, Albert de Groot, Elisabeth Ledrut, Gerbert Romijn and Lucio Vinhas de Souza NEI Rotterdam

EDITOR: Ben Patterson Directorate General for Research Economic Affairs Division Tel.: (00352)4300-24114 Fax: (00352)4300-27721 E-Mail: GPATTERSON Internet: gpatterson@europarl.eu.int

The opinions expressed in this working paper are those of the authors and do not necessarily reflect the position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

Manuscript completed in December 1999.

EUROPEAN PARLIAMENT



Directorate-General for Research

WORKING PAPER

EMU and Enlargement a review of policy issues

Economic Affairs Series ECON 117 EN 12/99

Table of contents

LIST OF ABBREVIATIONS	V
EXECUTIVE SUMMARY	VII
INTRODUCTION	
SUMMARY AND MAIN CONCLUSIONS	VII
1. PHASING AND TIME-FRAME	1
1.1 THE ACCESSION PROCESS	1
1.1.1 Procedures	
1.1.2 Prospects	
1.2 INTEGRATION INTO EMU	
1.2.1 Procedures 1.2.2 Prospects	
2. PROSPECTS OF MEETING THE MAASTRICHT CRITERIA	
2.1 THE MAASTRICHT CONVERGENCE CRITERIA	
2.2 PROGRESS ON CONVERGENCE TO 'MAASTRICHT'	
2.3 PROSPECTS FOR MEETING MAASTRICHT	
3. THE IMPLICATIONS OF EU ECONOMIC AND FISCAL POLICY CO-ORDIN ACCESSION COUNTRIES	
3.1 PRESENT FRAMEWORK FOR EU POLICY CO-ORDINATION	
3.2 POLICY CO-ORDINATION IN THE PRE-ACCESSION PHASE	
4. EXCHANGE RATE LINKAGES WITH THE EURO AREA	
4.1 DEVELOPMENT OF ACCESSION COUNTRY EXCHANGE RATE LINKAGES	
4.1.1. "First Wave" Countries 4.1.2. "Second Wave" Countries	
4.1.2. Second wave Countries 4.1.3. Overall conclusions	
4.2 EXAMPLES OF FUTURE DEVELOPMENTS OF THE LINKAGE STRATEGIES	
4.2.1. Poland	
4.2.2. Lithuania	
4.2.3. Conclusions	
4.3 GETTING READY FOR THE EURO	
5. ECONOMIC AND INSTITUTIONAL CONSEQUENCES OF EMU MEMBERSH TIMING	
5.1 THE RATIONALE FOR JOINING THE ECONOMIC AND MONETARY UNION	
5.2 PROGRESSIVE AND SUSTAINABLE CONVERGENCE TOWARDS THE EURO AREA	
5.2.1. A First Best Scenario	
5.2.3. "Third Best" scenario	
5.3 ACCESSION COUNTRY STRATEGIES FOR FULL EMU MEMBERSHIP	
5.3.1. "First Wave" Countries	
5.3.2. "Second Wave " Countries	
5.4 CONCLUSION	61
6. THE EXTERNAL IMPACT OF AN EXPANDING EURO AREA	63
6.1 INTRODUCTION	
6.2 IMPACT ON THE ROLE OF THE EURO AS INTERNATIONAL CURRENCY	
6.2.1 Determinants of an international currency	
6.2.2 The impact of the EMU on the international monetary system6.2.3 The economic significance of having an international currency	
6.2.3 The economic significance of having an international currency6.3 THE IMPACT OF ENLARGEMENT ON THE INTERNATIONAL ROLE OF THE EURO	

6.4 IMP	LICATIONS OF THE EMU AND ITS FURTHER ENLARGEMENT FOR SELECTED GROUPS OF NON-	
PARTICIPA	NTS	71
	The non-accession Central and East European Countries (CEEC), Russia and the Ukraine	
	The CFA franc zone	
	The Mediterranean countries	
BIBLIOGR	АРНУ	75

Annexes

Annex A: Annex B:	Country Profiles The Portuguese Integration Experience	85 169
Annex C:	An Example of "Premature Monetary Integration": East Germany	171
Annex D:	EMU Criteria for the Candidate Countries	175

List of Abbreviations

4.17	
AP	Accession Partnership
AT	Amsterdam Treaty
ATS	Austrian Schilling
BCE	Business Central Europe
BDP	Portuguese Central Bank
BNB	Bulgarian National Bank
BOE	Bank of Estonia
BoLa	Bank of Latvia
BoLi	Bank of Lithuania
BOS	Bank of Slovenia
CB	Central Bank
CBA	Currency Board Arrangement
CBC	Central Bank of Cyprus
CBM	Central Bank of Malta
CBBH	Central Bank of Bosnia and Herzegovina
CEEC	Central and Eastern European Country
CFA	Communauté Financière Africaine
CGE	Computable General Equilibrium
CHF	Swiss Franc
CIS	Commonwealth of Independent States
CNB	Czech National Bank
CZK	Czech Koruna
DEM	Deutsch Mark
DIT	Direct Inflation Targeting
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECB	European Central Bank
ECSC	European Community of Steel and Coal
EEK	Estonian Kroon
EIB	European Investment Bank
EMU	Economic and Monetary Union
EP	European Parliament
ERM	Exchange Rate Mechanism
ESCB	European System of Central Banks
EU	European Union
EUR	Euro
FDI	Foreign Direct Investment
FED	Federal Reserve System
FRF	French Franc
GBP	Pound Sterling
GDP	Gross Domestic Product
GEMU	German Economic and Monetary Union
JENIO	Serman Leonomie and Wonetary Onion

HIPC	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
KM	Convertible Marka
LLR	Lender of Last Resort
MNB	National Bank of Hungary
MS	Member State
MT	Maastricht Treaty
NBH	National Bank of Hungary
NBP	National Bank of Poland
NBR	National Bank of Romania
NBS	National Bank of Slovakia
NPAA	National Programmes for the Adoption of the Acquis
OCA	Optimal Currency Area
PLZ	Polish Zloty
SDR	Special Drawing Rights
SKK	Slovak Koruna
TEU	Treaty of the European Union
USD	U.S. Dollar
VAR	Vector Auto Regression
	-

Executive Summary

Introduction

This study on "Economic and Monetary Union and Enlargement" was commissioned by the Directorate-General for Research of the European Parliament from the Netherlands Economic Institute (NEI) in May 1999. It reviews the main policy issues concerning the accession of ten Central and Eastern European Countries, and Cyprus and Malta, and the interaction with their parallel integration into Economic and Monetary Union (EMU).

Six key issues will be discussed:

- What is the likely phasing and timing of accession into the EU and into the Euro area?
- What are the prospects of the applicant countries meeting the Maastricht criteria for Euro area membership?
- What impact will present and future economic and fiscal policy co-ordination within the EU have on the enlargement process?
- What are the present exchange rate linkages to the Euro area and how will these evolve as first EU membership and then full integration into EMU approach?
- What will be the economic and institutional consequences for the accession countries and the EU itself if countries decide against or for early entry into the Euro area?
- What will be the impact of an expanding Euro area on the international monetary system and on neighbouring country groups remaining outside the EU?

This study provides, on the one hand, a briefing on facts, opinions and most likely outcomes. We present the views and analysis of the European Commission, of the accession countries and of independent commentators in the academic world. However, on certain issues our own analysis and judgement complements the variety of views presented.

It also provides a review of academic literature, policy documents of the EU and the accession countries and on newsmedia articles. Background information has been gathered through discussions with ECB and EC staff, for whose co-operation we express our gratitude. The Project Team was given academic guidance by Prof. Peter Bofinger of Würzburg University and Prof. Hans van Miltenburg of Erasmus University, Rotterdam.

Summary and Main Conclusions

Phasing and Time-frame

• The time-frame for EU accession as seen by the accession countries (2002-2003 for the 'first wave') seems to be more optimistic than that foreseen by most independent commentators. The European Commission remains rather vague as to when the first applicant countries will be ready for EU membership ("medium term", "within the

lifetime of this Commission"), although budgetary arrangements have been made. The accession of 'second wave' countries lies beyond 2004 (for some more than a decade away).

- The actual implementation of the Acquis, more than its adoption into domestic legislation, will form the real challenge for many of the accession countries. A number of stumbling blocs are still present for certain countries in areas of the Acquis pertinent to EMU: full capital account liberalisation, full independence of the Central Bank, no access to privileged finance. The Capital Movement and EMU chapters in the negotiation process are expected, however, to be all relatively easily resolved, given the eagerness of accession countries not only to joint the EU, but also to prepare for joining the Euro area.
- The present distinction between 'first wave' and 'second wave' countries will become obsolete as countries vary in successfully meeting the Copenhagen criteria, the criteria for EU Membership. The next IGC in Helsinki will most probably confirm the Commission's proposal to start substantive negotiations with all accession countries. Latvia, in particular, is expected to the catch up with the first wave, while the Czech Republic and Poland seem to be losing some of their initial momentum.
- The main stumbling blocks to early accession to the EU will be, according to most independent commentators, the unfinished transition process in most accession countries and the large discrepancies in income and productivity levels. The latter might induce large migratory flows or the need for vastly expanded regional subsidy flows. On the EU side the reform of the CAP is the most complex and financially important issue to be resolved before accession can take place. The internal decision-making structure of Commission and Council also needs to be addressed.
- Both the European Commission and most of the accession countries seem convinced that the entry into the Euro area currency union will be a phased process, including a period of (at least) two years as EU member but still outside the Euro area. The initial enthusiasm of the accession countries for very early adoption of the Euro (at entry to the EU, or even earlier) seems to be waning under the influence of advice to the contrary from international institutions and the academic world.
- For the 'first wave' countries the desired time-frame for membership of the Euro area is still somewhat optimistic. Although exchange rate linkages to the area can stabilise inflationary expectations and improve trade and investment flows, most economists suggest that the ongoing transition and productivity catch up in these countries will make the Maastricht criteria a too restrictive set of conditions for the accession countries.
- The exact monetary policy regime for the accession countries once they enter the EU, but are not yet in the Euro area still remains somewhat unclear. This phase will, on the basis of the Maastricht Treaty, and barring any political override, include in any case a minimum period of two years in the so-called Exchange Rate Mechanism 2 (ERM2). Most accession countries seem to prefer immediate entry into ERM2 at accession into the EU and to stay in this framework for as short a time as possible.

Prospects of meeting the Maastricht criteria

- The accession countries are actually performing quite well on several of the Maastricht criteria: inflation, fiscal parameters, in some cases also with respect to exchange rate stability.Interest rates are, however, still high for most of them, reflecting high real interest rates, not yet subdued inflationary expectations and immature capital markets. Moreover, long-term interest rates, and corresponding financial instruments of ten-year maturity, for the most part do not exist yet in the accession countries, which makes applying the interest rate criterion in the Maastricht Treaty problematic.
- The 'first wave' accession countries, and some others like Latvia and Lithuania, are probably right in their opinion that they can attain the Maastricht criteria if they really set their minds to it. The EC has not expressed a view on their ability in this respect. Convergence towards 'Maastricht' seems more a question of desirability rather than of ability.
- Furthermore, the good performance in convergence in the last two years also has to do with the recession experienced by many of the accession countries in the wake of the Russian financial crisis.
- The present convergence is also, to some extent, a sign that transition countries are still in the stabilisation phase of economic transition. Countries, like Hungary and Poland, which have progressed furthest in market reform and are best able to meet the economic criteria for entering the EU (a functioning market economy, able to withstand competitive pressures), actually perform worst on the Maastricht criteria.
- In our opinion, in the coming five years transition (and, if not yet attained, stabilisation) issues should still be the main focus of economic policy in the CEE accession countries, not convergence to 'Maastricht'. A certain threshold of real convergence should have been passed before nominal convergence is attempted. This has to do with structural pressures on the inflation rate and the real exchange rate in transition economies induced by a number of transition and productivity catch-up induced phenomena.

The implications of EU economic and fiscal policy co-ordination

- Once accession countries enter the EU they have they same status with regard to EMU as countries like Greece and Sweden ('countries with a derogation'). This means that EU economic and fiscal policy mechanisms like the broad economic policy guidelines, the convergence programmes and the excessive deficit procedure will be applicable to the accession countries (but not in such a strict way as for the Euro area members).
- Understandably, the focus of these mechanisms is on convergence to Euro area membership. This underlines the importance of having completed real convergence to a certain extent, certainly in the institutional and market-reform sphere, before entry into the EU.
- If, for political reasons, early entry into the EU, and thus continued transition of the accession countries within the EU, is deemed necessary, the focus of the EU policy co-

ordination framework should perhaps be changed to more structural issues for these countries.

• Already in the pre-accession policy co-ordination framework of the Joint Assessments the influence of the Maastricht Criteria is prematurely felt, despite repeated statements of the European Commission that these criteria are not conditions for entry into the EU.

Exchange rate linkages with the Euro area

- The present exchange rate linkages of the accession countries with the Euro area vary enormously: from no link, (currency board) peg to the Euro, basket peg (with the Euro in the basket), crawling basket peg, to managed float (with shadowing of the Euro). The primary aim of all exchange rate linkages is still stabilisation of the economy, although the more advanced transition economies see the exchange rate also as an important instrument for preserving competitiveness.
- Only a few of the accession countries have a clear Euro area entry strategy. Poland has worked out an interesting strategy in which the currency is progressively loosened previously a basket peg, now a crawling peg, in the coming years a free float before it enters the ERM2 framework. ERM2 is a full Euro peg with intervention facilities, but still the possibility of realignment. After two years in ERM2 Poland would then, while also meeting the other Maastricht criteria, enter the Euro area. The benefits of the Polish example, although quite ambitious in its timing, are that the exchange rate would have ample opportunity to find its equilibrium value before entering the Euro area.
- The alternative to the Polish strategy is not having an intermediate free float period. The currency peg used in stabilisation could be repeatedly realigned by the monetary authorities and then gradually tightened as equilibrium is approached. ERM2 could then be entered once realignments become very infrequent. These strategies thus differ in the mechanism used for finding the equilibrium exchange rate.
- It would seem a good idea that accession countries develop with the European Commission and the ECB medium- to long-term EMU entry strategies (and exit strategies from their present arrangements), which are attuned to the individual needs and possibilities of the accession country in question.

Economic and institutional consequences of EMU membership and its timing

• The dangers of early entry into the Euro area lie in inadequate 'real convergence' on the part of accession countries. Inadequate 'real convergence' would mean that structural inflationary pressures and the need for reform investments in the accession countries would be hampered by too tight monetary and fiscal policies, which might lead to slower economic growth. Inadequate diversification of production structure and insufficient export orientation towards the EU could make accession countries susceptible to different exogenous shocks from the EU.

- The effect of inadequate real convergence could be counteracted by wage flexibility in the accession countries, migration to the EU core countries and large fiscal transfers from the EU to the new Member States. All these 'solutions' seem only partially feasible both from an economic and from a political point of view.
- For the stability of the Euro and the credibility of ECB monetary policy *real* convergence is also important. Completion of the price liberalisation process and restructuring and recapitalisation of the banking system seem important conditions from the Euro area point of view, next to *sustainable* convergence to the Maastricht criteria.

The external impact of an expanding Euro area

- The Euro has, despite a shaky start, very good prospects of becoming one of the world's leading international currencies. This role will create substantial benefits for the Euro area Member States. If the entry of the accession countries into the Euro area goes well the future role of the Euro may be enhanced. If it goes badly (because, for example, new members cannot adhere to the Maastricht criteria or to the conditions of the Stability and Growth Pact), then this could seriously damage the prospects of the Euro becoming an international currency.
- The enlargement of the EU and consequently of the Euro area will initially cause trade and capital flow diversion (to the new members) and, somewhat later, the creation of new trade and capital flows (for all countries). For country groups with an orientation towards the EU (non-accession CEEC's, CFA franc countries, the Mediterranean Countries) the initial impact of accession could thus be detrimental. Especially with respect to Russia and the Ukraine, this could be a cause for concern.

EMU AND ENLARGEMENT

1. Phasing and time-frame

In this chapter we will give an overview of the phasing and time-frame of the **accession process**, and of the likely **full integration into EMU**¹, of the 10 Central and Eastern European Countries who have formally applied to become members of the EU, and of Cyprus and Malta.

The outcomes of both processes are as yet uncertain and depend amongst other things on the successful adoption of the EU membership obligations by the accession countries and the reform of certain key-EU policies and decision-making structures by the present EU member states. We present the views of the European Commission, of the accession countries, and of independent commentators from the academic world. We will also go into the rationale behind the various views and discuss the main factors that might speed up or delay both processes.

The structure of this chapter is as follows. In paragraph 1.1 we discuss accession to the EU process; and in paragraph 1.2 entry into the Euro area.

1.1 The accession process

1.1.1 Procedures

The European Commission officially launched accession processes² on March 31, 1998 with the countries of Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia³, through the mechanisms of the Accession Partnerships⁴ (APs). According to the terms of a European Council decision, the first phase of the accession process, the so-called pre-accession phase and its related questions will be dealt via the APs and the respective National Programmes for the Adoption of the *Acquis* (NPAA), their counterparts at the accession-country level.

Substantive negotiations on accession were opened on November 10, 1998, with Cyprus, the Czech Republic, Estonia, Hungary, Poland and Slovenia, the so-called "**first wave**" countries, plus Malta. This set of countries was selected on the basis of their level of fulfilment of economic and political criteria set out by the European Council held in Copenhagen in July 1993 as benchmarks for future member countries.

These criteria, known as the "Copenhagen Criteria", spelled out that the new entrants should:

¹ We use the phrase 'full integration into EMU' as meaning membership of the Euro area currency union.

² Based on the provision of Article O of the Treaty of the European Union (TEU).

³ Malta was only added to this list in October of 1998, when the Council accepted Malta's request to reactivate its candidature, which had been presented in 1990 but withdrawn following the change in government in the island after the general elections of 1996. A new government, elected in September of 1998, reversed this position.

⁴ See European Commission, 1998 (b).

- i) achieve stability of the institutions guaranteeing democracy, the rule of the law, human rights and the respect for and protection of minorities;
- ii) can be regarded as functioning market economies able to cope with the competitive pressures and market forces within the Union; and
- iii) should be able to take on the obligations of membership (the so-called 'Acquis Communautaire'⁵), including the adherence to the aims of political, economic and monetary union.

The "**second wave**" entrants (Bulgaria, Latvia, Lithuania, Romania and Slovakia) have not started substantive negotiations yet with the European Commission. In practice this group of countries is, however, also working hard, to various degrees, on adoption and implementation of the Acquis.

Box 1: Consequences of Enlargement

The 6 "first wave" entrants, plus Malta, would add, if they entered the union at the present time, over 63 million inhabitants to the current Union's population (almost two thirds of them in Poland alone) and over 240 Billion Euro to its GDP (again, over half of this figure in Poland). This will mean, respectively, a 17% increase in the Union population, but a mere 3% increase in its GDP.

In number of countries, this will be the biggest wave of expansion of the Union since its birth in 1957, surpassing the North Sea Accession of 1973/74 (the Kingdom of Denmark, the Republic of Ireland and the United Kingdom), the Mediterranean Accession of 1982 (the Greek Republic), the Iberian Accession of 1986 (The Kingdom of Spain and the Portuguese Republic) and the Nordic-Central European Accession of 1995 (the Republic of Austria, the Republic of Finland and the Kingdom of Sweden). The "second wave" entrants would add to these figures roughly another 57 million of people and 97 Billion of Euros (or a 15% increase in the population of the Union, but an even more marginal increase of 1.2% in its GDP). This, of course, reflects the lower level of development of the two biggest countries in this group, Bulgaria and Romania.

The division into first and second wave countries will, in practical terms, most probably end by a series of new Commission recommendations, published on 13 October, 1999 (see European Commission, 1999(a)). In a wide-ranging modification of the EU accession procedures *and* foreign policy –yet to be approved by a European Council meeting, to be held in Finland, on 12-13 December 1999, substantial negotiations for accession are now to be opened with *all* applicant countries in the year 2000.⁶ Negotiation chapters already closed with the "former" first wave countries are to be re-opened.

⁵ The Acquis is expected to be *taken in full* by all future new entrants, including EMU participation and, in due time, all the requisite "Maastricht Criteria" for Euro area integration. Also no Opt-out to the Social Charter will be permitted.

⁶ Turkey was also added to the Application Countries list, but *without any date for the opening of negotiations*. The Balkans was also added to the list of countries for *eventual* future integration. A new framework of co-operation is also to be developed with all remaining EU-neighbouring areas, from Eastern

Both groups of countries have in the past two years been monitored by the European Commission on their progress in adopting and implementing the obligations under the Acquis via so-called 'screening' operations.⁷ At the request of the European Council the European Commission reports on these 'screening' operations in yearly "Regular Reports on Progress Towards Accession" on each of the candidate countries.⁸ The progress of all twelve countries involved in the accession process is summarised in a yearly 'Composite Paper'.

The most recent Composite Paper was published in October of this year. It suggested that some "first wave countries", especially Poland and the Czech Republic, were falling behind in their progress in implementing EU-legislation. On the other hand, a number of "second wave countries" have taken great strides in conforming to the Copenhagen criteria. The probable opening of substantive negotiations with all accession countries should be seen in that light, and, in that of the widely felt new sense of urgency for not letting 'the window of opportunity' for further eastward expansion of the EU go to waste.

1.1.2 Prospects

Table 1.1 summarises the views of the European Commission (EC), the accession countries and independent commentators on the likely timing of accession.

Europe (mostly the Russian Federation and the CIS –Commonwealth of Independent States) to the Mediterranean Sea.

⁷ In practical negotiation terms, while "first wave" countries were dealt with by the "Enlargement Task Force", the "second wave" countries had their screening handled by the DG1A. In the new Prodi Commission both groups of countries will be handled by the new Directorate-General for Enlargement

⁸ The most recent ones were also published on October 13, 1999. These regular reports can be seen as updates of the original 'Country Opinions' of the Commission dating from July 1997 in which for the first time the Commission evaluated how far the accession countries were in fulfilling the Copenhagen criteria.

	EC view						Independent Commentators
	Copenhagen criteria Timing of					Timing of	
	Political Criteria	Economic Criteria		Adoption of the <i>Acquis</i>	Accession	Accession	
		Functioning market economy	Ability to cope with competitive pressure and market forces	Status/ progress last year			
			"Fi	rst wave"			
Cyprus	V	V	V	+/-	Medium term	2003	Political problem: partition of the country; 2004-2010
Czech Republic	V	V	In the medium term; losing ground	+/-	Medium term	2003-2005	Slowdown in transposition; 2004- 2006
Estonia	V	V	In the medium term	++/+	Medium term	2003	Very open to trade and FDI; 2004-2005
Hungary	V	V	In the medium term	+++/++	Medium term	2002	Strong commitment towards reform; 2003-2004
Poland	V	V	In the medium term	+/	Medium term	2002	Large agricultural sector: potential problems in CAP; 2003-2005
Slovenia	V	V	In the medium term	++/+	Medium term	2003	Slowdown in transposition; 2004-2007
Malta	V	V	V	+/-	Medium term	2003	2004-2006
				ond wave"			
Bulgaria	V	Making progress; medium to long term	In the long term	/++	Long term	No official target	End of next decade
Latvia	V	In the medium term	In the medium term	+/++	Medium term	2005	2005-2006
Lithuani a	V	In the medium term	In the medium term	+/-	Medium term	2005	Slowdown in progress; 2005-2008
Romania	V	Worrying developments ; long term	In the long term	/-	Long term	No official target	Stabilisation not achieved; More than a decade away
Slovakia	V	In the medium term	In the medium term	-/++	Medium term	2005	2005-2008

Table 1.1 Timing of Accession⁹

The European Commission's View

The European Commission has not committed itself to any end-date for the accession negotiations. It has agreed to negotiate on the basis of the accession target dates as set by the accession countries. The official stance of the EC is that a first wave country will be ready to become a member of the EU in the medium term as long the country in question continues its efforts to adopt and implement the conditions of the Acquis. The official line of the commission furthermore is that countries will not necessarily join in waves; each country will be accepted into the Union on its own merits.

⁹ N.B: V = condition satisfied, +++ = excellent, ++ = very good, + = satisfactory, for the minuses the opposite applies.

For the second wave countries the EU has only given very vague indications of the likely duration of the accession negotiations (which, as we have seen, have not formally started with these countries).

The Accession Countries' View

The first wave accession countries have set target dates for EU membership during the negotiation process with the Commission, all in the 2002 - 2005 period. Second wave countries in general have either only recently given an indication of their targets or not taken any formal positions on this issue. The target dates are reported, as available in Table 1.1.

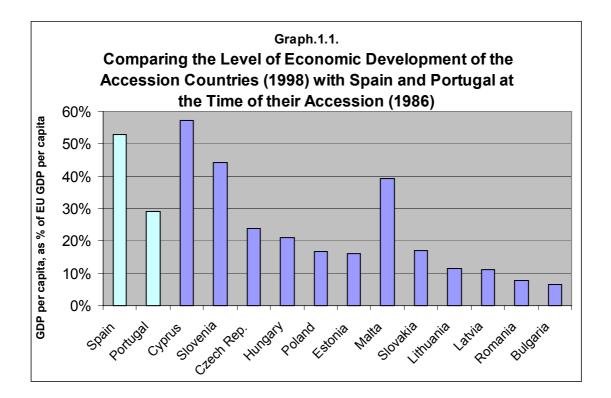
For all applicant countries EU membership is at present the most important foreign policy aim of the presiding government and can also (still) count on broad support in society as a whole. Now that the implementation of the Acquis has started to influence the position of some vested interests, however, (abolition of state aid, free acquisition of land by EU citizens) the support for EU membership has increasingly come under fire in some applicant countries.

The views of independent commentators

In the academic literature various comments have been made about the duration of pre-accession period. The most important of these are:

- **Comment 1:** A comparison with the accession process of Spain and Portugal (in 1986) could be pertinent. These negotiations lasted for almost 10 years. Since then the Acquis has become much more complex and further reaching as to harmonisation of legislation and co-ordination of (economic) policy.
- **Comment 2:** The level of economic development of the most accession countries is much lower than that of Portugal and Spain at the moment these countries entered the EU. In graph 1.1 we present the levels of GDP per capita relative to average EU GDP per capita, first for Spain and Portugal in 1986 and then for first and second wave applicant countries in 1998.¹⁰ Because per capita income and productivity levels are so much lower than the EU average, entry into the EU might induce large migration flows that would be unacceptable for present EU member states.

¹⁰ GDP levels could also be presented in Purchasing Power Parity (PPP) terms, an economic measure for comparing actual domestic spending power of consumers. For a level comparison with Spain and Portugal at their time of accession a depiction in PPP terms would not provide any additional insights. Moreover GDP levels in PPP terms, which can be found in annex A for all the accession countries, tend to overstate the level of economic development of developing and transition economies. GDP in monetary terms, however, tends to understate it.



- **Comment 3:** The CEE accession countries are still in a process of economic transition from centrally planned to market economies despite the great strides they have made in recent years. Some major sectors of the economy of these countries (steel, agriculture, banking, mining) still face major restructuring efforts. In a number of countries privatisation programs still have quite some way to go. In annex A we present country profiles in which the progress of the transition process for each individual country is discussed. There are large differences between the countries involved in accession with respect to the success of transition. Countries like Romania and to a lesser degree Bulgaria lag significantly behind.
- **Comment 4:** Because transition still has quite some way to go, the adoption of the Acquis may be realised on a formal level, but actual implementation may be much more difficult. The European Commission itself points to this danger in its 1998 and 1999 Composite Papers.
- **Comment 5:** A few countries face political obstacles in being ready in a political sense for EU membership. This is the case for Cyprus where the split between the Greek and Turkish part has not been resolved. In Slovakia democratic rights and institutions have greatly improved recently but are as yet not solidly grounded.
- **Comment 6:** The question whether the EU has already straightened out its Common Agricultural Policy in such a way that an integration of the accession countries in the EU would be financially feasible given the present EU budgetary framework, is still open¹¹. According to Commission officials the framework decided on at the Berlin summit (basically: price, but no income subsidies for farmers in the accession countries) would make

¹¹ See, among others, Baldwin, R., 1995 and Koop, M., 1997.

the CAP financially sustainable. The accession countries, who - it should be notednegotiate with the EU not as a group but individually, do still have to accept this framework.

- **Comment 7:** The EU still has to reform its internal decision-making structure (composition of the Commission, voting structure partly based on population, majority voting). Outside commentators, but also the Commission itself, view the EU becoming unworkable with 27 Member States, if these reforms are not made.
- **Comment 8:** The Kosovo-crisis has induced considerable political momentum to speed up the accession process to ensure political stability in Eastern Europe and to mitigate the negative economic effects of the recent military conflict.
- **Comment 9:** The EU might agree with relatively early accession to the EU, accepting substantial temporary derogations on the part of the accession countries with regard to certain elements of the Acquis. In return certain budgetary rights and perhaps the freedom with respect to the movement of workers for the accession countries might be slowly phased in. This option would make it possible for accession countries to complete the transition process of their economies within the EU.

Of these nine major comments, only the last two seems to point at a speedier integration in the EU than aimed at by accession countries. Most commentators especially view the transition issue – which is linked with adoption and especially with implementation of the Acquis - and the reform of the CAP as major stumbling blocs. The durability of the Balkan-crisis argument furthermore cannot really be evaluated at this time.

Consequently, most commentators estimate an accession period somewhat longer than that envisaged by the accession countries themselves.

An interesting concept in this respect is that which is referred to in the academic literature as 'real convergence'. Real convergence is usually referred to in two ways. First, there is the aspect of the restructuring of the old economic system and the approximation of the EU market-institutional and legislative framework. Secondly, there is the aspect of catching up with the productivity and per capita income levels of mature, developed market economies, like those of the European Union.

A transition economy is hypothesised to be only able to fully profit from EU membership, and later on from Euro area membership, when, both aspects of real convergence have taken place to a certain extent. While the EU has encompassed the first (restructuring and institution building) aspect into its Copenhagen criteria, income and productivity levels are not criteria for EU membership.

In the economic literature it is viewed as conceivable that a certain threshold also with respect to productivity and income levels will have to be passed before EU membership will really have the effect of accelerating the process of 'real convergence' for the accession countries. No indication of the level of this threshold level has been presented, however. Furthermore, a major political problem could be that catching up in income and productivity would push accession many years into the future.

For example, a recent IMF study (Fischer, S., et al., 1998), calculated the time required for CEE countries to catch up with the Southern EU member countries (Greece, Portugal and

Spain¹²). The time periods for real convergence, calculated under the assumption¹³ of steady and more rapid income growth of the CEE countries, were, relative to the year 1995: 28 to 29 years for Bulgaria, 11 to 15 years for the Czech Republic, 16 to 17 years for Estonia, 20 to 22 years for Hungary, 23 to 25 years for Latvia, 33 to 24 years for Lithuania, 18 to 23 years for Poland, 34 to 36 years for Romania, 15 to 19 years for Slovakia and 19 to 24 years for Slovenia. In other words, it will be a generation-long process, *even under beneficial macro-economic circumstances*, for most accession countries to catch up in real terms with the EU's poorest states.

Of course, *full convergence, even with the Southern EU Members, is not a condition sine qua non* for accession to happen. The present EU has sizeable differences in economic prosperity and even individual nations have huge gaps in development inside their territories. These calculations do suggest the long-term nature and very substantial size of EU structural funds required for these countries and the need for real wage levels attuned to productivity development.

¹² In a 1996 study (see Baros & Garoupa, 1996) the ongoing process of real convergence towards the EU average (the start of which preceded actual EU membership) of both Iberian economies, Portugal and Spain, was found to have been *positively and significantly affected by EU membership* (these results where confirmed for Portugal by an updating of the study by Vinhas de Souza in 1999: see Vinhas de Souza, L., 1999(c)).

This would mean that the real convergence process of the accession countries could be similarly affected by EU membership, reducing the necessary time span to achieve a greater level of development (this is, of course, actually one of the strongest underlying motivations for these countries to seek EU membership in the first place). The question would then be: what is the convergence "threshold" that these countries would have to have for this positive reinforcing effect to appear (which would also be convergence level that would be "safe" for the EU to accept these countries).

¹³ Long-term real growth rates of the Southern EU Member States was put at 2 percent while those for CEE countries ranged from 4.4 to 7. 1 based on varying assumptions on fundamental factors determining long-term economic growth.

1.2 Integration into EMU

1.2.1 Procedures

As stated in paragraph 1.1.1 the new entrants to the EU will not be allowed an "opt-out" clause for the Economic and Monetary Union as was used by the United Kingdom and the Kingdom of Denmark. This means that all future entrants into the EU are supposed eventually to become members of the common currency area, which became a reality with the introduction of the Euro in 11 of the 15 European Union (EU) member states, in January 1999¹⁴. This follows from the Amsterdam Treaty (AT), which declares that all-future member countries "shall adhere to the goals of EMU". It was spelled out more explicitly by the general commitments in the pre-accession agreements signed by the new entrants with the European Commission.

In its 1998 Composite Paper on the progress of applicant countries in meeting the Copenhagen criteria, the European Commission also presents its views on the phasing of EMU integration for the future member countries. The EC envisages a three-phased process (see EC, 1998 (b); For a full description of the proposed phasing and its time frame, see Box II, page 11).

The first phase is the pre-accession phase, during which the accession states shall fulfil the general EU membership criteria. The second is the accession stage, in which the accession countries are already in the EU but still outside the Euro area. In this phase they shall treat "*exchange policy as a matter of common interest*" and (eventually) co-ordinate exchange rate policy through and ERM-like mechanism¹⁵. The third and final phase is the actual Euro phase¹⁶.

So contrary to the view of some of the accession countries the European Commission is now very clear that there should be a distinct second phase on the road to full integration into EMU. The European Commission states explicitly that: "new Member States are not expected to adopt the single currency upon accession, even though they will be taking part in EMU. EMU implies a gradual development of the economies of candidate countries leading to the final adoption of the single currency as ultimately all Member States must introduce the Euro (EC, 1998, ibid)".

The time frame described in the Composite Paper thus excludes a simultaneous accession to the European Union and to the common currency framework, the so-called third phase

¹⁴ The founding members of the Euro are Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain. The currently non-participating Member States are Denmark, Greece, Sweden and the United Kingdom.

¹⁵ At this stage, the governors of the new member countries' Central Banks will also join, upon accession, their counterparts in the General Council of the ECB, which is a non-voting body that encompasses all EU member-countries, regardless of their membership in the Euro area. Actual ECB policy decisions are taken by its Governing Council, which encompasses the Governors of the Central Banks of the 11 member countries and the 6 members of the ECB board.

¹⁶ This phased integration process seems to have been confirmed by the 1999 version of the "Composite Paper", which did not introduce any substantial modifications concerning the EMU integration procedures (see European Commission, 1999(a), ibidem).

of EMU¹⁷. This impossibility of a "simultaneous entry" is further strengthened by the EMU convergence criteria themselves (see a full description of the criteria in Chapter 2). The third Maastricht-criterion is the so-called "ERM criterion", which states that the currency of any future EMU member should have been in the ERM (Exchange Rate Mechanism) without devaluation or revaluation for at *least two years*.

Since only EU member countries can integrate into the ERM-mechanism (or, rather ERM2, which has replaced the old ERM with the introduction of the Euro), an EMU accession could only happen at least two years after the EU accession, bar major changes in *both* the current enlargement and monetary integration institutional and legal frameworks.

The exact monetary policy stance of the accession countries in the second phase, i.e. during their first years within the EU, was left rather vague in "Agenda 2000".¹⁸ In its 1998 Composite Paper the European Commission now clarifies its position somewhat: it suggests that the ERM2 framework is the preferred pre-Euro framework for the Accession countries in this phase. Whether ERM2 should start immediately at the moment of accession into the EU, is, however still unclear in the Composite Paper. Remarks made by former Euro-commissioner De Silguy in 1998 seem to suggest that the Commission was at that time thinking about a crawling peg regime immediately after EU accession to be followed by ERM2. The rationale of course would be that the first mechanism would be conducive to monetary stability, but not as restricting for the accession countries as immediate ERM2 membership. We will come back to exchange rate policy in the accession phase in later chapters. It is important to realise that phase 2 would possibly comprise an as yet undefined part and an ERM2 part with a duration of a minimum of two years, in the Commission's view.

The ERM2 part of phase 2 will aim to ensure that the new Member States will "orient their policies towards stability and convergence, and help them in their efforts to adopt the Euro".¹⁹ The operating procedures for the new ERM have been defined by the ECB and the non-Euro area national CBs²⁰: the currency of each Member State participating in the ERM2 will have a central rate against the Euro and bands of $\pm 15\%$, supported by automatic, *unlimited* intervention at the margins²¹.

After a political decision process, the parities in the ERM2 exchange rates grid can be adjusted to new levels. The Commission has suggested at various occasion that realignments could

¹⁷ This clarifies the statements in "Agenda 2000", which, in principle, do not seem to exclude a two-phased process, in which entry into both the EU and the EMU could be simultaneous, and where no exchange rate co-ordination framework was actually specified.

¹⁸ "all Member States shall...be in a position to stabilise their exchange rates in a mechanism yet to be decided".

¹⁹ Resolution of the European Council in Amsterdam, June 1997. The Resolution suggested that participation in ERM2 would be voluntary for all non-Euro area Member States. An EU Member State which would not participate in the ERM2 from the beginning was free to join later.

²⁰ Presently, only Denmark and Greece.

²¹ However, the ECB and the participating non-Euro area national CBs can suspend this in a situation of conflict with internal price stability. The exchange rate coordination in the ERM 2 can eventually be increased by tighter currency bands, if deemed necessary.

become a regular occurrence in ERM2 for those new Member States who are still finding their real exchange rate equilibrium versus the Euro area.

Box 2: "Time frame for full EMU membership according to the European Commission"

Pre-accession phase: During this phase, candidate countries carry out the economic reforms needed to fulfil the Copenhagen economic criteria on the existence of a functioning market economy and on the capacity to cope with competitive pressure and market forces within the Union. Meeting the economic criteria will ensure that the general economic framework – including institutions and policies – is broadly compatible with EMU. Specifically, Community legislation on EMU needs to be in place for accession, namely:

i) completion of the orderly liberalisation of capital movements;

ii) prohibition of any direct public sector financing by the central bank and of privileged access of the public sector to financial institutions;

iii) alignment of the national central bank statutes with the Treaty, including the independence of the monetary authorities and respect of the price stability goal.

These requirements, together with the continued implementation of the proper economic policies and reforms will enable *candidate countries to participate in EMU upon accession without adopting the Euro*. The economic and legal framework put in place will ensure the capacity to take on other obligations in this field.

Accession phase: Upon accession, new Member States participate in EMU and have to comply with title VI of the Treaty. This includes the following obligations:

i) adherence to the aims of economic and monetary union;

ii) treatment of exchange rate policy as a matter of common interest and, *later*, participation in the ERM;

iii) treatment of economic policies as a matter of common concern and coordination of economic policies between the Member States through participation in Community procedures;

iv) avoidance of excessive government deficits and adherence to the relevant provisions of the stability and growth pact;

v) further adaptation of the national central bank's statutes with a view to integration in the European System of Central Banks (ESCB);

vi) progress towards the fulfilment of the Maastricht convergence criteria (on public finances, inflation, exchange rates and long term interest rates).

Final Euro phase: The participation of new Member States in the Euro area will be decided in the light of their compliance with the necessary conditions for the adoption of the single currency, following the examination (via so-called convergence programs) of the achievement of a high degree of sustainable convergence. *However, prior to accession to the EU, there is no institutional requirement to assess progress made on convergence criteria.*

As discussed above the minimum duration of the stay of the accession countries in this second phase is two years. It could possibly lasts much longer if it is deemed appropriate for the economies of the accession countries or for the (stability of the) Euro area. The duration of phase 2 will of course also depend on the duration of phase 1, the pre-accession phase.

The possibility of a duration of phase 2 shorter than two years should, however, not be totally ruled out. On the exchange rate stability criterion derogations were given in 1998 upon entry into the Euro area for Italy and Finland. Moreover, the President of the ECB in recent public statements has indicated that the view of the ECB on this point is that "a plurality of approaches should be feasible without compromising equality of treatment". ²² It has been suggested by accession countries that two years of nominal exchange rate stability outside ERM2, but equal in performance to that in ERM2, would qualify them on the exchange rate stability criterion as described in the Maastricht Treaty.

In our view, a too nominalist approach to exchange rate stability could be detrimental to accession countries' economic development. For example, as we will discuss in later chapters, entering the Euro area (and ERM2) at equilibrium levels of the real exchange rate is important. Moreover, article 121 of the Treaty is right in prescribing that the Maastricht criteria should be **achieved on a sustainable basis**.

For entry into the third phase, full participation in the Euro area currency union, the new EU Member States will only have to comply with the Maastricht criteria. These criteria are convergence criteria in the fiscal and monetary sphere (and will be discussed extensively in the next chapter). Once in the Euro area, the new members will also have to adhere to all the budgetary rules of the Stability and Growth Pact, like the other Euro area Members.²³ It is important to note here that no additional transition-type requirements are to be applied for full EMU Membership. In principal these will all have been covered by fulfilment of the Acquis conditions for entry into the EU. We will discuss in chapter 4 what type of additional criteria have been mentioned in the economic literature for entry into the Euro area as being a sensible step both for the accession countries and the present currency union. It should be realised that once accession countries are inside the EU full EMU Membership could be relatively simple, given the monetary and fiscal convergence which has already taken place.

²² The President of the ECB, Wim Duisenberg, in a speech on 26 September, at the headquarters of the U.S. Central Bank System, the FED (Federal Reserve System), made the following reference to the flexibility to be expected in the use of the Maastricht Criteria for the accession countries: "Against the background of different starting-points and degrees of economic transition, and the difficulty of ascertaining the lead time for further headway towards real and nominal convergence, a plurality of approaches should be feasible without compromising equality of treatment. This may apply, in particular, to the timing of EU accession, ERM II membership, monetary policies (including exchange rate strategies) before EU accession and the development of sound financial market infrastructures" (see ECB, 1999(c)). The same flexibility was alluded to, in less strong terms, at Duisenberg's first speech after the 13 October recommendations, delivered at the Bank of Greece, on 15 October, "against a background of different starting points and varying degrees of economic transition, a plurality of approaches should be feasible without compromising equality of treatment." (see ECB, 1999(b)).

²³ Actually, the Stability and Growth pact already lays down some rules for monetary and budgetary policy co-ordination for the accession countries before they enter the Euro area, just as is the case for the present non-Euro area Members without an opt-out clause.

1.2.2 Prospects

In this paragraph we will present the views of the Commission, the Accession countries and independent commentators on the duration of the second phase of full integration into EMU (between Accession into the EU and into the Euro area). The views on the pre-accession phase were presented in paragraph 1.1.2.

The European Commission's View

The Commission has not expressed any expectations on duration of the second phase. It does present the required time of two years in ERM 2 as a minimum period.

The Commission assessed in the Country Opinions of 1999 the progress in monetary and fiscal convergence achieved before initiation of the pre-accession phase. It concluded that the participation of the *Bulgaria, Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia in EMU as a non-participant in the Euro area should pose few problems in the medium term, provided that the necessary measures specified in the Opinion were taken by each country.* Only for Romania the Opinion concluded that its participation in EMU as non-participant to the Euro area could still pose serious problems. Overall, Hungary seems to be the best prepared country for EU Accession. *For all countries, the Opinions concluded that it was still premature to judge when they will be ready to adopt the Euro.*

The Accession Countries' View

First and second wave applicant countries have expressed a range of views on the timing of their entry into the third phase of EMU. The individual country entry strategy into EMU is discussed at length in Chapter 5 and summarised in Table 5.1. In general the countries involved seem to favour relatively early entry into EMU. The reason is that they believe that membership of EMU (and EU) would substantially increase trade and investment flows to their countries, and, moreover, provide strong credibility for their stabilisation efforts. Most countries also seem to favour full membership for political reasons. Domestically it would be an important instrument to reinforce the transition process. Externally, EMU membership would really make them equal members in the EU and reinforce their integration into the EU.

The entry strategy of the accession countries can be roughly split into three groups. A number of accession countries (Hungary, Lithuania, Poland, Slovakia) seem to accept that the second phase will contain a two year time period for ERM2. Contrary to the Commission these countries have indicated that they see this two-year period as a maximum for full EMU membership.

A few accession countries have stated their desire to enter the Euro area at the time of entry into the EU (Estonia, Latvia, Slovenia). Politicians in these countries have, at certain times, even expressed interest in entering EMU before EU accession. Entry into EMU before EU membership and before a two-year period in ERM2 as an EU Member is not possible given the present EU legislative framework, as we discussed previously. Slovenia has, however, in the accession negotiations made a formal request for an exemption for the national currency staying in ERM2 for the required two years. The position of the Slovenian government is that if the Tolar has a stable relation to the Euro in the two years before EU

membership and complies with the other Maastricht criteria it should be eligible for full EMU membership at accession to the EU. Such an exemption would clearly require a political decision by the European Council.

Finally, a number of accession countries have not named a target date or period for entry into EMU (Bulgaria, Czech Republic, Romania). They do see 'full EMU' as coming at least 2 years later than EU Membership. The enthusiasm of this group for early entry seems to be waning somewhat under influence of information from the academic world and IMF. These countries would possibly be in favour of splitting the second phase in two parts. One period involving relatively few restriction on adjusting their real exchange rate (a crawling peg, even perhaps a free float à la the UK), and a second part with membership of ERM2.

The views of independent commentators

On the likely duration of the second phase independent commentators have not really made any concrete predictions. They have suggested a number of reasons why the second phase should probably take longer than that advocated by some accession countries.

- **Comment 1:** The catch-up in economic development and the continued transition of the CEE applicant countries would induce substantial real exchange rate adjustments (real appreciation). A fixed nominal exchange rate would complicate this process and actually hurt the accession countries. The consequences of early entry into EMU will be discussed at length in Chapter 5.
- **Comment 2:** There is scepticism within the economic profession that the EMU of the 11 founding members was (and is) a so-called Optimal Currency Area²⁴. The driving force behind EMU has been political rather than economic. This would be even more true for the expanded Euro area with 12 accession countries included. Because monetary policy would be aimed at overall economic conditions in the Euro area, the countries involved would lose a valuable policy instrument to mitigate economic shocks while their production structure is still vulnerable. Basically, this argument is a Keynesian argument that assumes monetary policy can be used for fine-tuning of the economy.
- **Comment 3:** The attainment of the Maastricht criteria would be a heavy burden for the accession countries in the fiscal sphere at a time when these countries should be making substantial investments in the transition process.
- **Comment 4:** The low inflation rates required for EMU membership would unnecessarily constrain the resolution of disequilibrium prices in the economy which are still present in many of the CEE countries.
- **Comment 5:** An unsuccessful entry, and subsequent withdrawal from EMU, would be a political disaster. The Euro would lose much of its credibility which would imply substantial economic losses for the Euro area as a whole (higher interest rates, Euro not an international currency).
- **Comment 6:** If accession to the EU is relatively early, this will only be possible with substantial derogations to the Acquis. Full compliance with the Acquis in the fields of

²⁴ See, among others, Bayoumi, T. and Eichengreen, B., 1993.

economic and monetary union and in the fields of bank restructuring and price liberalisation will be seen, however, by Euro area Members as a pre-requisite for full EMU membership. So before the Maastricht criteria come into play the full implementation of the Acquis will be the hard nut to crack for the accession countries.

Contrary to this pessimistic view, there is also a (minority) school of thought, which sees definite benefits of early entry into the Euro area. For example, the Optimal Currency Area Theory is seen as not very relevant for modern, diversified market economies. These critics, moreover, point to the fact that accession countries' production structure has already converged to quite some degree to that of EU countries. In this view the main value of the Euro area currency union lies in the 'free' credibility provided to accession countries in the field of monetary policy. Inclusion in the Euro area would relieve these countries of all the worries of independent monetary policy: real exchange rate consequences of large inflows of FDI, possible speculative attacks against the currency, and the balancing of the internal and external value of the currency.²⁵

²⁵ See for example Bofinger, 1994, on the limitations of Mundel's OCA-theory and the credibility benfits of monetary union.

EMU AND ENLARGEMENT

2. Prospects of meeting the Maastricht criteria

In this chapter we will go into the prospects for the accession countries of meeting the requirements of full integration into EMU, i.e. membership of the Euro area currency union, once these countries have become EU Member States. For this purpose we will review in paragraph 2.1 the Maastricht criteria. These criteria will be the criteria for entry into the third stage of EMU of the accession countries just as they were for the founding Members of the Euro area.²⁶ We will discuss whether the application of the Maastricht criteria will present any additional problems for the accession countries given the transitional nature of their economies. In paragraph 2.2 the progress in monetary and fiscal convergence of the accession countries in conforming to the Maastricht criteria will be presented. Finally in paragraph 2.3 we discuss the views of the EU, the accession countries and independent commentators on the likely speed of the Maastricht criteria being met.

2.1 The Maastricht Convergence Criteria

A number of numerical benchmarks were defined in the framework of the Maastricht Treaty. These so-called *EMU or Maastricht Convergence Criteria* aim to ensure monetary and fiscal stability in the joint currency area. The criteria force the countries which want to become full EMU members to converge in the monetary and fiscal sphere. Two of the criteria are monetary, one is linked to currency rate stability, and the final one is fiscal. The criteria are:

- *i)* The Inflation Convergence Criterion, defined as an inflation rate which should not exceed by more than 1.5% the average inflation rate of the three best-performing countries;
- *ii)* The Interest Rate Convergence Criterion, meaning that the average long-term nominal interest rate should not be more than 2% above the average interest rate of three countries with the lowest inflation rate;
- *iii)* The ERM Criterion which postulates that the currencies of future EMU members should have been in the ERM (Exchange Rate Mechanism) without devaluation or revaluation for at least two years²⁷;
- *iv)* The Excessive Debt Criterion is composed of a budget deficit component, which declares that a country's budget deficit should not exceed 3% of its GDP, and of a *stock* of debt component, which states that the stock of outstanding government debt should not exceed 60% of that country's GDP (or otherwise be in a descending sustainable trajectory towards these benchmarks).

Additionally, an "operational" criterion was also set, concerning the legal and institutional features of the national Central Bank (CB), namely, its independence from government

²⁶ A semantic discussion could be whether these countries can enter the third stage of EMU while this stage has already started for 11 Member States as of 1January 1999.

²⁷ The 1992 ERM crisis made the narrow bands of the then functioning ERM of +/- 2,25 % not sustainable. These bands were replaced by the current +/-15% margins, which allow major currency moves without the direct need for intervention or realignment.

interference²⁸, a mandate towards price stability, the prohibition of monetary financing of deficits, and the availability of a set of market-based instruments that enable the CB to conduct monetary policy actions.

The economic rationale behind the criteria is that deficits have to be sustainable, from an intertemporal point of view²⁹, and that inflation and exchange rate instability are negative factors for economic growth from a long-term allocation perspective³⁰. The justification for CB independence is related to the so-called "time inconsistency" question, which would also lead to a lower level of aggregate welfare³¹. Also, in systemic terms, instability should not be transferred from individual members of the Union into its aggregate³². As a group, the criteria have been often described as "common sense macro economic policy".

The application of the criteria is not automatic. If the national figures are temporarily off target but in a continuous and sustainable trajectory towards the benchmarks, exemptions from these criteria can be made. Such exemptions were made by the European Council decision that selected the founding members of the Euro area. With regard to the fiscal criterion, exemptions were made for Belgium and Italy, with regard to the ERM criterion, for both Finland and Italy. **These past exemptions may indicate that accession countries are right in expecting in a future selection process a similar degree of flexibility at the political level.**

As to the applicability of the Maastricht criteria to accession countries, and especially to the transition economies amongst them, the following remarks may be pertinent.

• According to some studies (See European Parliament, 1999), the very existence of the Euro area as a *de facto* common currency area would imply changes in the criteria, namely, in the inflation and interest rate criteria. According to this interpretation, the reference benchmark should no longer be the three best performing countries, but the

²⁸ More precisely, "instrument independence", and not "goal independence" (since the goal is pre-defined as being price stability: see Fischer, 1995).

²⁹ Some of these numerical benchmarks seem to have been derived from the application of a "golden rule" growth condition on "back of the envelope" long run forecasts for growth and inflation in the Western European economies.

³⁰ On a very basic micro level, the prices of goods and services, in a market economy, function as indications of their relative scarcity. Private individual agents, to be able to take adequately maximizing decisions, need to "read" the information expressed in those prices as clearly as possible. Both inflation and exchange rate instability distort this information, leading to non-maximizing decisions and lower than optimal aggregate welfare. Price and wage rigidities existing in market economies imply that the CB's usually interpret price stability as meaning an inflation rate between 0 and 2%.

³¹ Under the assumption of short term non-neutrality of money, i.e., a short run Phillips curve, implying a tradeoff between inflation and employment, government authorities with a limited time-horizon would have an incentive to produce surprise inflation in an attempt to generate an increase in output. Rational economic agents would anticipate such behavior, and the final, sub-optimal outcome would be lower growth with higher inflation. A committed central banker, with lower than average tolerance for inflation or a framework of principal/agent with a binding contract with the CB would (in theory) solve such a problem, bringing the economy back to an optimal path (see Walsh, 1995 and Svensson, 1997).

³² To try to impose a more binding constraint on the fiscal behaviour of the member countries of the Union, a system of punitive pecuniary fines was introduced by the Stability and Growth Pact (SGP), through which –after a lengthy joint political decision process- individual member countries that incur non-cyclical excessive deficits would transfer up to 0.5 of their GDP to the Union.

inflation and long-term interest rates of the Euro area itself.³³ Others dispute this interpretation, stating that the TEU remains unchanged concerning this subject and, therefore, the application of the criteria should follow the letter of the Treaty. In practice convergence towards the Euro area as a whole will of course be easier than towards the three countries with the best inflation performance. Entry into a existing currency union is fundamentally different than founding one with a group of nations. In our opinion, for the accession countries the Euro area as a whole should be the frame of reference.³⁴

- The interest rate criterion may pose problems as applied to most accession countries as they do not have a functioning long-term bond market yet (10-year maturity). This means there are no long-term interest rates to compare to a Euro area benchmark. Once economic stabilisation is firmly entrenched in these countries most commentators, however, expect the maturity of long-term government bonds to increase.
- The formal independence of accession country CB's has greatly improved over the last few years. In several countries the informal situation is, however, less well defined. In practice some CB's still receive their orders from national governments.
- With regard to CB financing of government (or other forms of privileged access to finance) accession countries are in the process of conforming with EMU standards.
- The 'operational' criterion on CB independence also assumes the CB can use indirect monetary policy instruments, like open market policies and reserve requirements. In countries with a currency board arrangement (CBA) these instruments can not really function adequately (see the next paragraph). Entry into EMU assumes an 'exit-strategy' from the CBA before this criterion can be seen to be fulfilled. The EC in its Composite Paper, however, seems to suggest that a CBA operated by an independent monetary authority can be brought into line with this element of the operational criterion fairly rapidly.

2.2 Progress on convergence to 'Maastricht'

We can see how the applicant countries would currently fare regarding the Maastricht criteria in Table 2.1. The values in bold indicate that these macro figures still surpass the Maastricht reference values indicated in the top of the table. The data used in Table 2.1 are official figures for, in most of the cases, the third quarter of 1999 (or 1998 yearly data, in the case of the "Excessive Debt Criterion") and was supplied by either the respective national central banks, the IMF or the ECB.

³³ These proponents state that in particular the discussion of country inflation rates is no longer relevant in a currency union as individual country inflation is no longer a target of monetary policy. Differences in long-term interest rates similarly do not reflect monetary policy conditions but rather market liquidity and credit rating of the country debt.

³⁴ An awkward consequence could otherwise possibly be that accession countries would have to converge towards three Euro area countries going through a recession.

Countries	Inflation Rate	Long-term Interest Rates	Deficit or Surplus as a Share of the GDP	Public Debt as a Share of the GDP	Monetary Authority Status
EMU Criteria	2.8% (Aug ² 99)	7.36% (Sept '99)	-3% (Euro area '98: -2%)	60% (Euro area '98: 73,7%)	Legally Independent Central Bank
Cyprus	2.8	5.5(d)	-5.3	57.7	Non Independent Central Bank (b)
Czech Republic	2.7	6.8	-1.4	10.7	Legally Independent Central Bank (b)
Estonia	2.8	6.75	-6.6	11.1	Currency Board Arrangement.
Hungary	9.52	15.5	-4.1	65.8	Legally Independent Central Bank (b)
Poland	7.2	22.5	-2.2	50.1	Legally Independent Central Bank.
Slovenia	6.6	9.71	-0.6	25.2	Legally Independent Central Bank (b).
Malta	2.23	5.29	-8.8	56.3	Non Independent Central Bank (b).
Bulgaria	-0.5	5.40	0.0	96.4	Currency Board Arrangement.
Latvia	2.4	12.25	0.1	12.7	Legally Independent Central Bank.
Lithuania	1.0	12.0	-5.8	17.0	Currency Board Arrangement (b), (c).
Romania	48.7	35.0(a)	-2.6	18.0	Legally Independent Central Bank (b).
Slovakia	9.4	15.84	-2.66	20.7	Non Independent Central Bank (b).

Table 2.1 EMU Criteria for the Candidate Countries (most recent official data)

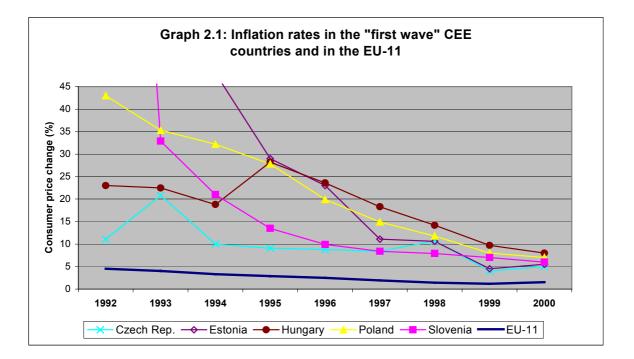
Source: BCE, IMF, ECB and respective National Central Banks; (a): Interbank rate; (b) Lending to Government is still permitted; (c) Capable of engaging in some types of open-market operations; (d) Ceiling on domestic interest rate. Values in bold indicate a transgression of the Maastricht criteria. See annex D for the identification of all the data in the table.

Only interest rates are above the benchmark³⁵ for most of the countries, reflecting high real interest rates for these countries, underdeveloped capital markets and the fact that inflationary

³⁵ Note that both the Euro area benchmarks for long term interest rate and inflation used in the table above do not conform to the strict Maastricht Treaty(MT) definition, since they are ECB-produced GDP-weighted averages of the national figures. Strict MT benchmarks would be much more stringent. As an example, the non-weighted average HICP (Harmonised Index of Consumer Prices) for the three best performing Euroarea countries –Austria, France and Germany- for the same period is a mere 0.67%, with the result that only Bulgaria and Lithuania would fall within the 2.2% upper boundary for the "Inflation Criterion". It must be noted that even in long-standing common currency areas, substantial inflation differentials among

expectations have not really subdued yet. It must also be noted that for the long-term interest rate proxies were used with much shorter maturity than the 10-year bond rate used for evaluating 'Maastricht' for the 11 Euro area Members. For Romania we even had to use the Interbank rate.

On the face of it, the fiscal situation for these countries is, in general terms, rather positive perhaps, even better that the average fiscal situation for either the Euro area or the whole set of EU members, especially concerning the Debt Stock to GDP ratio. Only Bulgaria, Cyprus, Estonia, Hungary, Lithuania, Malta and Romania breach either one of the two fiscal sub-criteria, and only Hungary breaches both.

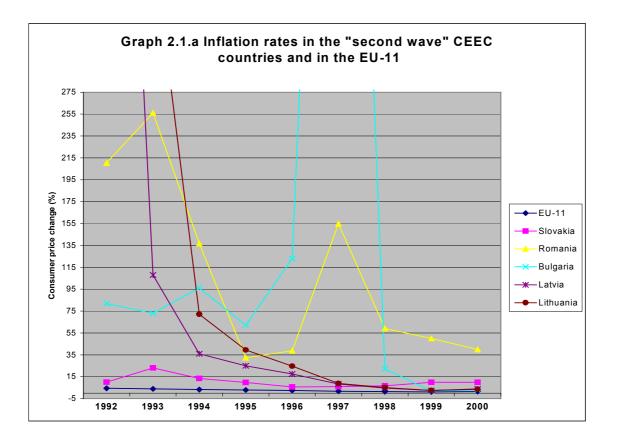


As a result of the surprisingly fast deflationary process of the past few years, caused in part by the introduction of tighter monetary policies, the inflation criterion is now also respected by most of the countries. The deceleration of inflation was assisted by the emerging markets

regions are *systematically* found: secular price series for, among others, the United States of America, the Commonwealth of Canada and the Federative Republic of Brazil attest to that. Focusing on the U.S. case, inflation rates produced by the U.S. Bureau of Labour Statistics for the major metropolitan areas are available since 1919. They show price differences with a maximum of over 7 percentage points as recently as the early 1980s, and such intra-national price differences are persistent in time, but not permanent. Surprisingly, the U.S. regional inflation differential in the 1990s are around 2.0%, with a variance of 0.6%, *values remarkably similar to the ones in the EU's HIPC* (see ECB, 1999 (a)). One of the reasons for this somewhat surprising result (since the U.S. has been a currency union for substantially longer than the EU, and is undoubtedly more integrated in several respects, a larger differential could be expected) seems to be that EU national economies are much more diversified than U.S. regions, and are, therefore, less prone to region-specific price shocks.

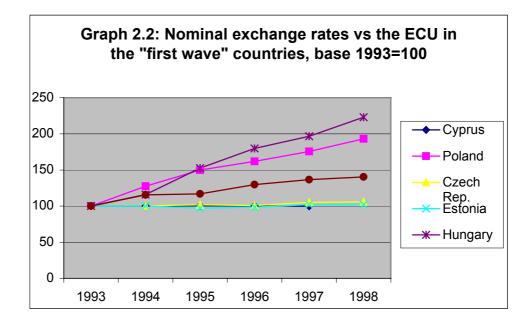
Calculating the interest rate benchmark by using the unweighted average of the ten year national government bond for the three "best performers" in inflation terms would require using, early November 1999, 5.12% for Germany, 5.21% for Austria and 5.23% for France, resulting in a non-weighted average of 5.19%. That wouldn't modify the set of Accession Countries presently conforming to this criterion, but is significantly different to the weighted average.

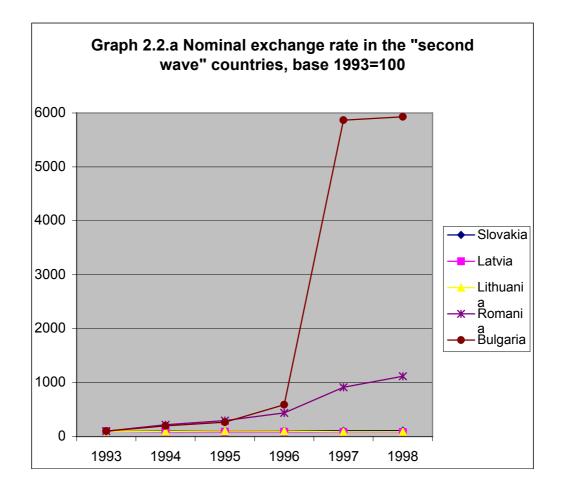
crisis that started in 1997 and reached Eastern Europe in 1998. World market prices were tempered, while an economic contraction added to the deceleration of domestic inflation. Graph 2.1 presents the remarkable convergence in inflation of the first wave countries. Graph 2.1.a does the same for the second wave countries.



Concerning the exchange rate stability criterion, none of these countries is, of course, an ERM member yet, but roughly it can be said that the currency board countries (Bulgaria, Estonia, Lithuania), plus Cyprus, the Czech Republic, Slovakia and Latvia have had relatively stable currencies lately, and that Poland, Hungary and Slovenia have had steady and relatively moderate currency devaluations. Only Romania seems to have experienced serious exchange rate instability recently.

Graph 2.2 presents the nominal exchange rate development of the first wave countries against the ECU (index 1993 = 100). For the development of all Maastricht criteria for all accession countries from 1992 up to the EBRD projections for the year 2000 we refer to the data-overviews in the country profiles in Annex A.





The actual fulfilment of the operational criterion of an independent CB is a controversial question. As already alluded to in the previous paragraph with respect to Bulgaria, Estonia

PE 168.282

and Lithuania, a currency board is by definition an independent organ, but, also by definition, one that does not have the means to engage in open market operations. For the other accession countries it is a fact that their CBs are now assured a great degree of legal independence (in some cases, like Poland and Slovenia, this is even enshrined in their Constitutions). The actual relationship between the CB on the one hand and government *and* parliament on the other, however, can be one of conflict (see Radzyner, O. & Reisinger, S., 1997), with the latter two trying, more or less systematically, to influence the former. Also, in several cases, the monetary financing of government deficits is still permitted.

2.3 **Prospects for meeting Maastricht**

Most of the discussion on the ability of the accession countries to meet the Maastricht criteria has been from the academic world. The EU has not made any predictions on this issue, focussing as they have on the first hurdle of joining the EU, entering the (second stage) of EMU and becoming member of ERM2. These prospects have been discussed in paragraphs 1.1.2 and 1.2.2. Most accession countries have given the impression that meeting the EMU criteria is well within their possibilities given the positive strides they have made in recent years. For individual country opinions of meeting Maastricht see paragraph 5.3 on the various Euro area entry strategies and/or the country profiles in Annex A. Recently, on the advice of the academic community and publications for example by the IMF (Masson, 1999) the opinions of accession countries have been shifting somewhat. The ability to reach Maastricht is still not cast into doubt, the benefit to their economies is.

2.3.1. Views of independent commentators

• **Comment 1:** The mostly positive convergence figures must be interpreted very carefully. The transition process is still ongoing in virtually all the former centrally planned economy countries³⁶. The twin long-run processes of transition and of catching-up with the EU average development level imply **both** higher average domestic inflation and interest rates for the time being. This, in turn, will imply continuous pressures for the appreciation of the real exchange rate.

The reasons for these statements are the following. **First**, the transition process implies that prices (for example in the housing sector) are still finding their equilibrium (i.e. higher) values. This means structural inflation in transition economies is probably higher than in the Euro area even at the same stage in the business cycle. **Secondly**, the catching up with EU levels of productivity and income causes the so-called *Balassa-Samuelson* effect. According to this process, above "world level" inflation in the accession countries is related to the increased productivity in the tradable sector of an economy, where the prices tend to equalise with world levels, while below average increases in productivity in

³⁶ Throughout this study we shall concentrate on questions related to the transition economies of Central and Eastern Europe. This is justified by the fact that much more studies and information have been produced about these economies than about Cyprus and Malta, which are economies nearer EU/EMU standards with a consequent smaller need to adjust (according to the latest Country Opinions, they actually have "already met the criteria of a functioning and competitive market economy"). Also, as pointed above, the actual integration of Cyprus hinges on the –unlikely, in the near future- solution of the question of the division of the island. Finally, both these island states are –and will remain- utterly marginal from both the points of view of economic and monetary integration.

the non-tradable sector generates above "world level" inflationary pressures. This positive domestic inflation differential generates a real appreciation of the national currency if the nominal exchange rate is pegged to a low-inflation country. Foreign capital inflows are attracted both by the increasing productivity in the tradables sector and by the higher interest rate level needed for keeping inflation in check. This in turn ends up strengthening the real appreciation process³⁷.

Contrary to the perception of some authors, the Balassa-Samuelson effect doesn't disappear with the constitution of a common currency area: this is a mistaken conclusion. The Balassa-Samuelson is a real phenomenon with real and nominal effects and, if we deal with different currency areas, one additional nominal effect, namely, the exchange rate imbalances. The configuration of a common currency area eliminates this nominal effect, but not the others (capital, wage and labour adjustments still have to happen). One of the reasons for the persistence of substantial inflation differentials in long established common currency areas like the U.S. is exactly the differential productive growth between economic sectors in different U.S. regions. In common currency areas where a "periphery" is catching up with a "centre" characterised by higher productivity levels, and therefore higher income and price levels -a situation that describes not only the current but also the future status of the Euro area- such persistence inflation differentials are all but inevitable. In fact, the ECB has already calculated the persistence and importance of the Balassa-Samuelson effect in the current Euro area³⁸ According to the ECB estimations, 70% of the observed Euro area inflation differential could be attributed to the Balassa-Samuelson effect.

- **Comment 2:** According to most commentators the inflationary pressures in these countries could be subdued by these countries if they really wanted to. This would, however, damage the growth potential of these countries unnecessarily.
- **Comment 3:** The reduction in inflation in the last two years has partly to do with the downturn in these economies caused by the Emerging Markets crisis.
- **Comment 4:** Concerning the budgetary criteria, the apparently healthy fiscal situation probably masks the fact that fiscal definitions of the accession countries are not always synchronised with those used by EU members. The definition of fiscal deficit in the Maastricht treaty includes deficits of lower levels of government and social security schemes. As government transfers have been shifted in recent years in these countries to social security schemes, the deficits of these schemes have also been cut away from the central government budgetary situation. This, added to unavoidable future financial commitments for structural reforms and investments, and coupled with still incomplete tax reforms, could indicate a future worsening of the fiscal position in the accession countries. Finally, in several countries one-off privatisation revenues have helped improve the budgetary situation. See the country profiles in Annex A for country specific information.

³⁷ See, among others, Backé, P., 1998 and Backé, P., and Radzyner, O., 1998.

³⁸ See ECB, pp 42, 1999(a): "...the principal factors underlying potential inflation differential are, apart from a number of erratic factors, price level convergence (due both to market integration and to the Balassa-Samuelson effect) and cyclical divergence".

• Comment 5: Transition countries have shown great perseverance in the initial stabilisation of their economy in keeping their exchange rate pegged against currency baskets or by using currency board arrangements (CBA's). As the transition process matures (Poland, Hungary) transition countries feel more and more the importance of freeing up their exchange rate or accepting a moderate rate of inflation to avoid overvaluation. It is, in our opinion, highly significant that a country like Hungary, which has progressed furthest in the transition process and which, according to all sources, is likely to be the first CEEC to enter the EU, fails on all the Maastricht criteria, while a slow reformer such as Romania or countries with a CBA (Bulgaria, Estonia, Lithuania) perform better on 'Maastricht'.

Rather than viewing these latter countries as early candidates for the Euro area, they should be viewed as still being in the stabilisation phase of transition. Having half an eye (or more) on the Maastricht criteria as many of the accession countries have stated they have, could be detrimental for their transition effort, as we will discuss in further chapters. Having had a stable exchange rate link with a Euro-currency (basket) could actually, at the present time, mean for several of the accession countries that the country has still quite some way to go in the transition of its economy. Only when mature transition economies have done quite some catching up with EU productivity levels would a return to a pegging arrangements be beneficial for investment and trade flows to these countries.

• **Comment 6:** The attainment of the EMU macro convergence criteria for the new entrants has to be seen as a set of mid-term goals, to be achieved in a sustainable and permanent basis, adequately supported by micro reforms. In practice, the convergence to these benchmarks will be reached through paths that will be largely national, and, therefore, specific to each of the candidate countries.

Summarising, independent commentators on the whole do not dispute the ability of the accession countries meeting the Maastricht criteria in the medium term, but they do question whether this would be a wise thing to strive for.

3. The implications of EU economic and fiscal policy coordination for the accession countries

3.1 Present framework for EU policy co-ordination

Economic and fiscal policy co-ordination within the EU received a major impetus with the Maastricht Treaty of 1992 and the subsequent Stability and Growth Pact (SGP) of 1997. The main reason for seeking closer policy co-ordination has lain in the fear that lax fiscal policies in some of the Member States, and to lesser extent rigid labour markets, might undermine the unified monetary policy to be realised in the third phase of EMU. Or, put differently, without economic and fiscal policy co-ordination monetary policy might under certain circumstances be forced to be tighter than would be beneficial for the Euro area as a whole. To ensure fiscal discipline in all the EU Member States the following mechanisms in the field of economic and fiscal policy co-ordination have been agreed upon:

- ➤ the broad economic policy guidelines
- \succ the convergence programmes
- the excessive deficit procedure (including the stability programs)

Box III gives an overview of what these policy co-ordination mechanisms comprise. On the fiscal side these mechanisms basically enforce a continuation, and in certain respects a further tightening, of the Maastricht convergence criteria.

For the coming years it is not expected that major new *formal* initiatives will be taken with respect to economic and fiscal policy co-ordination. Some of the larger EU Member States (France and Germany) and a number of Commission officials have, however, in the past few years indicated their desire to expand economic and fiscal policy co-ordination, *within the present framework*, from the level of discussions on convergence and avoidance of excessive budget deficits to a more centralised form of economic and fiscal policy within the Union. The necessity of further centralisation of economic policy is, however, still a point of debate in the academic literature. Furthermore, the willingness of Member States to further abdicate sovereignty in this field can be seriously doubted.

Once accession countries enter the EU they will have the same position with regard to policy co-ordination as Greece and Sweden (the so-called 'countries with a derogation with regard to EMU').³⁹ This position implies that they will have to treat economic policies 'as a matter of common concern' and adhere to the procedures for economic policy co-ordination of the EU. More specifically, the Maastricht Treaty specifies that these countries will have to progress towards the fulfilment of the Maastricht criteria and, furthermore, under the conditions of the Stability and Growth Pact, that they will have to *endeavour* to avoid excessive deficits. On this latter point the conditions for Euro area Member States are more severe: these countries are *obliged* to avoid excessive budgetary deficits and should strive under normal economic circumstances for a situation of close to budgetary balance (or

³⁹ The position of Denmark and the U.K. is governed by their opt-out clauses with regard to EMU in the Maastricht Treaty.

surplus) in their public finances.⁴⁰ Furthermore, for Euro area Member States sanctions can be imposed if countries, after a certain procedure, have not implemented measures to straighten out their fiscal position.

Box 3. Economic and Fiscal Policy Coordination in the EU

There are basically three mechanisms for economic and fiscal policy coordination and surveillance in the EU.

- the broad economic policy guidelines. These have been issued by the European Council every year since 1993 and present the Member States' consensus opinion on macroeconomic and other structural economic policies in the medium-term. The European Commission reviews each year the implementation of the guidelines by the Member States in its Annual Economic Report.
- the convergence programmes. Before the start of stage III of EMU all Member States without an opt-out clause were obliged to report regularly on their convergence towards meeting the Maastricht criteria. These reports contained the economic strategy the country in question intended to pursue to attain convergence.

The Stability and Growth Pact has made the yearly presentation of convergence programmes obligatory for all Member States with a derogation with regard to EMU. *This obligation would thus fall on all of the accession countries once they enter the EU (and are not yet in the Euro area).*

the excessive deficit procedure. This procedure entails that Members States avoid 'excessive deficits', which condition embodies both the 3 % deficit limit and the 60% public debt criterion of the Maastricht Treaty. If countries do experience an excessive deficit they are obliged to take corrective measures or, eventually, for Member States in the Euro area, face sanctions imposed by the European Council. Since the SGP, the procedure has been augmented, again only for Euro area members, with a surveillance system concerning medium term fiscal policies. An element of this system are the yearly stability programs which each Member States participating in the Euro area is obliged to fiscal convergence. As noted, the SGP further obliges Euro area countries under normal economic circumstances to strive for a situation close to budgetary balance (or surplus) in its public finances.

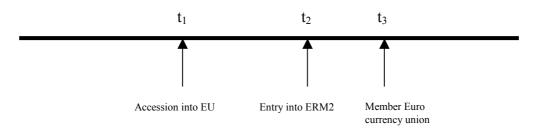
Based on the above, the conclusion seems justified that the present policy co-ordination framework, would put the accession countries, once they are EU members, into a position in which convergence to the Maastricht criteria (nominal convergence) becomes the focal point of their economic policies. On one hand, this conclusion highlights the importance for the accession countries to have made substantial progress in real convergence of their economies (transformation to a market economy, catch up in income and productivity levels) before entering the EU. The reason for this statement is that, as

⁴⁰ The reason the SGP calls for fiscal positions to be close to balance or in surplus in normal times is to provide room for automatic budgetary stabilisers to operate over the economic cycle. In this way, national governments should be able to achieve an adequate degree of stabilisation on their own with the traditional national instruments for automatic stabilisation.

discussed in chapter 2, nominal convergence may slow down, or lay a burden on the process of real convergence.

On the other hand, in our view, political pressures (both from the EU and the accession countries themselves) might well push candidate countries for early accession into the EU before real convergence has progressed sufficiently (the scenario of continued transition within the EU). It should be considered whether, under those circumstances, the present EU economic and fiscal policy framework, with its focus on nominal convergence, would be optimal for the economic development of the countries concerned. Perhaps, for the period between EU membership and entry into ERM2 (see figure 3.1, between t_1 and t_2) the policy co-ordination framework for the accession countries should still be more oriented to economic restructuring issues and less to nominal convergence. Of course, this does not mean that macro-economic stabilisation issues are not extremely important for the transition economy does not always make both price and exchange rate stability feasible, or desirable. This has to do with issues like remaining price liberalisation, inflows of foreign direct investment and real appreciation of the currency through the catch-up in productivity differentials.





Once accession countries enter ERM2 the entry into the Euro area should take a minimum of two years (barring a political decision to give derogations with regard to the ERM criterion). During this period (between t_2 and t_3), the position of the accession countries with regard to EU policy co-ordination requirements will be no different than in the period before ERM2 membership (except for exchange rate policy issues). The question whether the EU policy co-ordination framework is well suited for the accession countries in this period depends on how ERM2 will be used by the accession countries. We discern two basic options for the ERM2 framework:

- ➤ a minimalist option
- ➤ a medium-term linkage option.

In the **minimalist option** ERM2 will only be used as the required two-year period of exchange rate stability necessary for entering into the Euro area. It would seem appropriate with such a relative short-term use of the ERM2 framework that the EU policy co-ordination requirements are fully oriented towards convergence to the Maastricht criteria for entry into the Euro area.

In the **medium-term linkage option** ERM2 could facilitate the exchange rate pegging strategy of the accession country practically from the start of EU membership (t_1 and t_2 could

actually coincide). In this situation ERM2 could possibly last much longer than the minimum of two years. The ERM2 framework could accommodate on the one hand the need of the accession countries for a nominal anchor to stabilise their economies and on the other provide enough flexibility for regular exchange rate realignments to cope with changes of the real exchange rate. In such a situation again an extreme focus of the EU policy co-ordination framework towards nominal convergence could be detrimental to economic performance of the accession countries. How ERM2 will be used will probably differ from country to country. In chapters 4 and 5 we will discuss further possible exchange rate strategies for the period between EU accession and entry into the Euro area.

Once the accession countries enter the Euro area they will have to comply with all EU policy co-ordination procedures spelled out in the Maastricht Treaty and the SGP. As we have seen, especially the excessive deficit mechanism for Euro area members, is more stringent than for member states with derogation. Entry into the Euro area might, however, in theory actually ease convergence pressures on the accession countries' transition process. The dilemma between exchange rate and price stability which transition countries experience under a pegging arrangement is taken from the national macro-economic policy agenda. The accession countries could be free to experience somewhat higher inflation levels induced by transition and productivity catch-up phenomena, as long as fiscal indicators were not affected. The ECB can only take overall inflationary conditions in the Euro area into account for its monetary policy decisions. This line of reasoning may lead accession countries to the conclusion that it might be optimal for them to let the ERM2 period be as short as possible. From the standpoint of stability of the Euro and credibility of ECB monetary policy inflationary pressures clearly should not be too divergent.

3.2 Policy Co-ordination in the pre-accession phase

Before the accession countries enter the EU they have no obligation to meet the Maastricht criteria. This is clear from the Copenhagen criteria which only state that the candidate countries should 'adhere to the aims' of economic and monetary union. In the Accession Partnerships it has been agreed that countries do start making headway, however, towards convergence with the sound economic conditions prevailing in the Euro area.

The pre-accession instrument for economic policy dialogue between EU and individual accession countries, based on the Accession Partnerships, is the so-called "*Joint Assessment* of Medium-Term Economic Policy Priorities". The Joint Assessments serve as a preparatory exercise for the accession countries in the area of economic policy co-ordination. Joint Assessments are drawn up by the accession countries in close co-operation with the European Commission. So far, only a few countries have completed their first Joint Assessment.

The Joint Assessments aim to review regularly the medium-term economic and monetary policy strategies of each candidate with a focus on satisfying the Copenhagen criteria for membership of the Union. In theory they should deal with transition policies and macro-economic stabilisation, not with convergence to the Maastricht criteria.

In fact, according to academic sources, various policy statements and the texts of the Joint Assessments themselves, the Maastricht Criteria have already played an important role in forming the macro-economic policies in many of the accession countries over the past few years. The Commission has, significantly, felt it necessary to express on numerous occasions that 'Maastricht' is not part of the entry conditions into the EU. The reason for the influence of the Maastricht criteria may lie in their attractive simplicity or in the aim of accession countries to make an early entry into the Euro area possible.

EMU AND ENLARGEMENT

4. Exchange rate linkages with the Euro area

The relationship of the set of monetary and fiscal targets in the Maastricht criteria with the exchange rate regime is one of dependence and concordance with the macro setting of reforms. The exchange rate regime is *not* an independent aim by itself, and cannot be seen as such. This is not only the position of the Commission, but of the national governments themselves (among others, see EC, 1999(a) and 1998; Nemenyi, 1998; Polanski, 1999). As such, the analysis of the subject separately from the wider macro framework is to some extent artificial.

However, in this chapter we will focus on the development of the exchange rate linkages of the accession countries up to the present and discuss the rationale behind them (paragraph 4.1). Consequently we will go into the question how exchange rate linkages might evolve as convergence to full EMU membership nears (paragraph 4.2). We will do this by discussing the medium term exchange rate strategy of Poland and Lithuania. In paragraph 4.3 we draw some general conclusion

4.1 Development of accession country exchange rate linkages

As a general rule, most transition economies adopted, at some point early in their transition process, macroeconomic stabilisation programmes⁴¹ with some form of exchange rate anchor (usually a basket of currencies comprising at least the Dmark and the dollar). Many of these initial peg strategies where later abandoned or softened, in face of growing external imbalances, either relatively swiftly, as was the case in Poland, or spectacularly, in the midst of a speculative attack, as was the case in the Czech Republic⁴².

It must be noted that the learning curve of these countries (some of them newly independent – namely, Estonia, Latvia, Lithuania, Slovakia and Slovenia, which had to build national institutions virtually from scratch, including their monetary authorities) has been very steep: hardly ten years ago, the currently universal two-tier bank structure was not only absent, but irrelevant. The CB, for all practical purposes, was a department of the Ministry of Finance, and its only real function was to produce the means of exchange to allow the trading of plandetermined quantities among private consumers⁴³.

The development of the institutions able to carry out monetary policy actions, as well as the development of the necessary instruments to carry them out took time. Initially, more blunt direct monetary control instruments were used (credit ceilings, interest rate caps, high reserve requirements, "moral persuasion", etc.) since:

⁴¹ These macro programs encompass, of course, several different policy actions. On the monetary side, one of the main initial concerns was the elimination of the monetary overhang: centrally planned economies traditionally generated a surplus of legal tender, given the limited amount of goods and services available for consumption. A substantial part of this overhang was held by households outside of the former mono-bank financial system. The liberalization of prices and external trade, besides the macro balance and allocative micro-efficiency issues involved, aimed at eliminating part of this surplus.

⁴² For a stylised description of the general trajectory, see Halpern and Wyplosz (Halpern & Wyplosz, 1996).

⁴³ Among the state enterprises and government departments, not even this means of exchange function of money was necessary: barter –inter-unit transfers of goods and services for settlement- was often used instead.

- i) the monetary authorities themselves hadn't learned how to use modern, so-called indirect monetary policy tools.⁴⁴
- ii) the transmission channels for the proper use of those tools namely, working financial markets, and a banking system with 'hard budget' constraints where absent in these economies (and, still are today, but to a much lesser degree) and;
- iii) the lack of stable relationships among the CB's target variables and its instruments.

Only very recently market-based indirect monetary policy instruments – repos, Lombard facilities, government securities auctions- have been introduced⁴⁵.

The primary goal of a central bank is to maintain price stability. This can be accomplished through direct or indirect strategies. To try to meet an inflation target directly assumes some sort of stable links between the final target and a monetary aggregate(s), which the central bank attempts to influence. These aggregates are the so-called intermediate targets, while inflation usually is the final target. There are two possible types of indirect monetary strategies, one based on a stable rate of exchange between the domestic currency and the currency of a low inflation country, and the other based on controlling the growth rate of a domestic money supply aggregate.

The use of any type of pegging regime (simple peg, basket peg and crawling peg) is, therefore, equivalent to the use of indirect inflation targeting. If, however, the peg becomes a goal by itself (and no longer the underlying inflationary target), pegging arrangements can become unsustainable. The usual breakdown in pegging arrangement follows the general pattern of initial large inflows of foreign capital (thanks in part to the stabilisation of the economy made possible by the peg). The ensuing economic boom causes the real exchange rate to appreciate which process is resisted by the nominal peg. As inflationary pressures build (helped by unchecked growth in the money supply induced by the capital inflows) undervaluation reverts to overvaluation and sentiment towards the currency usually changes abruptly. Capital outflows and weakened competitiveness make abandoning the peg unavoidable. As Tinbergen showed over forty years ago, having more targets than instruments never works in economic policy⁴⁶. It is usually considered that only one type of exchange rate strategy is truly sustainable from a long-term perspective: the free float⁴⁷. All other strategies are unstable when faced with exogenous shocks, ultimately collapse and therefore require timely adjustment by the monetary authorities.

The extreme case of the currency peg strategy is the currency board arrangement (CBA), which requires the official foreign exchange reserves to be - at least- equal to the amount of domestic currency issued (at a given *fixed* exchange rate): under a strict CBA, there is no actual domestic

⁴⁴ It should be noted that even in Western Europe these policy tools were only slowly and progressively introduced between the 1950s and the 1990s. In the Netherlands, for example, where the need for these tools were limited due to the very tight peg to the Dmark, open market instruments were only developed in the late 1980's, and not much used thereafter.

⁴⁵ It is estimated that, on average, only three years seperated these two distinct phases: it was a much faster process that its counterpart in Western Europe (See Radzyner & Riesinger, 1998).

⁴⁶ See Tinbergen, J., 1952.

⁴⁷ A full fixing (like the Euro) merges the national currency in a composite currency that floats itself: in these terms, a full fixing to the Euro is actually a floating regime, from the point of view of the aggregate.

monetary policy, since both the monetary base and the level of interest rates are endogenously determined.⁴⁸ CBA's are viewed, notably by the international financial institutions, as the most stable form of pegging arrangement. Usually, the choice of a CBA is linked to the need to give credibility to a stabilisation policy in a hyperinflation situation. It is also, as in the case of Eastern Europe, connected to the inexperience in conducting monetary policy of the monetary authorities.

Among its stated advantages, a CBA entails automatic balance-of-payment adjustments, essentially in the same way that a gold standard exchange system would operate: in case of a deficit in the capital and current accounts, money supply is reduced, causing, *ceteris paribus*, the interest rate to rise, which will lead to i) (sharply) reduced domestic activity and imports, and to ii) an increase in foreign capital inflows,). It should also result in reduced inflation expectations (depending on the anchor currency chosen). Finally, it should also, in principle, encourage sound fiscal policy (the dismissal of monetary policy leaves fiscal measures as the only counter cyclical macroeconomic tool)⁴⁹. Among its drawbacks, a CBA means not only the loss of monetary policy as a counter cyclical tool, but the CBA itself is actually *pro-cyclical* in nature (economic booms and troughs are reinforced). The lack of lender-of-last-resort (LLR) features of the CBA by the monetary authority increases both the short run probability and effects of financial sector crises (regardless of the beneficial long run effects caused by the reduction of moral hazard).

The most fundamental problem of a CBA, nevertheless, lies in the question of real misalignment, caused by different inflation rates between the CBA country and the country to which the currency is pegged. Usually, the growth of such imbalances is what brings about the demise of a CBA (helped along by speculative attacks). Such real exchange rate misalignments are a general disadvantage of all pegging arrangements, although realignment is a much less problematic adjustment for a currency peg than for a Currency Board Arrangement. Crawling pegs are the most flexible forms of pegging arrangement. The various forms of currency pegs thus imply a choice between stability and flexibility.

The applicant countries have, at the moment, several different ways of linking their national currencies to the Euro area. We will make a condensed presentation of those different linkage strategies and how they came about (see Table 4.1). The current arrangements are:

⁴⁸ Modified CBAs, though, may perform limited monetary policy actions, through the use of some types of CBlike instruments, like lender-of-last-resort (LLR) facilities or limited open-market operations.

⁴⁹ It must be noted that this last feature is not automatic, since the CBA does not endogenize fiscal policy.

Country Currency		Current Exchange Rate Regime	Modifications as from Jan.1999	Expected Future Exchange Rate Regime	
Bulgaria	Lev	Since July 1997: <i>Currency Board</i> <i>regime. Peg to the DEM.</i> 1000 BGL=1 DM.	<i>Peg to the EUR.</i> 1 EUR ≈1955, 83 BGL. New Leva (=1000 old Leva) introduced on July 1, 1999.		
Cyprus	Pound	Since1992: <i>Peg to the ECU</i> with a central rate of 1,7086 and fluctuation bands of +/-2,25%.	<i>Peg to the EUR</i> with fluctuation bands of +/- 2,25%.		
Czech Republic	Koruna	Since May 1997: <i>Managed float</i> , with informal shadowing of the DEM. Exchange rate target of 17 to 19,5 crown per mark.	Shadowing of the EUR.	"Closer links of our currency with the Euro" (CNB).	
Estonia	Kroon	Since 1992: Currency board regime. DEM peg.	EUR peg.	Abandon currency board by 2000?	
Hungary	Forint	Since March 1995: <i>Crawling basket</i> <i>peg</i> (30% USD, 70% ECU until 1996 and DEM afterwards), with fluctuation bands of +/- 2,25%.	Crawling basket peg (30% USD, 70% EUR).	<i>Reduced rate of crawling</i> <i>by 2000. EUR peg</i> by mid 2001.	
Latvia	Lats	Since October 1993: Peg with the International Monetary Fund's (IMF) SDR.		Eventual change from SDR peg to EUR	
Lithuania	Litas	Since 1994: <i>Currency board</i> regime (Peg to the USD).		EUR peg by mid 2001.	
Malta	Lira	Since 1989: <i>Sliding basket peg</i> with no intervention bands, to ECU, USD, GPB (64.8%, 21.7%, 13.5%)	<i>Sliding basket peg</i> of EUR, GBP & USD (56.8%, 21.6% and 21.6%)		
Poland	Zloty	1991-1999: crawling peg against DEM, USD, GBP, FRF, CHF	<i>Sliding basket peg</i> (EUR 65%, USD 35%).with intervention bands (+/-12.5%)	Free float before entry in ERM II.	
Romania	Leu	Since 1991: Managed float.		50% EUR/USD peg?	
Slovakia	Koruna	Since October 1998: Managed Float.		Slovakia announces a possible EUR peg (where)?	
Slovenia	Tolar	Since 1992: <i>Managed float</i> with informal shadowing of the DEM.		Intention to join ERM II at the same time or after EU accession.	

Table 4.1 Exchange	Rate Linkages	of the Accession	Countries

Source: IMF, EU, Erste Bank.

4.1.1. "First Wave" Countries⁵⁰

Cyprus

Cyprus used a peg regime to link its Pound to the ECU from 1992, with fluctuation bands of $\pm 2.25\%$. In early 1999, this peg was transferred to the Euro. After a decision taken only in 1995, the Central Bank of Cyprus (CBC) replaced in 1996 its main direct monetary instrument - high liquidity ratios (20%) - by a uniform reserve requirement of 7%. The main tools for monetary policy then became the newly introduced repos/and reverse repos and standing liquidity facilities⁵¹.

⁵⁰ As stated in chapter 1 the distinction between first and second will probably (formally) disappear by confirmation by the European Council at the Helsinki Summit of the EU new enlargement strategy, including substantive negotiations with all Accession Countries.

⁵¹ Cyprus, a former British dependency, also had a 9% cap on interest rate, introduced by the Metropolitan Government in 1944, to "protect farmers from usury". The island nation also has a highly deregulated offshore financial centre, which will have to brought in line with EU prudential regulations.

Czech Republic

The Czech Republic's Koruna followed a peg to a DEM/USD basket until May 1997, which it was then forced to abandon after a speculative attack on its currency. The CNB (Ceska Narodni Banka or Czech National Bank) follows today a "dirty floating regime", informally shadowing the DMark, while officially targeting the domestic inflation rate⁵². As of the beginning of this year the Euro has become the informal target.

Among the Eastern European countries endowed with a CB, the Czech Republic can be singled out for its ability to hold on to a fixed exchange rate regime for a record period of time. The CZK held its basket peg in a very narrow +/- 0.5 band from December 1990 until February 1996 (when the bands were extended to +/- 7.5%). The system survived the Czechoslovakia partition of early 1993 without disturbances.

The monetary policy intermediate target evolved from the domestic credit volume target (1990) to a net domestic asset in the banking system target (1991/92), to, finally, a M2 (money and quasi money) "corridor". The initial phase of blunt direct policy instruments (rate and credit ceilings) lasted for only two years, essentially ending by October 1992.

The initial choice of a "nominal anchor" foreign exchange regime was actually defined by the stabilisation program jointly designed with the IMF in 1990, with the peg being set after a substantial cumulative "entry" devaluation of 95%. This actually explains the longevity of the peg: the devaluation *deliberately* substantially undershot the "equilibrium" entry level, creating a "cushion" that permitted a persistent real appreciation of the Koruna to be absorbed without changing the parity. The negative effects of this were i) a very high initial adjustment contraction of the GDP – a 16% fall in 1991 - and ii) the undervaluation "cushion" reduced incentives to real adjustment, with the mounting pressures spectacularly exposed by the currency crisis of 1997.

Classically, the violation of the uncovered interest rate parity condition led to the increase in short term foreign capital inflows between 1993 and 1995 (when they reached an amazing 17.4% of the Czech GDP), leading to equally classical and costly sterilisation interventions by the CNB (the costs were estimated to equal 0.5 of GDP in 1995 alone) and the subsequent fall of the inflows in 1996-97, when the situation was perceived to be increasing unsustainable, finally leading to the breakdown of the system.

Estonia

Estonia has a currency board system administered by the Eesti Pank (Bank of Estonia, BoE) which linked its Kroon to the Deutsch Mark by a rate of EEK 8 to DEM 1. Starting from 1

⁵² The CNB has indicated several times that the integration of the Koruna in the Euro framework is one of its aims. Nevertheless, the domestic situation, since the crash of the currency in 1997, is clearly its main short run concern. As an aside, the Czech Republic is a good example of the fragility of apparently positive macroeconomic developments in a transition economy that lacked adequate micro foundations. As was so elegantly put by Buch, C., the micro weakness of the Czech position was "... for all too long hidden behind a curtain of macroeconomic success" (see Buch, C., 1999).

January 1999 the Estonian Kroon was fixed against the Euro, at the same conversion rate of the DM in the common currency⁵³.

When adopting a CBA in mid-1992, as a component of a stabilisation and reform package, Estonia's main aims were stability and credibility. The Ruble was replaced by the Kroon. The new, two-tier banking system was centred, from the very beginning, around a currency board type of monetary authority. Its main function is the acquisition of hard currency in the Interbank forex market. Nevertheless, it also has some monetary policy tools: central bank bills (issued since 1993, but in very small amounts), (low) reserve requirements and (unused) standing deposit facilities. No LLR instruments are available, and the result of the 1992/94 banking crisis was that the number of banks operating in the country was reduced to a third of its original figure. Capital movements were fully liberalised already by late 1993.

Due to increasing capital inflows (parallel to an increasing trade deficit) and an economy near overheating, the real exchange rate has experienced that familiar peg phenomenon, a substantial real appreciation. The lack of a more sophisticated set of macro economic policy tools, which could enable the monetary authority to cool down the economy and achieve a sustainable external balance places doubts on the long-term prospects of the CBA.

Hungary

The Hungarian Forint is, since 1995, in a crawling peg with a variable pre-announced devaluation rate (currently of 0.4% a month) towards a DEM/USD basket (with weights of, respectively, 70% and 30%), within a +/- 2.25% intervention band. This basket has been converted, since January 1, 1999, into an Euro/USD one, with the same relative shares. The MNB (Magyar Nemzeti Bank or National Bank of Hungary (NBH)) and the Hungarian Government have already announced their intention to switch to a full (100%) Euro crawling peg by January 1, 2000 (See MNB, 1998).

The two-tier banking system was established already in 1987 (Hungary was an early reformer), but the current legal framework for the NBH was introduced in 1991 (with several additions since). It defined the NBH's aims as safeguarding the internal and external purchasing power of the Hungarian currency. This implied the problem – clear between 1991 and 1994, the first phase of the transition - of too many final goals for monetary policy: inflation control or external balance. In practical terms, policy emphasis shifted from one to the other. This problem was compounded by a postponement of fiscal adjustment. When fiscal deficit reached 9% of the GDP in 1995, the situation became unsustainable, resulting in the adjustment program of March of that year. This also caused the clear selection of *price stability* as the ultimate goal of monetary policy, with the nominal exchange rate being used as an intermediate target: the Forint was devalued by 9% and the current pre-announced crawling band system introduced, as a replacement of the previous adjustable peg to a DEM/USD basket (with a 50%/50% composition).

The pre-announced devaluation aims to undershoot forward-looking inflation expectations, taking into consideration productivity improvements and underpinning desinflation. The sustainability of such a regime, of course, depends on the maintenance of fiscal balance and on a sensible wage policy.

⁵³ The Eesti Pank, in its last "Statement of the Board" before the introduction of the Euro, dated 10/12/98, declared that the introduction of the Euro and the related change of reference currency for the peg had no other implications in terms of monetary or exchange rate policy.

Malta

Malta uses a peg regime, through which its Lira is linked, to a basket made of the ECU, the USD and the GBP, with weights of 64.8%, 21.7% and 13.5%, respectively. Starting in 1999, the Central Bank of Malta (CBM) changed the basket's composition to the Euro, the USD and the Pound Sterling, with weights of 56.8%, 21.6% and 21.6%, respectively (the decrease in the Euro and the increase in the GBP reflect the fact that the ECU also incorporated that currency in its composition). There are no formal intervention bands.

The Central Bank of Malta (CBM) was created after the island achieved independence from the UK in 1964, after the model of the Bank of England, and started operations in 1968. As a fully fledged CB, it has the usual set of indirect policy tools: open market operations (its main policy instrument), reserve requirements (5%), discount loans, etc. Some exchange controls in capital flows still remain.

Poland

The Polish Zloty is at the moment on a crawling-peg against a basket of currencies, which was modified in early 1999 into a Euro/USD basket (the former basket included the Deutsch Mark, the American Dollar, the Pound Sterling, the French and Swiss Francs), weighted with, respectively, 65% and 35%. Currently, this peg has – widened - bands of +/-12.5 and a – reduced - devaluation rate of 0.5% per month.

The choice of a peg exchange rate regime in Poland was linked to the need to fight hyperinflation in the country in 1989/90 (i.e., the monetary/exchange rate policy was a part of a short-term stabilisation program), at the moment that the two-tier banking system was introduced into the country. Additionally, the limited nature of instruments available at that time to the NBP (Narodowy Bank Polski or National Bank of Poland) - ceilings, reserve requirements, "moral suasion"- conditioned the choice for this policy option.

A very high liquidity in the banking system – caused by an unexpectedly positive situation in the balance of payments and the government budget- led to the imposition of very heavy reserve requirements of 30% in 1990 (the registered trade surplus was also a result again of the substantial undershooting of the "entry level" exchange rate chosen for the initial peg with the USD in 1990). Nevertheless, the sharp economic downturn characteristic of the initial stage of transition, experienced by Poland in 1991, led to another devaluation in May of that year and to the introduction of a crawling peg of the PLZ to a currency basket (USD, DEM, GBP, FRF, CHF) by October.

The 1992/95 period was one of slow desinflation with a parallel development of monetary instruments: money market operations and refinancing facilities became the most important policy tools. Capital flows were already highly liberalised by 1992. Additionally, the initial fall in GDP turned into sustainable export-led growth by 1993, albeit with high unemployment.

The classical problem of foreign capital inflows and monetary expansion that developed was initially dealt with by the combined reduction of the crawl rate and sterilisation operations, and, in May 1995, by the introduction of a crawling band regime with +/-7% intervention bands, increasing the ability of the NBP to pursue an active monetary policy while retaining the anchor features of the regime.

Slovenia

Slovenia uses a float system for its Tolar (created in 1991), administered by the Bank of Slovenia (Banka Slovenije, BoS), with the BoS targeting a domestic money aggregate (M3: money, quasi-money and time deposits), and informally shadowing the DEM.

This set-up has been successful so far (in spite of widespread indication schemes in the country, especially of wages and interest rates⁵⁴), delivering both desinflation and external balance, with only minor exchange rate adjustments: during 1996/97, the Tolar experienced a nominal depreciation of 6.9% to the DEM. The currency stability is, in the view of Slovenian authorities, due, in part, to the restrictive legislation concerning capital inflows.

The BoS is a fully fledged CB, created, as an independent entity, after the separation of the country from the Federal Republic of Yugoslavia in the early 1990s (it already existed even before independence, since the former Bank of Yugoslavia actually operated as a federation of regional central banks, uncannily similar to the ECB.

4.1.2. "Second Wave" Countries⁵⁵

Bulgaria

Bulgaria uses a currency board regime, which linked its Lev to the DEM up to the end of last year. It was introduced as part of a one-year stand-by IMF programme in the Spring of 1997, which aimed to bring macroeconomic stabilisation to the country (one of its results was to almost immediately bring hyperinflation down from over 1,000% a year to around 5%). Starting from January 1999, the anchor currency of the arrangement became the Euro.

Bulgaria went through a conventional transition stabilisation programme in the early 1990s, which proved to be unsuccessful: neither disinflation nor external balance was reached. As a result of that, the IMF started to press the Bulgarian authorities, already by November 1996, to introduce a CBA, against the initial opposition of a sceptical BNB (Bulgarian National Bank). With the worsening of the crisis by the spring of 1997, this plan was finally accepted, as a part of a comprehensive package of stabilisation reforms (including fiscal consolidation and wage and price reforms), and implemented by mid-1997. The CBA was installed upon the modified structure of the BNB, who phased out all its monetary operations, retaining only the minimum reserve requirement tool. The CBA-"entry" rate of the Lev was 1.000 to 1 DEM.

Broadly speaking, the short-lived CBA experience in Bulgaria is so far successful: inflation has been substantially reduced, external balance has been achieved and the economic contraction seems to have bottomed out. Due to the perceived fragility of the situation, though, no serious planning concerning the replacement of the CBA has yet been developed.

⁵⁴ These interest rates are capped, the ceiling being set by a cartel of banks: see Pautola, 1998.

⁵⁵ Again, as noted in footnote 50, the status of this group of countries is likely to change at the Helsinki summit.

Latvia

Latvia uses a peg regime, through which the Lats, the currency which replaced the temporary Latvian Ruble or "Rublis" (which was the country's first step to monetary independence from the "Ruble Zone", and lasted from May 1992 to October 1993), is linked to the IMF's fiduciary account unit, the Special Drawing Rights (SDR, which is actually a basket of currencies of IMF member countries). The SDR's weights actually roughly reflect Latvian external trade composition (only a third of its foreign trade is with the Euro area), but another reason for this choice is the fact the creation of the Latvian currency was one of the results of the IMF-backed stabilisation programme of 1992 (see Nissinen, 1999). There are no immediate plans to change this arrangement (see Repse, 1998).

The Bank of Latvia (Latvijas Banka), BoLa uses the exchange rate peg to the SDR as an intermediate target and net domestic assets as an operational target. As a fully fledged CB, it has the standard set of indirect monetary policy tools: repurchase agreements ("repos"), a treasury bill market, reserve requirements (uniformly held at the 8% introduced in July 1993), and also LLR facilities, which it chose not to use during the 1994/95 banking crisis, arguably the most severe of the wave of Baltic financial sector crisis in the first half of the 1990s: the 4 major banks among the 17 that collapsed accounted for 46% of all private deposits, and that in an environment without deposit insurance. The Bank of Latvia decided instead to use that opportunity to introduce sweeping regulatory and prudential reforms to consolidate the financial sector.

Peculiarly, the Latvijas Banka, in spite of deviating from its Baltic neighbors on using a CBA strategy, has emulated one feature of it, namely, aiming to keep near 100% of its domestic liabilities covered by foreign reserves (the lowest point was reached exactly during the banking crisis period, when they reached 60-70%: see Äimä, 1998).

Lithuania

Lithuania uses a modified currency board arrangement, introduced in 1994, which pegs the Lithuanian Litas to the USD. Its monetary authority, the BoLi (Lietuvos Bankas, Bank of Lithuania) has available to it certain types of market based instruments, and it also has a clear strategy to evolve towards a fully fledged CB.

Lithuania, like its two Baltic neighbours, reappeared as an independent state in the early 1990s (in modern times, it had experienced only a brief period of autonomy from 1919 to 1940), with the collapse of the Soviet Union, to which it had been annexed after the military invasion of 1940.

The Rouble was initially replaced, as in Latvia, by an interim coupon currency issued by the newly created BoL, from May to October 1992, and them by the Talonas, which was, on its turn, replaced by the Litas in June 1993. The Talonas, initially in a float regime, lost over 50% of its value between its introduction and April 1993. Some exchange rate stability was regained with the introduction of the Litas. Nevertheless, the government, with the support of the IMF, decided to press for the constitution of an Estonian-type CBA as early as October 1993, against the will and the advice of the BoL. The CBA was introduced in April 1994 – *upon the unchanged administrative structure* of the BoL. Its CBA, therefore, since the very beginning, has to be characterised as a modified CBA, since some CB instruments (like

reserve requirements and short term credit facilities, including for LLR operations: all those tools were necessary and duly used during the great 1995/96 banking crisis) were preserved⁵⁶.

Romania

Romania uses a dirty float regime, with the National Bank of Romania (NBR) intervening in the market to support the Leu in a discretionary fashion.

Slovakia

Slovakia used a peg regime with intervention bands, through which the National Bank of Slovakia (Národná Banka Slovenska, NBS) pegged its Koruna to a basket made of the DEM and the USD (with weights of, respectively, 60% and 40%). The intervention bands had to be progressively widened since the introduction of the regime in 1996, from +/- 1.5% to +/-7.0%. After a series of speculative attacks, the NBS was finally forced to abandon the peg and float the Koruna, in October 1998.

The Slovakian CB was created only in 1992, and entered into operation in 1993, after the break up of the Federal Republic of Czechoslovakia. Its main objective is the stability of the Slovakian Crown ("Koruna", SKK). The exchange rate regime was initially a fixed peg to a basket (USD, DEM, ATS, CHF and FRF, with weights of 49.06%, 36.16%, 8.07%, 3.79% and 3.79%, respectively) in the Czech model, accompanied by a domestic M2 growth target ("supporting economic growth" was added to its list of aims in 1995) as an intermediate target. The currency basket of the peg was modified to USD/DEM on July 14, 1994 (40%/60%).

The period 1993/1994 corresponds to the stabilisation years for the new SKK, with a relatively small devaluation "entry" of 10% in 1993. The set of instruments initially used was more blunt than its Czech counterpart (credit limits, restrictions to the internal convertibility of the currency – which only became "Article VIII" compatible, i.e., convertible according to IMF requirements in October, 1, 1995 - and reserve ratios), in spite of the availability of the discount and Lombard rates and repo and Treasury bill auctions instruments since 1993. In 1996, to deal with the usual problem of capital inflows in peg regimes, reserve requirements were raised to an uniform level of 9%, the SKK bands were widened from 1.5 to \pm 3% and then to \pm 5%.

4.1.3. Overall conclusions

A conclusion of the above review of pre-accession exchange rate regimes is that the specific national choice of linking strategies is influenced by the specific structural characteristics of the applicant countries' economies, like export structure and the susceptibility to exogenous shocks, but also to progress of the transition process.

The CBA strategy is used either by small, very open (trade surpasses GDP in both Estonia and Lithuania) and not very diversified transition economies, whose reliance on external demand makes fast adjustments to international price movements essential, or by countries that

⁵⁶ Almost uniquely among CBAs, the exchange rate of the Litas can be changed by a *Government* decision, albeit one made in consultation with the BoL. This has led some authors to question if the Lithuanian arrangement deserves to be called a CBA at all (see Äimä, 1998).

still need to use the currency board to stop a run-away inflationary process (which was the case of Bulgaria)⁵⁷. The CBA implementation is also usually supported by international financial institutions (namely, by the IMF).

The choice of a pegging anchor or basket usually reflects the trade composition of the country in question (it may also incorporate other considerations, like, in the case of Poland, a large USD-denominated external debt)⁵⁸, and the speed of the sliding and its intervention bands reflect either the dimension of the inflation differentials or the speed of the productivity increase. The use of a float regime, may, in some cases, not be the result of an actual policy choice, or a part of a liberalisation strategy (as in the case of Poland, see below), but it may have been imposed by the markets, due the inability of the country in question to hold on to a peg or shadowing strategies (the cases of Slovakia and the Czech Republic, where, respectively, deficiencies in their macro and micro fundamentals were clearly revealed by the waves of speculative attacks against their currencies), or even to start one (the case of Romania).

4.2 Examples of future developments of the linkage strategies

From a full EMU participation point of view, i.e. for entry into the Euro area, any type of exchange rate linkage arrangement should be seen as a *transitional* one, which raises the question of the "exit strategy". Any such exit strategy has to be credible and sustainable, otherwise, the hard won stabilisation gains achieved can easily be lost. We will now briefly present two examples of country–specific strategies (one for a CB-based system, the other for a CBA structure) and of possible future developments in their current exchange rate linkages.

4.2.1. Poland

Poland, among the countries with a fully fledged Central Bank, has one of the most clearly defined strategies for integrating into the Euro area of all current future entrants⁵⁹. The NBP in its "Medium Term Strategy of Monetary Policy 1999-2003" (see NBP, 1998, (b)) clearly states the middle-run aim of integrating the Zloty into the Euro area, in a process preceded by a progressive widening of the peg bands and the slowing down of the crawl rate (this phase would take place between 1997 and 1999), which should culminate in a temporary floating of the currency (perhaps already by early 2000, according to the latest statements of the NBP), with

 ⁵⁷ Proposals have been made to introduce currency boards in other countries, like Poland (See Freytag, 1998).
⁵⁸ Bénassy-Quéré & Lahrèche-Révil (see Bénassy-Quéré & Lahrèche-Révil, 1998) tried to estimate optimal weightings for currency baskets' pegs for a set of Eastern European, countries taking trade flows and debt compositions into consideration. Their results indicate that the Euro should have a 85% weight in Bulgaria, 89% weight in the Czech Republic, 91% in Hungary, 89% in Poland, 70% in Romania, 76% in Slovakia and 93% in Slovenia.

⁵⁹ Poland is also special in the sense that, being the biggest of all new entrants –as stated in Chapter I, its economy and population surpasses all the other likely "first wave" entrants taken together. It also has to face some of the most difficult reforms of the whole group: for example, the amazingly large share of its work force still in the primary sector (25%, with the proviso that actually only 10% have this sector as their main source of income), and the still partial privatisation process of its economy. Due to this, it will probably be the most complicated integration case in the first wave.

the express objective of assessing the equilibrium value of the Zloty before its final fixing within the Euro framework. 60

This strategy explicitly provides for the abandoning of the peg strategy (due to the limitations described above) and its replacement with a strategy of direct inflation targeting⁶¹ (or, more precisely, inflation forecast targeting) in the inter-twinning period⁶². The NBP's medium-term monetary policy target will be set to reduce inflation to below 4% by the year 2003 (by which date, it assumes, Poland should enter the EU and also a ERM-2-like mechanism), finally joining the Euro area by 2005.

The yearly inflationary target will be defined as a wide-band range, to give greater flexibility to monetary policy if faced with any shocks that may hit the Polish economy⁶³.

4.2.2. Lithuania

For the countries with a CBA-type of monetary authority, on the other hand, the **Lithuanian** case, described by some as a "currency board with exit strategy", is a particularly useful example⁶⁴.

- ⁶¹ Some authors doubt that Poland is ready for the effective use of a DIT strategy (see Christoffersen & Wescott, 1999), due to the lack of stable relationships in the transmission mechanism of monetary policy and to the lack of reliable forecasting of the inflation target (once again, due to the lack of stable relationships among variables in an economy still in a transition process).
 - The choice of a direct inflation targeting (DIT) strategy can be supported by the following arguments:
 - The monetary policy goal is explicit and understood by all economic agents;
 - DIT, by its openness, limits the ability of monetary authorities to implement short-term objectives in the real economy and it allows for public verification of monetary policy directions and the policy effectiveness, thereby enhancing the policy credibility, and, with this increased credibility, it allows for minimising the social cost of inflationary expectations;
 - DIT allows for greater flexibility in applying monetary policy instruments, which enables the CB to tailor its actions to specific shocks;
 - Contrary to a policy based on controlling aggregate money supply, DIT allows for more flexible reactions to changing velocity of money.
- ⁶³ The NBP's Council has decided to set the 1999 target in the range of 8% to 8.5%.
- ⁶⁴ It must be noted that some authors (see Äimä, K. 1998) have a much more negative interpretation of the monetary policy developments in Lithuania and the very institutional design of the Lithuanian monetary authority, linking them to, in essence, a power struggle within the Lithuanian government.

According to this interpretation, the institution of the CBA *increased*, in practical terms, the margin of manoeuvre of the government in terms of economic policy, due to the elimination of a competing centre of authority –the BoL- with increasing domestic standing: this is possible because, almost uniquely among CBAs, the exchange rate of the Litas can be changed by a mere government decision, albeit one made in consultation with the BoL (this has led some authors to question if the Lithuanian arrangement deserves to be called a CBA *at all*: see Äimä, ibid). Such a situation is actually the opposite of the expected outcome of a CBA.

Historically, the institution of the CBA was imposed upon the BoL by a government decision against the Bank's advise, after it had achieved the stabilisation of the Litas and without any real modifications of its internal structure. The high turnover of BoL's Governors *–seven* since its founding in 1990, two of them temporary ones- grants it the lowest score in actual independence among the Baltic monetary authorities,

⁶⁰ Clearly, an assumption of this strategy is that in a floating exchange rate regime the exchange rate will move to its equilibrium value, something which some economist doubt.

The Bank of Lithuania (BoLi) has already started to implement some phased modifications to its CBA to enable it to pursue an active, CB-type monetary policy (see Šarkinas, 1999). Currently, monetary policy in Lithuania is implemented under a modified currency board arrangement.

CBAs are useful in that they provide a credible policy commitment, by means of hands-off monetary policy (which is, in practice, exogenous, since the adjustment process is automatic, and takes place through flows of the reserve currency).

Nevertheless, among their several limitations, they discourage the development of domestic money and capital markets, strictly limit the ability of the monetary authority to act as a lender of last resort (LLR), and its capacity to perform active policy actions (which may be necessary in periods of market instability, as was clearly the case in Eastern Europe after last year's Russian crisis).

The Lithuanian strategy to move towards a full-fledged CB was presented at the "Monetary Policy Programme for 1997-1999", adopted by the Bank of Lithuania in 1997. It has three phases:

- 1st. Phase: Development and introduction of open market operations and a Lombard facility with the currency board still in existence (1997-1999);
- 2nd. Phase: Amendments to the "Law on the Credibility of the Litas" (1999-2000);
- 3rd. Phase: Reorientation of the exchange rate of the Litas to establish a closer relationship with the EU and the EMU (2000-onwards).

Implementation of the first phase had already begun in 1997, when the Bank of Lithuania introduced open market operations on a limited basis. Such operations were designed to be consistent with the limits allowed by the "Law on the Credibility of the Litas", which regulates the operations of the Lithuanian monetary authority⁶⁵.

The Bank of Lithuania has deliberately developed monetary instruments similar to those used by the European System of Central Banks (ESCB) itself. These include:

- i) a reserve ratio, currently set at 10 % of domestic and foreign currency bank liabilities under one year;
- ii) some market-based monetary instruments, namely, "repos" to increase liquidity and deposit auctions to decrease it;

according to the "Cukierman" index. Some of them were dismissed due to direct conflicts with the Lithuanian government (most famously in 1993, when the then Governor refused to allow the use of the BoL profits to finance the government's budget; the following Governor, after an interim administration and already under the CBA legislation, even allowed the use of the BoL's reserves as collateral for loans provided by private banks to the government).

⁶⁵ Obviously, open market actions for macroeconomic aims are not directly applicable under a pure currency board arrangement. Nevertheless, they can be used to reduce short-term interest rates' volatility. They can also be used to help transmit changes in external rates to domestic markets, when institutional factors or imperfections prevent this from automatically taking place.

- iii) a Lombard facility;
- iv) a LLR facility.

During the second stage, the legal framework will be amended, to allow the use of direct discretionary monetary policy. Finally, during the third stage, policy will be oriented towards the integration of Lithuania into the EU. This final stage is not likely to begin before the year 2000. At that point, the Bank of Lithuania plans to peg the Litas to a currency basket, made up of 50 % Euro and 50 % USD, and, later, to fully peg the Litas to the Euro (preserving the same current external value of the Litas). At that point, the BoL plans to be prepared to meet the requirements of ERM2⁶⁶

4.2.3. Conclusions

As we can see from the very brief descriptions above, the new entrants currently lack both a homogeneous or a stable approach concerning their linkages with the new currency. They also lack homogeneous institutional structures to manage this relationship and most also lack a clear strategy of integration. Those who do, see it as multiple stage, progressive process, which will enable the countries to adapt to these developments in a multi-year framework (a progressive, adaptive view that is shared by the EU itself).⁶⁷

4.3 Getting ready for the Euro

As we indicated above, the **transitional** linkage strategies and the degrees of preparation - and, indeed, the very perception of the need to already start preparing - for an eventual integration into the Euro area varies widely from country to country.

This necessarily will change, as the need to prepare for it becomes clear over the next few years. The European Commission, during the ongoing negotiation process, through the preaccession treaties, with the advice and technical support from the European Central Bank⁶⁸, will have to define a clear and gradual monetary integration strategy for these countries. Until then, their disparate, even informal linkages with the Euro area – fixed and sliding pegs, managed floats, currency boards- shall remain.

⁶⁶ Recently, the BoLi has resolved (see Statement of the Bank of Lithuania, October 13, 1999) not to carry out the planned re-peg of the Litas exchange rate, and to re-peg the Litas directly to the Euro in the second half of 2001, skipping an intermediate peg to a USD/Euro currency basket. The pegging of the Litas directly to the Euro is defended on the basis that "no principal decisions concerning the litas exchange rate will be taken in 1999-2000; therefore, in the future, this plan will have to be carried out faster". Additionally, such a peg would be more transparent and easily understood by the agents, and, at the same time, would send a clear signal to them to increase the use of the euro in their international settlements in trade with the European Union.

⁶⁷ Some statements (see Repse, 1998, (a) & (b)) seems to indicate that a few countries would be prepared to contemplate the immediate adoption of the Euro. Nevertheless, is doubtful that such statements can be actually taken seriously.

⁶⁸ There is a meeting scheduled to take place in Helsinky in mid-November, 1999, between the ECB and representatives of the monetary authorities of all Accession Countries. Understandably, the ECB which is only just functioning as an institution, has not yet played a important role in discussing present and future exchange rate linkage strategies with the accession countries.

Hopefully, all the applicant countries will, with time, converge to a common optimal strategy for their **progressive** integration into the common currency monetary framework. **These convergence strategies should, nevertheless, necessarily be specific to the individual countries national conditions.** An example of such a successful progressive integration can be again taken from the experiences of a southern member of the Union (See Annex B on the experiences of Portugal).

Such a strategy should perhaps be based on an early voluntary entry into an ERM2-like mechanism, as suggested in the Commission's "Composite Paper" (See EC, 1998, ibid), but that entry would be advisable only after the implementation of the necessary macro structural reforms - with adequate micro underpinnings - had been undertaken in a sustainable fashion; amongst these reforms, the most important are:

i) the complete constitution of an independent and operational central bank; including no privileged financing for government;

ii) the final and progressive opening up of these countries capital accounts;

iii) the restructuring and adequate supervision of a privatised and liberalised financial system;

- iv) the full completion of the domestic price liberalisation process;
- v) an adequate level of labour market flexibility.

Issues 1, 2, and to a lesser extent 3 and 4 will be dealt with in the negotiations on the Acquis Communautaire, as conditions for EU membership. All issues are discussed with the Commission in the framework of the Joint Assessments.

The optimal path towards that stage should perhaps be similar to the Polish integration strategy, in which the currency linkage(s) evolve(s) towards increased flexibility, culminating in a temporary float regime before ERM2 entry⁶⁹. The major benefit of this approach would be that the currency has the opportunity to find its equilibrium level. This advice may indicate that CBA-type strategies should, in the medium term, be replaced by the applicant countries that use them, and attempts to develop fully fledged central banks should be undertaken, but without undermining the hard won stabilisation and credibility gains.

The alternative to the 'free float to find equilibrium' option would be a strategy of just continuing (or start in case of an existing float) the pegging arrangement with the Euro area with initially regular realignments. The peg would gradually be tightened (meaning fewer realignments) to prepare for ERM2 entry. In this way not the market, but the monetary authorities would try to find exchange rate equilibrium. To some extent also the real economy of the country pursuing this strategy would be pushed into the equilibrium by real adjustment.

We will discuss the pros and cons of these two options in the next chapter.

⁶⁹ For a "critique" of the Polish strategy, see footnote 65, pp. 50.

EMU AND ENLARGEMENT

5. Economic and institutional consequences of EMU membership and its timing

In this chapter we will discuss the pro's and cons of full EMU membership for the accession countries. The question whether benefits of joining a currency union for the accession countries outweigh costs will amongst others depend on traditional factors like the costs of losing the monetary policy instrument to counter economic shocks, the benefits of higher trade and investment flows, and the 'free' monetary credibility provided by joining the union. The situation for the accession countries is even more complicated than that due to the transitional nature of their economies and the gap in income and productivity levels.

The structure of this chapter is as follows. First, in paragraph 5.1 we discuss the rationale for entering a currency area from a theoretical point of view. In 5.2 we go into the dangers of entering a currency union when 'real convergence' has not taken place. We underline these dangers with an analysis of problems of the East German and Greek integration into monetary union with West Germany and with the Euro area, respectively. Finally, in paragraph 5.3 we discuss the entry strategy for full EMU membership of the accession countries.

5.1 The rationale for joining the Economic and Monetary Union

In chapter 1 we have already mentioned that the theory of Optimal Currency Areas (OCA's) identifies a number of factors which determine if it is warranted to give up an independent national currency. The loss of the national currency increases the adjustment costs caused by exogenous economic shocks, while on the positive side the elimination of transaction costs and exchange rate risk generates economic growth via larger trade and investment flows. Moreover the risks and costs for small economies in carrying out independent monetary policy are eliminated.

Research on the costs of giving up an independent currency has concentrated in trying to develop some quantifiable results, usually through the testing of effects of the so-called "asymmetric shocks". This concept is originally linked to Mundell's definition of an OCA as a region, and of the related notion of adjustment costs that would have to be borne **by that region** to face any changes in the external environment. A region is defined, for the purpose of testing this hypothesis, as an area where the economic structure would be so similar as to react in a homogeneous fashion to any external shocks. Additionally, other criteria are usually also added to the testing procedure, like the degree of openness of an economy (measured by the ratio of trade to GDP), the degree of trade orientation towards the members of the existing currency union, the similarity in production structure, and the linkages in the financial flows sphere (has public debt been issued in the currency to be joined). These factors are all hypothesised to increase the benefits of entering a currency union.

The usual conclusions of such estimations are that the United States is an OCA, due to the existence of factors like:

- i) a federal system of fiscal transfers,
- ii) a high degree of labour mobility,

iii) a high degree of economic integration

iv) a diversified production structure

These features would make coping with the costs of adjustment to exogenous shock bearable, thus rendering the use of the currency instrument unnecessary, while the EU, due to the lack of the first two features, would not be an OCA (not at the start of the process, at least)⁷⁰.

The line of argument above tends to overly concentrate on the "minus" side of a single currency area (the increase in adjustment costs), without taking into consideration the likely benefits arising from its constitution: the elimination of transaction costs and exchange rate risk, and elimination of the costs of independent monetary policy. Thus a proper cost/benefit analysis is not carried out.

Another set of studies tries to operationalise the estimation of the positive components, the most influential of which is the well-known European Commission study on the "Costs of Non Europe" (See European Commission, 1990). This study also presents estimates of the costs of EMU, but these losses are far out-weighted by the benefits arising from the constitution of the European common currency area.

Nevertheless, most of the studies in this latter set lack the conceptual and modelisation consistency of the first group, usually resorting to a piecemeal estimation of several types of benefits (elimination of currency exchange risks, of interest rate differentials, positive impacts on trade and capital flows, etc.) arising from the lack of a single currency, and then adding them up. The common currency constitution is usually presented as a one shot measure to reap these gains.

Given these two approaches, what can we say of the advantages of integration in the Euro area for the new member states? So far there are no specific studies as described above for the applicant countries. However, we can safely assume that they would indicate that the Euro area - itself not an OCA – does not qualify as an OCA with the new entrants added to it⁷¹.

It should be noted that both approaches tend to ignore the costs of independent monetary policy. As the Asian Crisis has shown the balancing act between external and internal stability in an environment with substantial foreign capital flows can be very difficult for relatively small developing (and transition) economies. Membership of a currency union eliminates the need for accession countries to carry out this balancing act. Furthermore, investment in monetary policy credibility is no longer needed.

As an approximation of the pattern of benefits (and costs) involved of joining the Euro area, we can hypothesise that this would be roughly similar to the ones estimated for the Southern

⁷⁰ The United States itself actually only became a currency union about a generation after independence. This underlines a serious limitation of the OCA theory: its *static* feature.

⁷¹ De Grauwe and Aksoy (See De Grauwe & Aksoy, 1999) arrive at the conclusion that the Eastern European Countries, as a group, *might be* an OCA with the EU. Nevertheless, their results are preliminary and tentative, and, as they themselves indicate, should be taken with care. Horvath and Jonas (See Horvath & Jonas, 1998), for the Czech Republic, in a country study, came to the conclusion that *it is not, at this moment,* an OCA with the EU.

European economies ⁷². For example, for Portugal entry into the Euro area was estimated to raise the level of GDP per capita, on a 10-year horizon, by only 1%.⁷³ (See Ministério das Finanças, 1998). Such low gains were due to the assumption, on the alternative scenario used in that study, that Portugal would keep the same type of sustainable macro policies, regardless of the participation in the Euro area, and also due to the fact the main channel of transmission of real effects in that model used was the decrease of the interest rate⁷⁴ (much closer in Portugal to the average European level than in the current applicant countries).

Given this comparison, the positive impact on Eastern European economies would probably be substantially greater than in the Portuguese case, since interest rate differentials with the EU are still substantially larger for the accession countries. Other channels of transmission that would have positive effects are as noted: the increase in trade flow, larger public financial transfers from the EU, more substantial private capital flows, and 'free' monetary credibility.

It should also be realised that the accession countries are in the process of diversifying their production structure (services are becoming much more important) and, furthermore, are reorienting their trade structure in the direction of the EU. This would make it less likely in the future that they would be affected by exogenous shocks differently then the EU itself. Clearly the reaction to the Russian crisis illustrates that presently exogenous shocks still affect the CEECs differently. Thus, the loss of the monetary policy instrument would presently involve costs. These can be expected to diminish greatly in the coming five to ten years. Many of the accession countries now already have 50-70 percent of their trade with the EU (see Table 5.1).

⁷² Buch (See Buch, C., 1999), in a study on financial integration which also uses the Southern European states as a benchmark for the new entrants, concludes that the benefits derived from EU accession will be smaller for the latter, since their degree of integration is already greater than the former in a similar stage, and will increase before the actual accession. This "convergence from outside" is actually one of the standard features of the successive expansion waves of the EU (See Vinhas de Souza, L., 1996).

⁷³ These results are obtained from the updating of the endogenous growth model developed by Gaspar and Pereira in 1995 (See Gaspar & Pereira, 1995).

⁷⁴ Since commercial integration and the benefits from private and public capital inflows were already a reality for Portugal, the effects of these other real channels of transmission were marginal in the outcome.

IMPORTS									
	1993	1994	1995	1996	1997	1998			
Bulgaria	34,2	32,5	37,2	35,1	37,7	45,0*			
Czech Rep.	42,6	45,0	61,1	62,4	61,5	63,3			
Cyprus	41.6	55.5#	59.0	57.2	56.3	61.9*			
Estonia	23,3	23,9	66,0	64,6	59,2	60,1			
Hungary	40.1	45.3	61.5	62.3	62.8	64.1			
Latvia	17.1	24.9	49.9	49.2	53.2	55.3			
Lithuania	18.7	26.4	37.1	42.4	46.5	50.2			
Malta	71.0	75.7	72.7	68.5	70.2	69.3			
Poland	57.6	57.5	64.6	63.9	63.8	65.9			
Romania	45.3	45.7	50.5	52.3	52.5	57.7			
Slovakia	20.6	26.2	34.8	37.3	39.6	50.4			
Slovenia	46.2	57.1	68.8	67.5	67.4	69.4			
EXPORTS									
	1993	1994	1995	1996	1997	1998			
Bulgaria	29,9	35,4	37,6	39,1	43,2	49,7*			
Czech Rep.	41,6	42,6	60,9	60,9	58,2	64,2			
Cyprus	42.6	52.2#	59.0	55.4	48.0	50.4*			
Estonia	17,8	19,0	54,0	51,0	48,6	55,1			
Hungary	46.5	51.0	62.8	69.7	71.2	72.9			
Latvia	24.4	27.9	44.0	44.7	48.9	56.6			
Lithuania	18.9	25.7	36.4	32.9	32.5	38.0			
Malta	71.0	74.0	71.4	56.9	54.3	52.8			
Poland	64.3	62.7	70.0	66.3	64.2	68.3			
Romania	41.3	48.2	54.1	56.6	56.6	64.5			
Slovakia	24.1	28.4	37.8	41.3	41.7	55.8			
Slovenia	42.6	59.2	67.0	64.6	63.6	65.5			

Table 5.1 Trade of the Accession Countries with the European Union, as a % of totaltrade

* January-September 1998

Source: European Commission, national sources.

However, most of the beneficial effects mentioned would probably also happen if sustainable macro policies and the progress towards EU accession were maintained. They do not require full entry into EMU. It is therefore difficult to identify net effects, i.e. effects that are *exclusively* related to full participation in EMU. Nevertheless, the consensus opinion of the economic profession seems to be that full EMU participation will have net positive effects for first wave accession countries in the medium term.⁷⁵ The question, of course, is how long the medium term takes.

⁷⁵ Some national modelizations (see Wdowinski, P. & van Aarle, B., 1998, for the case of Poland) would seem to agree with this conclusion. Of course, other -non-economic- considerations (political, strategic, security-related) also underpin the new entrants' will to integrate themselves with the EU.

5.2 Progressive and sustainable convergence towards the Euro area

In the previous discussion we have not mentioned one of the main reasons why a currency union may (initially) not be beneficial for the accession countries. As mentioned in paragraph 2.3 the Balassa-Samuelson-effect will induce a process of real appreciation of the currencies of these countries and also induce structurally higher levels of inflation than in the EU. Most of the academic literature suggests that a substantial amount of 'real convergence' will have to take place before governments strive for monetary and fiscal convergence. The recognition that the convergence process will take time to be completed in a sustainable nature, has been the main reason why a progressive and phased strategy has been built into the legal and institutional structure of the EU accession process.

A "real convergence" process – broadly defined as a catching up in productivity and real GDP level - will, in most of the applicant countries, have two components. The first is related to the transition process from a command to a market economy. The second is related to the catching up process with more developed economies. Both will inevitable take time.

As an indication of the likely period required for "real convergence" to take place, we already referred in paragraph 1.1.2 to an IMF study (see Fischer et al., 1998) which calculated the real convergence of the accession countries in cooperation with the level of the southern EU Member States. The conclusion of the paper is that "real convergence" will be a generation-long process, even under beneficial macro circumstances.

The still large income and productivity differentials of the applicant countries when compared to the EU average, could result in very negative outcomes if a premature integration process is attempted, not only for the new member states, but for the for the EU "core" itself. Three scenarios may present themselves:

5.2.1. A "First Best" scenario

The remaining productivity differential between accession countries and EU core is counteracted by **high degrees of wage and labour flexibility**. This means that wages remain below the wage levels of the EU core and only increase in line with productivity growth in the new member states. Any remaining pressures are resolved by work force migration towards the high productivity/high wage areas, speeding up the equalisation of the differentials. This is the natural economic adjustment process in a truly integrated economic region, like the US. Unfortunately, wage flexibility and labour mobility are not features of the EU or of the applicant countries themselves. Therefore this scenario is not particularly likely.

5.2.2. A "Second Best" scenario

A high degree of wage flexibility counteracts the low degree of labour mobility in the catch up process. Alternatively, a high degree of labour mobility counteracts the wage rigidity, although large intra-Union migration flows are not a realistic alternative in the current EU environment. This process is supported by a limited degree of net fiscal transfers from the EU core, to cushion any remaining transition costs and to accelerate the reduction of the productivity differential. This is, roughly speaking, the scenario applicable to the EU's southern member states.

5.2.3. "Third Best" scenario

Lack of either wage flexibility or labour mobility leads to the build up of inflationary pressures, an increase of unit labour cost and a consequent loss of competitiveness and flight of investment towards the high productivity EU core. Massive social and economic unrest can only be counteracted by very substantial financial transfers. These transfers can be very persistent as well because by themselves they do not necessarily eliminate the distortions that perpetuate the productivity differential. This scenario is clearly demonstrated by the Italian *Mezzogiorno* or the former East Germany (see Annex C).

The applicant countries themselves are acutely aware of these potential problems: they know that the *EU itself is not yet an OCA*, and that *it will not immediately become one with the new Member Countries in it*. The potential of asymmetric shocks (i.e., changes in the external economic environment that affect differently distinct parts of a common currency area) affecting the EU, without the adjustment mechanism of national exchange rates, and insufficient labour mobility, wage flexibility and limited scope for compensating fiscal transfers, is substantial.

Additionally, besides economic convergence, time will also be necessary for institution building and the sheer learning process of how to use policy instruments (including, of course, the monetary instruments necessary for the participation in the ESCB) in the applicant countries.

The dangers of early entry into a currency union are further illustrated by the East German and by the Greek example. In Annex C we describe the economic impact of the monetary unification of the former East and West Germany. In Box IV we go into the unsuccessful real convergence of Greece.

Box 4: The Greek Case: Divergence within the EU

Contrary to the case of the Iberian countries (Portugal and Spain: their successful partial convergence is identified with a structural convergence towards the EU core average productive basis, see Löhnig, 1999) and of Ireland, among the less developed countries that benefited from large EU inflows after accession –which will also benefit the future member countries, in the framework of structural funds used to help a catching up process of development towards the EU core (the so called "real convergence"), the Greek Republic stands out as *the single case of failure of progressive convergence towards the EU average welfare levels*. More than that, *divergence* (i.e., reduction of the national welfare level compared to the EU's) actually occurred, and that in spite of some of the largest financial transfers in terms of GDP share (up to 5% of the Greek GDP, by the early 1990, below only the transfer to Ireland).

The reason for that is the *pursuing of inadequate and unsustainable macro policies*: the first PASOK (Pan Hellenic Socialist Party) government in Greece in the early 1980's engaged in an budgetary expansion, which ultimately replaced (and reduced) domestic savings and investment by external *official EU transfers*, which were used not to finance investment but consumption and the expansion of the Greek state (FDI was not promoted, and the Greek state actually expanded its share of the economy from 9% before accession to 23% by the mid-1980's: see Orlowski, 1999). The expansionary fiscal policy was accommodated by a lax monetary policy by the Greek Central Bank. Domestic reforms to improve economic efficiency (deregulation, opening up to foreign investment, privatization) came to a halt.

As a result of that, the Greek Drachma never entered the ERM-1, the country was excluded from Euro participation for flunking all the Convergence Criteria, and only admitted in the ERM 2 in 1998.

This should be seen as a warning for all the application countries: *reform and convergence should be pursued before and after accession, in a consistent and sustainable fashion.*

5.3 Accession country strategies for full EMU membership

As discussed in Chapter One, the position among the "first wave countries" concerning EU accession timeframe seems to be relatively homogeneous. According to the EC (see EC, 1998) for the "first wave" countries future EU accession is "…based on the working hypothesis that they would join the European Union on 1 January 2002 in the case of Hungary and on 1 January 2003 for the others". Nevertheless, the current more likely timeframe, according to Commission and independent sources, seems to be 2004-2006.

The accession time frame presented above is the best case scenario. Informally, a number of countries have added a two-year margin of error for meeting the EU accession deadline. The timeframe suggested by the accession countries clearly indicates, however, the preference for a progressive and phased convergence, first to the EU and, for most countries in any case,

only afterwards to the Euro area. Integration into the Euro area is more controversial and - rightly - perceived to be farther away.

On a final balance of the costs and benefits of Euro participation for the applicant countries, most of the available EC opinions see it as a positive development, due to the reduction in transaction costs that it would bring to trade, to the reduction of currency risks and of financing costs, *but these positive elements are only attainable on a long term perspective* (see, among others, Avramov, 1999, Backe & Radzyner, 1998, Horvath & Jonas, 1998, Janackova, 1998, Nemenyi, 1998, Nissinen, 1999, Polanski, 1997 & 1999).

Few clearly formulated positions are available on this subject from the accession countries. Nevertheless, of those few stated national positions *that are accessible*, almost all indicate the acceptance and preference for a phased process. We will give a brief presentation of them below.

5.3.1. "First Wave " Countries

Czech Republic

The Czech Government published in 1998 its general strategy for EU accession (See Czech Republic, 1998). No specific time-frame is defined for full EMU participation, and the document argues that the country could join the Euro area from the starting point of any exchange rate regime (a statement which is not true given the EU's legal framework). This can only be interpreted as a side effect from the collapse of the Czech peg in 1997 and the policy insecurity still associated with the current "dirty floating" arrangement.

Any Euro peg is seen as conditional upon achieving sustainable internal economic stability, defined as internal (fiscal) and external (current account) equilibrium and on progress on disinflation and wage growth restraint (see also Janackova, 1998). An informal Euro shadowing to replace the current DEM one is an achievable alternative in the longer run, but the independence of the domestic monetary policy for the foreseeable future is advocated. This eventual Koruna peg is seen as an alternative only in a 5-10 years horizon (see Horvath & Jonas, 1998). Conforming to that opinion, in a recent interview, Pavel Mertlik, Czech Finance Minister, said that "regarding the EMU criteria, it seems probable that it will be a process of at least four to five years" (see Reuters, 25 of October, 1999).

Estonia

Estonia's CBA (currency board arrangement) "remains the cornerstone of economic policy, providing a transparent and credible framework for economic development" (see Lehmussaari, 1999). In January 1999, the Kroon's peg to the DEM became a de facto link to the Euro. In co-operation with the EU institutions, the Bank of Estonia (BoE) plans to have a medium term plan for joining the European Monetary System and, eventually, the common currency area by end-1999. According to the BoE, "the currency board provides a sound monetary policy framework for the preparation for the adoption of the Euro, and also provides the right signals for the real economy during the pre-Euro period" (see Lehmussaari, ibid).

Estonian Prime Minister Mart Laar said in a radio interview (ETA, 18 of October, 1999) that "Estonia should adopt the Euro right after EU membership". The Estonian government has targeted 2003 as the year Estonia should be in the EU, but no *official* standpoint has been taken on EMU. Estonia's Finance Minister Siim Kallas said, also on a recent interview, that "Estonia is basically ready for EMU accession but it will have to muster the domestic political support needed for monetary union" (see Reuters, 25 of October, 1999).

Hungary

The Hungarian authorities started discussing the subject of integrating the Forint into EMU a few years ago. EU accession (as indicated above) would happen between 2002 and 2003, and joining the Euro area is envisaged as happening somewhere between 2005 and 2007 (see Backe & Radzyner, 1998).

There *seemed* to be a consensus concerning a later entry into EMU and to ERM2 participation: "...we cannot see rationales of an early joining of the ERM2. Entering the ERM2 would limit the room of manoeuvre of Hungarian monetary policy ...the earliest date for making an exchange rate commitment will be determined jointly by the disinflation record and the growth performance of the country" (see Nemenyi, 1998).

Nevertheless, according to Hungarian Finance Minister Zsigmond Jarai's recent statements, "Hungary is trying to prepare itself for joining EMU in the middle of the next decade, some two to three years after joining the EU (see Reuters, 25 of October, 1999). Jarai also said that "Hungary might even fix the Forint to the Euro after 2001, bringing down inflation to between four and five percent by then, and introduce the Euro as its official currency as soon as 2004" (see Reuters, 2 of November, 1999). This should be preceded by a cut in the Forint's crawling peg devaluation rate -in two steps, to 0.2 % next year, from the current 0.4%, with 0.3% as an intermediate step.

Poland

As indicated in the previous chapter, the Polish Republic had one of the most clearly defined strategies of integration into the Euro area of all entrants. The NBP in its "Medium Term Strategy of Monetary Policy 1999-2003" (see NBP, 1998, (b)) clearly states the medium term aim of integrating the Zloty into the Euro area. Envisaged is a process of progressive widening of the currency peg bands and the slowing down of the crawling peg (this phase would take place between 1997 and 1999), culminating in a temporary floating of the currency (perhaps already by early 2000, according to the latest statements of the NBP), with the express objective of assessing the equilibrium value of the Zloty before its final fixing within the Euro framework, and finally integrating into the Euro area by 2005. More recently, Polish Central Bank Governor Hanna Gronkiewicz-Waltz stated that "the country hoped to join EMU about three years after it enters the EU". Poland's government also said that "it will be ready for accession at the end of 2003", but some analysts say 2005 is more likely (see Reuters, 13 of October, 1999).

Slovenia

Slovenia's position concerning Euro area integration seems more heterogeneous (some authorities even briefly indicated the country's willingness to join the Euro before joining the EU). After EU accession by 2002, domestic scenarios vary from a simultaneous entry into EU and EMU (in a statement by the prime minister), to 2005 (as stated by the Slovenian government in its NPAA), to 2008 (by the Minister of Economic Affairs), and, finally, to a non-committal (and perhaps more realistic) position from the Central Bank: it will join the EMU "when the country will have achieved sustainable macroeconomic stability".

In the negotiations with the EU, Slovenia asked for an exemption from the ERM Criteria: the country specifically requested that the Tolar stability, in line with ERM2 requirements, should be considered as corresponding to a formal compliance with it.

Slovenia is the only application country to have done so openly⁷⁶ so far (see Lavrac, V., 1999⁷⁷). The actual path towards such a monetary integration is, nevertheless, still an open question for the country's government.

Recently, Slovenian Minister for European Affairs Igor Bavcar told reporters that "following (the publication of) the report (of 13 October)... we have every reason to believe that Slovenia will fulfil its plan to meet all membership criteria by the end of 2002" (see Reuters, 18 of October, 1999). Slovenia's Finance Minister Mitja Gaspari said in a recent interview that "his country could be ready to enter EMU within the next two to three years, with inflation expected to go below six percent next year, while the budget deficit is seen below one percent of GDP" (see Reuters, 25 October, 1999).

5.3.2. "Second Wave " Countries

Bulgaria

There is no real discussion in Bulgaria about abandoning the recent and fragile stability achieved in the country under a IMF-sponsored CBA for another type of currency or monetary arrangement. The anchor currency was shifted automatically from the DEM to the Euro on January 1, 1999, but the nearest thing available to a monetary integration strategy seems to indicate the aim of maintaining the CBA until EU accession, declare EMU participation as an aim afterwards, and, once inside the Union, to use the EU's own

⁷⁶ Other requests of derogations by the applicant countries in 1998 were (see EC, 1998): "Poland, Hungary and Cyprus requested transitional periods beyond their working hypotheses in the area of **Telecommunications**. Hungary asked for a transitional period till 31 December 2002 for the full liberalisation of public networks voice telephony. Poland sought a transitional period of yet undetermined length for full access to certain frequency bands for mobile communications. Cyprus requested a transitional period till 31 December 2003 for the full liberalisation of the telecommunications market and the establishment of its national regulatory body. Under **Industrial policy**, Hungary requested a 6-month transitional period till 31 July 2002 for the European Coal and Steel *Acquis* until the expiry of the ECSC Treaty. Under the **Audio-visual chapter**, Slovenia sought a two-year transitional period for fully implementing the television without frontiers directives and the Czech Republic requested a transitional arrangement until 2005 for pay and cable television".

In the 1999 Composite paper, the Commission seems to have taken a stronger stance, and draws a distinction between derogation and a transition period, the later being only acceptable in exceptional cases (like EMU), and the former, under specific circumstances: "Now that negotiations are underway the Commission considers that the EU should define its policy on transition periods more explicitly ... Any transition periods should therefore be few and short. For those areas of the acquis where considerable adaptations are necessary and which require substantial effort, including important financial outlays (in areas such as environment, energy, infrastructure), transition arrangements could be spread over a definite period of time provided candidates can demonstrate that alignment is underway and that they are committed to detailed and realistic plans for alignment, including the necessary investments" (see EC, 1999(a)).

⁷⁷ The same Author makes one of the very few defences of an immediate EMU entry after EU accession, on the basis that this would reduce instability and the leaning period. Also, he has co-edited a collection of papers with de Grauwe, P. (see de Grauwe & Aksoy, 1999) in which the notion that Slovenia and the EU do conform to the OCA criteria is defended.

framework for participation, including the timeframe. At that moment, the CBA "exit strategy" would be fixed, but the questions concerning the need to develop or not a full fledged CB seem not to be clear yet in the Bulgarian authorities' minds (see Avramov, 1999).

Latvia

Statements by the Latvian Foreign Minister in mid-October put Latvia's likely EU date of entry at 2005 (Reuters, 13 October, 1999). Additionally, some recent statements made by the Governor of the Central Bank of Latvia (see Repse, E., Governor, Bank of Latvia, General Economic Developments and Banking in Latvia, Notes, 29 of October 1999) indicate that the BoLa sees the fulfilment of Maastricht convergence criteria as a medium-term target, and "will be able to meet all of them in 4 to 5 years". Also, he stated that "since the Lats has been pegged to the SDR at a constant exchange rate since 1994…in principle, we are meeting the currency stability criteria". During the pre-accession period, the current peg of the Lats to the SDR shall, in principle, be maintained.

Lithuania

Through the Bank of Lithuania (BoLi), Lithuania, has already started to implement some phased modifications to its CBA to enable it to pursue an active, CB-type monetary policy (see Šarkinas, 1999). Currently, monetary policy in Lithuania is implemented under a modified CBA.

The Lithuanian strategy to move towards a fully fledged CB was presented at the "Monetary Policy Programme for 1997-1999", adopted by the Bank of Lithuania in 1997. It has three phases:

- **First Phase**: The development and introduction of open market operations and a Lombard facility with the currency board still in existence (1997-1999);
- **Second Phase**: The adoption of amendments to the "Law on the Credibility of the Litas" (1999-2000);
- **Third Phase**: The reorientation of the exchange rate of the Litas to establish a closer relationship with the EU and the EMU (2000-onwards).

Recently, the BoLi has partially modified the timetable described above (see Statement of the Bank of Lithuania, October 13, 1999). It has resolved:

- a) not to carry out the planned re-peg of the Litas exchange rate towards the Euro in 2000;
- b) to re-peg the Litas directly to the Euro in the second half of 2001, skipping an intermediate peg to a USD/Euro currency basket.

The pegging of the Litas directly to the Euro is defended on the basis that "no principal decisions concerning the Litas exchange rate will be taken in 1999-2000; therefore, in the future, this plan will have to be carried out faster". Additionally, such a peg would be more transparent and easily understood by the agents, and, at the same time, would send a clear signal to them to increase the use of the Euro in their international settlements in trade with the European Union.

Slovakia

There are very few clear positions concerning the evolution of the currency strategy of the Slovak Republic, but in a recent statement, the country's Vice-Prime Minister, Pavel Hamzik, said that "the Slovak government expects to belong to the first wave of new member states joining the European Union in 2004". Also, Slovak Finance Minister Brigita Schmognerova said that "We *suppose* that we will enter ERM 2, which means the national bank would change from a floating to a fixed exchange rate, starting with a wide band and then narrowing it" (Reuters, 25 of October, 1999).

As we can see from the very brief descriptions above (summarised in Table 5.2, next page), the few future member countries who do have a clear time table for joining the Euro (not surprisingly, most of these are former "first wave" countries) see it as a multiple stage, progressive process, which will happen after the EU entry, a view broadly in accordance with the EU's own accession strategy. Some of the former "second wave" countries are beginning to sketch tentatively their strategies (Lithuania is an exception, with a clear integration framework), but the majority also seem to agree with the phased approach.

Country	Stated Future Strategy of Monetary Integration
Bulgaria	Maintenance of CBA until Accession and then to use EU's own Monetary Integration Framework (ERM 2).
Czech Republic	Evolve from Dirty Float to an Euro peg in a 5-10 year Horizon.
Estonia	Maintenance of CBA until Accession and then eventual immediate adoption of Euro (?).
Hungary	Crawling bands until 2001, Euro peg afterwards, Euro participation by 2004 (?).
Latvia	EU entry by 2005, with EMU as a mid-term goal, maintaining SDR peg in the meantime. Eventual immediate adoption of Euro upon Accession (?).
Lithuania	Progressive Flexibilisation of CBA until Accession, with change of the reference currency in 2001, and then to use EU's own Monetary Integration Framework.
Poland	Progressive Flexibilization of Crawling Peg, Culminating in a pre-Accession Temporary Float (National Deadline for Monetary Integration: 2005).
Slovakia	Maintenance of "Dirty Floating" until Accession and then to use EU's own Monetary Integration Framework (ERM 2) (?).
Slovenia	Progressive hardening of the Dirty Float Towards a Temporary, pre-Integration Euro Peg (range for Monetary Integration: 2002-2008). Eventual EMU (not Euro) participation upon Accession (?).

Table 5.2 Evolution of Currency Linkages

5.4 Conclusion

Real wage flexibility and cross border labour mobility are neither features of the EU nor of the application countries: to increase both of them is a necessary long term policy goal, to improve allocation efficiency, and, consequently, average welfare and growth potential for the whole of the Union. Nevertheless, the current and foreseeable absence of these features means that the absorption of real shocks, without the availability of an exchange rate instrument, could place undue strain on the limited available fiscal adjustment instruments, and could imply a higher than necessary variability of GDP level, with all the associated negative social costs.

Additionally, to spend political capital in an attempt prematurely to integrate in the common currency area could well divert the attention of the governments of the application countries from the more fundamental tasks of reform and convergence towards EU accession, and even compromise it.

As indicated in the previous sections, there are powerful economic reasons to support a progressive and phased process of joining the Euro area after EU accession⁷⁸. This is also in

⁷⁸ Of course, if an applicant country that has actually converged *enough and in a sustainable manner* (sic) to the EU core were to be "kept in the cold" – i.e., out of the Euro zone - for mere legalistic reasons, that

accordance with the time frame laid out by the European Commission itself, and by the relatively few national governments of the applicant countries that have already begun seriously to consider the possibility and effect of EMU participation. The negative consequences of a premature monetary integration is exemplified by the East German case and should be taken into serious consideration by all actors involved in this process.

would be, in practical terms, disincentive to reform, since a set of successful and doubtlessly costly efforts would be not rewarded.

6. The external impact of an expanding Euro area

6.1 Introduction

With the start of the third phase of the European Economic and Monetary Union on January 1, 1999, eleven European countries have decided to rely on the European Central Bank (ECB) to set monetary policy, and gradually adopt the Euro as their common currency. The current discussion in economic circles on the EMU has focused largely on the implications for EU countries (IMF, 1997a), both for the 11 participants and those expected to join later. However, the EMU and Euro do not only have implications for the EU countries, but also have potentially large effects on the international monetary system and on third countries, outside the European Union.

In this chapter we will describe the impact of the establishment of the EMU and the foreseen implications of its enlargements on or to the 12 candidate countries of Central and Eastern Europe and Cyprus and Malta. We will see that the impact of enlargement on the international monetary system and on third countries largely depends on the success of the EMU itself.

Paragraph 6.2.1 discusses the present situation with respect to the role of international currencies in the international monetary system and the global financial markets. Paragraph 6.2.2 deals with the expected impact of the EMU on the international monetary system. These global effects will depend on the extent to which the Euro will be used in international transactions and the external spillovers from its effects on economic policy and performance in Europe. Paragraph 6.2.3 examines the economic significance of having an international currency. Paragraph 6.3 focuses on the impact of the envisaged enlargement on the EMU. Finally, paragraph 6.4 will discuss the implications of the EMU for non-participants. We will deal with the three most important groups of outsiders after the enlargement, the non-participating Central and Eastern European Countries (CEECs) (notably Russia and the Ukraine), the countries of the CFA franc zone and the Mediterranean countries.

6.2 Impact on the role of the Euro as international currency

6.2.1 Determinants of an international currency

Two fundamentals seem to determine the main use of a currency in foreign exchange transactions: its importance in international trade in commodities and in securities. Both are related to the size of a country's domestic economy. The use of a currency beyond these fundamentals is determined by its role as a vehicle currency to mediate in exchanges between other currencies. Derived from the fundamentals of an international currency is the pegging of other currencies and the holding of official reserves. The dominance of a currency in foreign exchange transactions on the one hand, and the denomination of international assets and trade flows, currency pegging and official reserves holdings on the other, clearly reinforce each other.

This paragraph examines the present situation with respect to the two fundamentals and the vehicle role of the current make-up of the international monetary system. We will first

discuss the foreign exchange market itself. Then we will examine the fundamentals that determine the role of a currency in the international monetary system. We will further focus on its use as vehicle currency, its role as a peg for other currencies and its function as official reserves.

Role on the foreign exchange market

The volumes of foreign currency exchanged on the foreign exchange markets are enormous: in April 1998, the average *daily* foreign exchange turnover was estimated at USD 1.4 trillion. The currency composition of these exchanges gives an indication about the key currencies traded in the world. The US dollar is by far the dominant currency and is currently used in 87% of two-way transactions.⁷⁹ The Deutsch Mark follows at a respectable distance and is used in 30% of transactions. The third largest is the Japanese yen, which is used in 21% of transactions. All other currencies are used much less frequently. The best of the rest is the British pound, which is used in 11% of the transaction followed by the French franc with 5%. The other EU currencies (including the ECU) combined are used in 17% of transactions.⁸⁰ A simplified view of the world monetary system would thus only need to consider three currencies: the US dollar, the yen and the Euro with its legacy currencies and with the British pound.

Importance for international trade in commodities

The first fundamental is related to the denomination of the trade flows. Table 6.1 indicates that the US accounts for 12% of world exports, Germany for 9% and Japan for 8%. The share of the Euro area as a whole is with 17% much larger than that of the US or Japan. This is even more so for the EU.⁸¹ In addition, the US and the EU both account for about 28% of total world output. Germany by itself, however, accounts for only 7%. The Euro area accounts for 22% of world output. Judging from these numbers, the use of the dollar, the yen as well as the Deutsch Mark in foreign exchange transactions (87%, 21% and 30%, respectively) overstates the importance of these countries in the world economy and trade. Based on the Euro area trade flows alone, the Euro should surpass the dollar in importance.

European firms invoice a very large proportion of their exports in their own currencies. However, a significant proportion of European imports is invoiced in US dollars. Japanese firms, on the other hand, invoice mainly in dollars and the same applies overwhelmingly for developing countries. Although the share of Japanese exports invoiced in dollars has been falling and the share of US trade invoiced in foreign currencies is rising, nearly half of the world exports are invoiced in US dollars. The combined European currencies account for a share of about one third, with half of this for the D-mark. Invoicing in yen occurs in only 5% of the cases.

⁷⁹ We are referring to two-way transactions implying that the breakdown percentages do not add up to 100%, but to 200%. This implies that other currencies besides the ones mentioned are used in 29% of transactions.

⁸⁰ These figures refer to reported daily average foreign exchange turnover in April 1998 net of local and cross-border inter-dealer double counting as reported in BIS (1999). The transactions include the foreign exchange spot market, the outright forwards market and the foreign exchange swaps. All transactions are reported in US dollars.

⁸¹ This excludes intra-Euro area trade but includes trade with other EU members.

	GDP Exports Outstanding amount of international debt securities [‡]		Outstanding amount of domestic debt securities [‡]			
			By country of issue	By currency of issue	Public	Private
	1997	1997	End 1998	end 1998	end 1998	end 1998
	bn USD	Bn USD	bn USD	bn USD	bn USD	bn USD
World	28977	5528	4316	4316	17525	11221
US	8083	688	845	1972	7807	5946
Japan	4193	421	318	488	3746	1434
Germany	2103	511	509	441	867	1138
France	1394	290	266	222	743	484
UK	1288	279	362	342	469	388
Italy	1145	238	115	138	1216	364
Euro area*	6289	934	1381	1174	3783	2330
EU*	8096	920	1897	1542	4584	2944
Poland**	135	26	4	1	29	0
Czech Republic**	52	23	2	2	18	5
Hungary**	45	19	13	-	15	1

Table 6.1 Fundamentals of currency use

[‡] International debt securities consist of domestically held debt instruments in domestic and foreign currency issued by non-residents and debt instruments in foreign currency issued by residents. Domestic debt securities consist of domestically held debt instruments issued by residents in domestic currency.

* Exports exclude intra-regional trade. Intra-regional international debt holdings are included with the international debt securities.

** Poland: 54% of exports to Euro area; Czech Republic: 55% of exports to Euro area; Hungary: 66% of exports to Euro area.

Source: BIS, IMF, World Bank, ECB.

Importance for international trade in securities

The second fundamental determinant of use as an international currency concerns crossborder *flows* of securities. These flows generate a much larger volume of foreign exchange transactions than commodity trade. Table 6.1 reports the outstanding amounts of international debt securities (i.e. stocks), both by country of issue and by currency of issue.⁸² Although the share of the US in international debt securities is "only" 20%, the share of the US dollar denominated debt is considerably larger at 46%. The Euro area nationality share of international debt is 32%, but its currency share is only 27%, implying that part of international Euro area debt securities have been issued in other currencies, most likely the US dollar.

Assuming that security flows are more or less proportional to stocks, it is clear that the US dollar has a very dominant role in these flows.⁸³ Table 6.1 indicates that the use of the Euro for denomination of international debt securities by Euro area countries will make the Euro an important counterpart to the dollar. Moreover, it is likely that the Euro area countries will

⁸² Debt securities account for the largest portion of cross-border security flows by far.

⁸³ Portes and Rey (1998) present some evidence that the ratio of market turnover to outstanding stocks is higher for US securities than for European securities. Extrapolating this to the international markets, it implies that cross-border flows are even more pronouncedly biased towards US securities than suggested by the outstanding amounts.

phase out the use of other currencies for the issue of new international debt securities. This should gradually further raise the share of the Euro in international debt issues.

Vehicle currency

The role of a currency as vehicle currency is crucial as it establishes the international status of the currency determined by its use beyond its fundamentals. The main determinant for a currency to be able to operate as a vehicle currency are transaction costs (Portes and Rey, 1998). This concerns not only the transaction costs on the foreign exchange market but also the cost of transaction on the debt securities markets, especially the long-run government bond markets. The role of the latter arises when a customer has an open spot or future position in foreign currency. Just holding this foreign currency as cash implies interest loss. Hence, the foreign currency position is held in interest bearing securities. To curb risk on such an open position use is made of low-risk long run government bonds. Hedging against exchange rate risk is also an important source for the use of international bonds.

Transaction costs on any financial market depend, among other things, on the market turnover, or the market's "thickness," "liquidity" or "depth". This relation is a negative one and implies that the larger trading turnover is, the lower the transaction costs will be. Furthermore, the lower transaction cost, the more dealers will make use of that market thus raising turnover and further lowering transaction cost. This is called the market thickness externality, which constitutes a strong perpetuating mechanism of established trading patterns.

In 1998, transaction costs on foreign exchange markets were the lowest for DM-dollar exchange. Transaction costs for the yen-dollar are 2% higher. For the DM-yen transaction costs are almost 8% higher. These differences are significant but not alarming and will, by themselves, not result in spot exchanges using vehicle currencies. On the bond markets, however, major differences in transaction costs between the US, Germany and Japan exist. On the US government bond markets transaction costs are lowest. Transaction costs on the Japanese government bond market are 124% higher. On the German bond market transaction costs are even 156% higher than on the US government bond market. This pattern of transaction costs fits the relative size of the government bond markets as measured by outstanding debt as reported in Table 6.1.

In conclusion, the observed differences in transaction costs for bond markets constitute a major reason for the use of the US dollar as a vehicle currency. It is this feature that has played an important role in the establishment and perpetuation of the US dollar as the main international currency in the last decades.

Currency pegging

Currency pegging is both cause and effect of a reputation as international currency, but is frequently also dictated by international politics. Dollar domination is also illustrated in the number of countries pegging their currency, formally announced or de facto. As of March 1998, of the 182 IMF member countries, 47 had formally pegged their currency against a single other currency. Of these, 20 did so against the US dollar and 15 against the French franc (see IMF, 1998).

All these 47 countries with a formal peg are relatively small or very small, with Argentina as the major exception. Even jointly, these countries do not represent a significant share of the

world economy. In the 1990s, some CEECs, like Bulgaria and Estonia, have pegged their currencies to the Deutsch Mark, or to a basket in which the Deutsch Mark has a large weight (see chapter 5).

A number of more important countries such as the People's Republic of China and a number of Southeast Asian countries have a de facto arrangement with the US dollar under a formally announced policy of managed or independent floating. The international financial crises in the emerging markets in 1997, however, have forced some of these countries to adopt a more flexible exchange arrangement, thus weakening dollar domination.

In short, the US dollar has until now been a much more popular anchor for currency pegging than the European currencies. De facto pegging to the dollar especially takes places frequently.

Official reserves

Holdings of official reserves and currency pegging by governments are also affected by the established patterns in the international money markets. The share of the US dollar in official reserves is much higher than the share of any other single currency. Although declining, the dollar share in official reserves stood at 53% in 1995. The corresponding shares of the Deutsch Mark and the yen stood at 13% and 6%, respectively.

Overall Conclusion

The US dollar has a dominant role in foreign exchange transactions, in trade and security flows and as vehicle currency. This role is likely to remain in the coming decade. Its status of international currency will not change soon, as inertia is a powerful force in international finance (Bergsten, 1997b).

6.2.2 The impact of the EMU on the international monetary system

The creation of the EMU has already had and will have in the future important implications for the global financial markets and the international monetary system. This impact can to a large extent also be equated to the Euro's prospective significance as an international currency.

The future role of the Euro, however, depends on several interrelated factors, such as the future strength and the relative stability of the currency, and the integration of the capital markets in the countries of the Euro area.

Future strength of the Euro

An important factor for the strength of the Euro is how strictly or liberally the Maastricht Treaty will be interpreted. If the countries of the Euro area will manage to establish and maintain fiscal discipline and keep inflation low, as has been agreed in the Stability and Growth Pact, then the Euro will establish a track record and win credibility on the markets.

The strength of the Euro can also be approached on a relative basis: will the relevant authority of the EMU promote a relatively high or low value of the Euro against the US dollar? In each country or currency block there is always some balancing between the

benefits of a relatively strong currency with low inflation, and a relatively weak currency promoting employment (see Polak, 1997).

Exchange rate stability

Exchange rate stability of the Euro would also contribute to the attractiveness of the Euro as an international currency. A major international concern regarding the EMU is the anticipated increased exchange rate volatility between the world's most important currencies, the dollar and the Euro. Large swings in the major currencies would affect the terms of trade and the competitiveness. Two reasons are mentioned in the literature for the anticipated increased exchange rate volatility.

Firstly, there is the diminishing scope for international exchange co-ordination. The European Central Bank (ECB) is employing a price stability target. Hence, it is probably bothering less with exchange rate volatility or the external value of the Euro. Before the establishment of the EMU, the individual countries of the Euro area were much more open economies (in terms of export-GDP ratios) and hence more concerned about their exchange rates vis-à-vis their neighbours. The Euro area as a whole is a large, closed economy, rather like the United States, with a value of exports outside the EU block only slightly above 10% of its GDP (see Cohen, 1997). Due to such a benign neglect in the Euro area, the exchange rate volatility between the world's most important currencies, US dollar, the Euro and also the Japanese yen might increase.

Second, larger swings in exchange rates are expected from *changes* in interest differentials between the dollar and the Euro, as the Euro emerges as a major international currency. Under these conditions, investors are able to arbitrage much more freely between Euro- and dollar assets if both markets are deep and broad (Portes, 1999).

The anticipated exchange rate volatility could be detrimental for the future role of the Euro as international currency. Nevertheless, more volatility between the Euro and the US dollar is also bad for the US dollar.

Capital market integration

The extent and timing of future role of the Euro as international currency depends also on the ability of Europe to forge a single Europe-wide integrated capital and financial market (Bergsten, 1997a). McCauly and White (1997) argue that exchange rate uncertainty was in the past the main reason for capital market segmentation in Europe. Hence, the emergence of the Euro is boosting the integration of capital markets, which will lower the costs of financial transactions, narrow interest rate spreads and expand the supply of Euro-denominated assets. Portes and Rey (1998) argue that the reduction of transaction costs in an integrated pan Euro financial market allows the Euro to take over the role of the dollar in European-Japanese trade. Increased competition on the European financial markets and increasing financial market depth and liquidity would enhance the attractiveness of the Euro as an international currency.

Overall Conclusion

In the academic world, the commonly held opinion is that the Euro should be able to become a much more important international currency, as a medium of exchange and a store of value. The larger economic base of the Euro and the elimination of transaction costs, which were involved with multiple currencies, are likely to increase the role of the Euro, also when compared to the sum of the individual European currencies.

In spite of the inertia in international finance, the Euro could become relatively quickly the preferred currency for the candidate accession countries, replacing to some extent the Deutsch Mark (Eichengreen, 1996).

6.2.3 The economic significance of having an international currency

Apart from issues of status and power, there are valid economic advantages for wanting to see one's own currency as the international currency and having other countries peg their currency to it. These advantages are related to markets and institutions of the issuing country and to its international trade. It virtually eliminates exchange rate risk for domestic companies and takes away their need to enter into costly hedging schemes.

The most explicit advantage for the issuer of the international currency is the ability to finance balance of payments deficits with liabilities denominated in the domestic currency. Because of its role as medium of exchange, other countries will absorb liabilities and hoard reserves in the international currency. This implies that the so-called international seigniorage benefits accrue to the issuing authority. In this context, three effects can be distinguished.

- The ability to obtain real resources (net imports) in exchange for almost costless banknotes. As long as the issuing authority does not put international currency on the international markets beyond what is demanded, the international currency does not depreciate and the country can use currency issue to finance imports.
- The international seigniorage component, i.e. the liquidity discount on assets denominated in the international currency. The large demand for these assets by non-residents, who use it as a means for making international payments and for holding international reserves, reduces the real yield the issuer has to pay on its debt; and
- Finally, the country that issues the international currency has the option of eliminating some of its (foreign) debt with surprise inflation.

Given the dominant position of the US dollar in world monetary affairs and its role of international currency, the international seigniorage accruing to the US is estimated to be in the order of magnitude of 0.2% of GDP (Portes and Rey, 1998).

If the Euro is successful in taking over the place of the US dollar as the dominant international currency in full or in part, significant benefits will accrue to the Euro area economies.

6.3 The impact of enlargement on the international role of the Euro

The role of the Euro in the international monetary system will be affected by the enlargement of the EU and EMU. The obvious reason for this is that when new countries join EMU and adopt the Euro, the economic base of the Euro becomes larger. Integration of the commodity and financial markets of the new entrants with the existing Euro area creates an even larger momentum for the Euro by increasing its share in world trade and deepening its financial markets. The associated increase in commodity and asset trade denominated in Euro lowers transaction costs, increases invoicing in Euro and advances the case for using the Euro as reserve currency by outside countries.

However, even combined, the entrant CEECs' share in world output and exports is small. Their financial markets are hardly developed and the few assets in these countries are already largely denominated in D-Mark or Euro's. **Hence, the contribution of these countries to the enlargement of the Euro's economic and financial base is quite limited and will thus hardly affect the Euro's role in the international money markets.** In fact, the role of the Euro in the international monetary system would benefit much more from entry of the UK.

On the other side of the entry-balance is a considerable threat. The CEE accession countries have not been able to build up a long track record of sound macroeconomic policy. This should not pose much concern, if the current strict economic requirements for accession in force, and the three-phased process on a path to convergence with the EU, as described in the "Composite Paper" (see EC, 1998), is respected. These requirements could guarantee a smooth integration of these countries into the EMU.

Nevertheless, especially after the latest conflict with Serbia, a good deal of political pressure is building up to speed up accession. Although the political reasons are understandable by themselves, the current strict economic requirements for accession in force may be relaxed significantly because of it. This entails a serious danger that the EU and EMU are enlarged with countries that have not (yet) achieved a sufficient degree of economic and institutional stability and this could imply a weakening of EMU's macroeconomic and monetary fundamentals that underlies the prospective role of the Euro.

Another important threat of enlargement, that may be detrimental to the future role of the Euro, is that entry of the accession countries into EMU will mean that countries in very different stages of *development* will be accommodated. Without the exchange rate or monetary policy as cushion, and with major limitations to fiscal transfers and low intracommunity labour mobility, the differences in development between the candidate countries and the E(M)U core may exert a large toll resulting in high unemployment, high interest rates and/or high inflation. In addition, if large transfers must be made from the E(M)U core to the candidate countries, this will weaken the core's fiscal balance as well (see the discussion in chapter 5). As a result, the EMU and the Euro could lose, in a worst case scenario, much of its international appeal and credibility and thus its prospective role as an international currency may be harmed.

Conclusion

The economic effect of entry of the CEE candidate countries into EMU has two sides. On the one hand a positive, but limited, impact of a larger economic base. On the other hand, a potential threat of premature entry, i.e. before the potential entrants comply with EMU norms. This can severely damage the Euro's credibility and the macroeconomic stability of the Euro area.

6.4 Implications of the EMU and its further enlargement for selected groups of non-participants⁸⁴

The establishment of the EMU will not only have an impact on the participating countries but also, directly or indirectly, on non-participating countries. Especially countries with close links to the Euro area will be affected. Most important are links with respect to external trade, exchange rate links with currencies that will disappear and links to the European capital markets for borrowing in EU currencies.

As analysed in Ruhashyankiko (1998, 1999), an important short-term effect of the elimination of intra-Euro area exchange rate risk is the diversion of economic activity, including investment and trade, towards the Euro area. This is potentially harmful for the countries that remain outside the Euro as they see their exports to the Euro area and investment from the Euro area decline. Counterbalancing the diversion effect, is a more dynamic investment and trade creation effect that arises from an economically more efficiently operating Euro area. This will tend to boost economic growth. Non-participants could benefit from increased economic activity, as this will, by itself, increase their opportunities for trade with the Euro area. More direct foreign investment from this area will also be possible in the longer term.

As has been discussed in previous chapters, accession to the E(M)U by the accession countries will have profound effects on these countries themselves. On non-participants, enlargement of EMU will mainly further intensify the effects of establishment of the EMU in the first place.

The threats of enlargement identified in chapter 6.3 may, however, also affect the outsiders. A weakening of macroeconomic performance could harm the economic development and the trade performance of the Euro area. It may also induce even larger exchange rate volatility between the major international currencies.

This paragraph will deal with the possible developments stemming from the introduction of the EMU and its anticipated enlargements for the following three country groups of non-participants.

- The non-accession countries of Central and East Europe (CEEC), including Russia and the Ukraine
- The CFA franc zone
- The Mediterranean countries

For most of the countries in these three regions the EU is the principal partner in trade, development support and economic co-operation. None of these countries has an exchange rate arrangement with the Euro zone or the EU as a whole, but a number of them do have such an arrangement with one or more individual EU countries.

⁸⁴ We do not take into consideration here the effects of the Euro on non-participating EU member states, nor on the EEA (European Economic Area) countries.

6.4.1 The non-accession Central and East European Countries (CEEC), Russia and the Ukraine

It is generally expected that, after joining the E(M)U, the 10 CEE accession countries will move their orientation, with regard to trade, investment and co-operation further in the direction of the EU. This diversion trend in economic activity already started almost a decade ago, after the collapse of the Council of Mutual Economic Assistance (CMEA) trade regime in 1991. This could be a potential threat and lead to a feeling of isolation for the non-participating CEE countries such as Albania, Croatia and Macedonia and for Russia and the Ukraine.

On the other hand, an enlarged EU, which will border on these non-participating countries, will become even more important as trading partner, donor, and foreign direct investor for these non-participating countries. Positive medium and long-term trade creation effects, generated by more prosperous neighbours, are also likely to occur.

It is widely recognised, however, that future economic development of these countries not only depends on their co-operation with the enlarged EU, but much more upon their own capability to transform their economies and to integrate into the world economy.

6.4.2 The CFA franc zone

Background

The CFA franc zone consists of two separate monetary unions, each with its own common currency and central bank, and apart from this, one separate country, the Islamic Federal Republic of the Comoros.⁸⁵ There are no significant political or economic relations between these two unions. Their two central banks have identical agreements with the French authorities based upon the following provisions (see Carré 1997):

- fixed exchange rate against the French franc;
- full convertibility of their currencies into French franc, guaranteed by the French Treasury;
- pooling of foreign assets of the CFA franc member countries, which are required to maintain a large portion of their net foreign reserves in French franc in an Operations Account at the French Treasury; and
- participation of the French authorities in the definition of monetary policy in the CFA franc zone (as a counterpart to the guaranteed convertibility).

After the start of EMU, the budgetary agreement between France and the countries of the CFA franc zone, which is related to the exchange rate link, has been continued. In this way, the countries in the CFA franc zones are receiving a budgetary guarantee for maintaining the value of their currency.

⁸⁵ The first monetary union is the West African Economic and Monetary Union (WAEMU), including Benin, Burkina Faso, Guinea Bissau, Côte d' Ivoire, Mali, Niger, Senegal and Togo. The other is the Central African Economic and Monetary Community (CAEMC) including Cameroon, Central African Republic, Chad, Congo Brazzaville, Eq. Guinea and Gabon.

Currency mismatch

Most CFA franc countries are currently mainly exporting primary commodities, which are traded on the international markets in US dollars (Bakker and Kapteyn, 1997). Most of their imports are denominated in European currencies (and in the future probably in Euro). This mismatch is leading to large exchange rate risk for these countries. This risk will be aggravated if the creation of the EMU increases the exchange rate volatility between the world's most important currencies (see paragraph 6.3).

To reduce this mismatch, it would be beneficial if future denominations of some of the primary export commodities were changed to Euro. This seems especially logical for those commodities that are dominantly consumed in Europe and mainly produced in Africa, such as cacao.

Another mismatch occurs for highly indebted CFA franc countries that have strong trade links to Europe, while they are paying their contractual financial obligations on their debt mainly in US dollars. These countries are restricted in their ability to diversify their liabilities because of limited access to international capital markets (see IMF, 1997b).

Only those countries with access to private capital will be able to profit from the lowering of interest rates and the deepening of financial markets with Euro-denominated bonds. Such countries have the possibility of diversifying their portfolio and reducing a possible mismatch between export revenues and their financial obligations.

Anchoring to the Euro

The EMU may provide a monetary anchor for African countries in general to bring down inflation and build up credibility. These countries may invest in macro-economic stability by anchoring their monetary policy to the Euro. Producers in such countries will then be able to reduce their transaction costs for transactions with the Euro area, because their exchange rate risk is eliminated.

In 1996, the European Commission issued a green paper on the future relationship between EU and ACP countries (Commission of the European Communities, 1996). This paper put forward some basic principles for improving European assistance, notably by deeper monetary and macro-economic co-operation between the EU and the ACP countries. It considers the EMU as a new opportunity for ACP countries, especially those countries with strong trade relations with the EU, to anchor their currencies to the Euro. Such a linkage between periphery countries would lead to a more reliable monetary policy in these countries, would stimulate intra-regional trade and ease regional integration.

From an OCA perspective (see chapter 5), however, some doubts can be cast on the use of such anchoring to the Euro for ACP countries (see Monga, 1997). It takes away an adjustment instrument to deal with asymmetric shocks in a region that is very different from the EU.

A significant impact from the enlargement of the EMU to the 10 CEECs and Cyprus and Malta is not anticipated for this region.

6.4.3. The Mediterranean countries

The Mediterranean countries (MED) in the Middle East and North Africa⁸⁶ are, except for Cyprus and Malta, not candidates to join the E(M)U. Their geographical pattern of trade, however, is heavily concentrated on the EU. Most of them are exporting more than half of their non-oil exports to the EU, while for some (Morocco, Algeria and Tunisia) this percentage is even above 80%. Therefore, the Euro is expected to be a very important currency for their trade.

The MED countries are mainly competitors of Greece and the EMU members Italy, Spain and Portugal. Due to the participation of the latter three countries in EMU they are gaining from lower transaction costs and higher efficiency. Greece would do the same after its participation. Consequently, some diversion of economic activity and trade from the MED countries to these EMU members in Southern Europe might occur.

The increased international exchange rate volatility could be another negative impact of the EMU for these Southern Mediterranean countries. In the longer run, however, more dynamic impacts, positive spill-overs, trade creation and lowering of international interest rates can be expected from the EMU and its enlargement. Furthermore, the Euro could become attractive as a reserve currency and as an anchor for the exchange rate policy in this region.

Also for the MED region, a significant impact from the enlargement of the EMU is not anticipated.

⁸⁶ The MED region in EU terms include Morocco, Tunesia, Algeria, Egypt, Israel, Jordan, Lebanon, Syria, Palestinian Administrated Areas, Turkey and Malta and Cyprus. Once again, it must be noted that, after the 13 October recommendations, Turkey (wich has applied for EU membership) may eventually have the status of an accession country. Malta and Cyprus are, of course, already "Application Countries".

BIBLIOGRAPHY

Monetary Economics

- BIS (1999a), Central bank survey of foreign exchange and derivatives market activity 1998, Basle.
- BIS (1999b), "International banking and financial markets developments", *BIS Quarterly Review*, June 1999.
- Bartolini & Prati, Soft Exchange Rate Bands and Speculative Attacks: Theory and Evidence from the ERM since August 1993, mimeo, 1997.
- Blanchard, O., "Why Does Money Affect Output? A Survey", in Friedman, B & Hanh, F., (eds), *Handbook of Monetary Economics*, v. II, North-Holland, 1990.
- Carlino, G. & deFina, R., "Does Monetary Policy have Differential Regional Effects", *Business Review*, Federal Reserve Bank of Philadelphia, 1996.
- Cecchetti, C., "Central Bank Policy Rules: Conceptual Rules and Practical Considerations", in *Current Issues in Monetary Economics*, Wagner, H. (ed), Physica Verlag, 1998."
- Clarida, R. & Gertler, M., *How the Bundesbank Conducts Monetary Policy*, NBER Working Paper, n. 5581, 1996.
- Duguay, P., "Empirical Evidence on the Strength of the Monetary Transmission Mechanism in Canada: An Aggregate Approach", *Journal of Monetary Economics*, 1994.
- Fischer S., "Central Bank Independence Revisited", American Economic Review, May 1995.
- Gerlach, S & Smets, F, "The Monetary Transmission Mechanism: Evidence from the G-7 Countries", *Journal of Monetary Economics*, 1994.
- Gildea, J., "The Regional Representation of the Federal Reserve Bank Presidents", *Journal of Money, Credit and Banking*, 1992.
- Mundell, R., "A Theory of An Optimum Currency Area", American Economic Review, pp. 657-665, 1961.
- Pagan, A., "Three Economic Methodologies: A Critical Appraisal", Journal of Economic Survey, 1987.
- Ricci, L., A Model of an Optimum Currency Area, IMF Working Papers, WP/97/76, IMF, 1997.
- Sell, F., The Currency Conversion Controversy, MOST, v. 5, n. 4, 1995.
- Svensson, L., Optimal Inflation Targets, Conservative Central Banks and Linear Inflation Contracts, American Economic Review, v. 87, n. 1, March 1997.
- Vinhas de Souza, L., A Report on Robert Mundell's 'A Theory of An Optimum Currency Area', Tinbergen Institute, mimeo, 1999 (a).
- von Hagen, J. & Suppel, R., Central Bank Constitutions for a Federal Monetary Policy, European Economic Review, 1994.
- Walsh, C., *Optimal Contracts for Central Bankers*, American Economic Review, v. 85, n. 1, March 1995.

EMU and the Euro

- Bakker A.F.P. & A.J. Kapteyn, 1997, *De Internationale Rol van de Euro*, Paper Presented to a University Conference on the Legal Aspects of the Euro, Free University of Amsterdam, pp. 95-112.
- Barros, P. and Garoupa, N., *Portugal-European Union Convergence: Some Evidence*, European Journal of Political Economy, V.12, 1996.
- Bayoumi, T & Eichengreen, B., "Shocking Aspects of the European Monetary Unification", in Giavazzi, F & Torres, F. (eds), *The Transition to Economic and Monetary Union in Europe*, Cambridge University Press, 1993.
- Begg, D., The Design of EMU, IMF Working Papers, WP/97/99, August 1997.

Bergsten, C.F., 1997a, The Impact of the Euro on Exchange Rates and International Policy Co-operation, or A 'Big Bang' for the Euro?, Paper Presented to an IMF Conference on EMU and the International Monetary System, Washington DC, March 17-18.

- Bergsten, C.F., *The New Global Currency*, Council on Foreign Relations, Inc., Foreign Affairs, July/August 1997.
- Breuss, F., *The Economic Consequences of a Large EMU-Results of Macroeconomic Model Simulations*, European Integration Online Papers, v. 1, n. 10, 1997, Vienna, Austria.
- Buiter, W., *Macroeconomic Policy During a Transition to Monetary Union*, CEPR Discussion Papers, n.1222, 1995.
- Dornbusch, R.; Favero, C. & Giavazzi, F., *Immediate Challenges for the European Central Bank*, Economic Policy, April, 1998.
- European Central Bank, Annual Report 1997, Frankfurt am Main, Bundesrepublik Deutschland, 1998.
- Hutchinson, M., Northern Light: Do Optimal Currency Area Criteria Explain Nordic Reluctance to Join EMU?, CEPR, 1998.
- IMF, Preparations for Economic and Monetary Union, IMF Secretary, 26 March1997a.
- McCauly R.N. & W.R. White (1997), *The Euro and the European Financial Markets*, unpublished.
- Monga, C., 1997, A Currency Reform Index for Western and Central Africa, The World Economy, Vol 20, no.1, January.
- OECD, 1996, International Implications of European Economic and Monetary Union, Ad Hoc Group of high Level Monetary Experts, Economic Department, ECO/GEN(96)19.
- OECD, 1997, International Implications of the European Economic and Monetary Union, by N. Funke and M. Kennedy, Economic Department Working Papers, No. 174, OCDE/GD(97)61, Paris.
- Polak, J. J., 1997, The Significance of the Euro for Developing Countries, unpublished paper.
- Portes, Richard and Helene Rey (1998), *The emergence of the euro as an international currency*, Economic Policy, April 1998, pp. 307-43.
- Portes, R., 1999, *Global Financial Markets and Financial Stability: Europe's Role*, World Bank ABCDE Europe, seminar, Paris, June, 21-23.

- Ruhashyankiko, Jean-François (1998), Will the Euro Hurt the Industrialisation of Europe Southern Trading Partners?, manuscript, IMF.
- Ruhashyankiko, Jean-François (1999), *The Euro and the Production Structure and Export Performance of Middle-East and North African Countries*, IMF Working Paper, IMF Institute-Middle Eastern Division.
- Vinhas de Souza, L., "The Periphery of the EMU: The Current and Prospective EU Countries Outside the Euro area", in *NAKE Research Day 1998*, Amsterdam, 1998

_____, *Portugal-European Union Convergence: an Updating*, Tinbergen Institute, mimeo, 1999 (c).

von Hagen, J., *Monetary Policy and Institutions in the EMU*, Swedish Economic Policy Review, 1997.

Exchange Rate Regimes

- Avramov, R., *The Role of a Currency Board in Financial Crises: The Case of Bulgaria*, Discussion Papers, DP/6/1999, Bulgarian National Bank, 1999.
- Benassy-Quere, A. & Lahreche-Revil, A., *The Euro as a Monetary Anchor in the CEEC's*, 1998, mimeo.
- Buch, C. & Döpke, J., *Real and Financial Integration in Europe-Evidence for the Accession States and for the Pre-Ins*, Kiel Working Papers, nº 917, 1999.
- Carré, H., 1997, *Exchange Arrangements with Eastern Europe, Mediterranean and African Countries*, Paper Presented to an IMF Conference on EMU and the International Monetary System, Washington DC, March 17-18.
- Freytag, A., *Getting Fit for EMU: A Currency Board for Poland*, Institut für Wirtshaftpolitik, Germany, 1998.
- Horvath, J. & Jonas, J., Exchange Rates Regimes in The Transition Economies: Case Study of the Czech Republic 1990-1997, ZEI Working Papers, B11, 1998.
- International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions, 1998.
- Kopits, G., Implications of EMU for Exchange Rate Policy in Central and Eastern Europe, WP/99/9, IMF, 1999.
- Ribnikar, I., "Monetary Arrangements and Exchange Rate Regime in a Small Transitional Economy (Slovenia)", *in Inclusion of Central European Countries in the European Monetary Union*, De Grauwe, P. & Lavrac, V. (eds.), Kluwer Academic Publishers, 1999.
- Pautola, N. & Backé, P., Currency Boards in Central and Eastern Europe: Past Experience and Future Perspectives, Österreichische Nationalbank, 1998.
- Tullio, G., "Exchange rate Policy of Central European Countries in the Transition to European Monetary Union", in *Inclusion of Central European Countries in the European Monetary Union*, De Grauwe, P. & Lavrac, V. (eds.), Kluwer Academic Publishers, 1999.

Enlargement

- Baldwin, R., *The Eastern Enlargement of the European Union*, in European Economic Review, v. 39, n. 3/4, 1995.
- Baldwin, R., Francois, J. & Portes, R., *The Costs and Benefits of Eastern Enlargement: The Impact on the EU and Central Europe*, in Economic Policy, 1997.
- Daviddi, R. & Ilzkovitz, F., The Eastern Enlargement of the European Union: Major Challenges for Macro-economic Policies and Institutions of Central and Eastern European Countries, in European Economic Review, pp. 671-680, n. 41, 1997.
- Fischer, S., Sahay, R. & Végh, C., *How Far is Eastern Europe from Brussels?*, IMF Working Papers, WP/98/53, IMF, 1998.
- Koop, M., "Joining the Club: Options for Integrating Central and Eastern European Countries into the European Union", in *Europe's Economy Looks East*, Black, S. (ed.), Cambridge University Press, United Kingdom, 1997.
- Löhnig, C., "Changes in Production Structures After Accession: Experiences from the Southern Enlargement of the EU and Prospects for Eastern Enlargement", *in EU Enlargement and its Macroeconomic Effects in Eastern Europe*, Gabrisch, H. & Pohl, R. (eds.), MacMillan, 1999.
- Orlowski, W., "Real Exchange Rates and Growth After the EU Accession: The Problems of Transfer and Capital Inflow Absorption", in *EU Enlargement and its Macroeconomic Effects in Eastern Europe*, Gabrisch, H. & Pohl, R. (eds.), MacMillan, 1999.
- Temprano-Arroyo, H. and R. Feldman, *Selected Transition and Mediterranean Countries: An Institutional Primer on EMU and EU Relations*, IMF Working Paper WP/98/82, June 1998.

Implications of EMU for Candidate Countries

- Backé, P., Integrating Central and Eastern Europe in the European Union: The Monetary Dimension, Österreichische Nationalbank, January 1998.
- Backé, P. & Radzyner, O., The Introduction of the Euro: Implications for Central and Eastern Europe The Case of Hungary and Slovenia, Österreichische Nationalbank, 1998.
- Bekx, P., The Implications of the Introduction of the Euro for non-EU countries, Euro Paper No. 26, European Commission Directorate General for Economic and Financial Affairs, Brussels, July 1998.

Gabrish, H. & R. Pohl eds., EU Enlargement and its Macroeconomic Effects in Eastern Europe, MacMillan, 1999.

- De Grauwe, P. & Aksoy, Y., "Are Central European Countries Part of the European Optimum Currency Areas?", in *Inclusion of Central European Countries in the European Monetary Union*, De Grauwe, P. & Lavrač, V. (eds.), Kluwer Academic Publishers, 1999.
- Köhler, H. & M. Wes, *Implications of the euro for the integration process of the transition economies in central and eastern Europe*, EBRD Working paper No.38, March 1999.

P.R. Masson, "Monetary and Exchange Rate Policy of Transition Economies of Central and Eastern Europe after the Launch of EMU", IMF Policy Discussion Paper PDP/99/5, July 1999.

Ministério das Finanças, O Impacto do Euro na Economia Portuguesa, Lisboa, 1998.

- Rusek, A., Eastern Europe and the Euro Area (With Some Lessons from Recent Asian Experience), Paper presented at the Conference "The EMU and the Outside World", Institute for Business Cycle Research, Swiss Federal Institute of Technology, Zurich, December 11,1998.
- Wdowinski, P. & van Aarle, B., EMU and its Effects: The Case of Poland. A Study for Fixed and Flexible Exchange Rates, mimeo, 1998.
- Vinhas de Souza, L., The Future Entrants from Central and Eastern Europe and their EMU Strategies, A Contribution for the Meeting 'Financial Turbulences in Transition Economies', Cheminitz Technical University, mimeo, 1999 (b).

National Central Banks' Documentation

Banka Slovenije, Annual Report 1997, Bratislava, 1998

Bank of Lithuania, Monetary Policy Programme for 1997-1999, Vilnus, 1997.

, Statement of the Bank of Lithuania, October 13, 1999.

Central Bank of Cyprus, Quarterly Economic Review, n. 1, 1999.

Ceska Narodni Banka, *Minutes of the CNB Board Meeting*, Prague, several numbers.

, Annual Report, Prague, 1998.

CNB Monetary Strategy, Document approved by the Board of the CNB on 8 April 1999.

_____, Inflation target in 1999, Monthly Bulletin 98/12.

Eesti Pank, Statement of the Board, Tallinn, several numbers.

Statement of the Board of Eesti Pank Regarding the Launch of the European Economic and Monetary Union Third Stage and the Introduction of the Euro, 10 December 1998.

Lehmussaari, M., A Statement, Bank of Estonia, 1999.

Nauseda, G. Abandoning a National Currency: Advantages and Disadvantages, Bank of Lithuania Working Papers, Monetary Studies, Vol.3 No.2, June 1999.

Magyar Nemzeti Bank, Monetary Policy Guidelines 1999, MNB, Budapest, 1998.

Narodowy Bank Polski, Monetary Policy Guidelines for 1999, NBP, Warsaw, 1998.

Medium Term Strategy of Monetary Policy (1999-2003), NBP, Warsaw, 1998.

Repse, E., The Implications of EMU for the Policies of the Bank of Latvia, Speech by the Governor of the Bank of Latvia at the12th Annuel European Finance Convention, Vienna, 1998(a).

The Implications of Euro for Central and Eastern Europe, Speech by the Governor of the Bank of Latvia at the Conference "The Global Financial Markets and the Euro:

Strategies and Prospects", Lisbon, 1998(b).

_____, General Economic Developments and Banking in Latvia, Notes, October 1999.

Šarkinas, R., *Lithuania: A Monetary Strategy for EU Accession*, Speech by the Chairman of the Board of the Bank of Lithuania, Bank of Lithuania, Vilnus, 1999.

Monetary Policy and Preparations for Accession

- Czech Government, Economic Strategy of Joining the European Union: Starting Points and Outlines of Solutions, Prague, 1998.
- Dedek, O., "Echoing the European Monetary Integration in the Czech Republic", *in Inclusion of Central European Countries in the European Monetary Union*, De Grauwe, P. & Lavrac, V. (eds.), Kluwer Academic Publishers, 1999.
- Filosa, R., Monetary Policy Framework in Central and Eastern Europe: The Relevance of Other Countries' Experience, Österreichische Nationalbank, 1996.
- Hrnčíř, M., Monetary Policy in the Czech Republic: Strategies, Instruments and Transmission Mechanisms, Österreichische Nationalbank, 1996.
- Janackova, S., Convergence for European Union Accession: Challenges for Czech Monetary Policy, in Prague-Economic-Papers, V. 7, nº 1, 1998.
- Kokoszczyński, R., Monetary Policy in Poland: Strategies, Instruments and Transmission Mechanisms, Österreichische Nationalbank, 1996.
- Krzak, M. & Schubert, A., *The Present State of Monetary Governance in Central and Eastern Europe*, Österreichische Nationalbank, 1998.
- Kuus, T., *Estonia's EMU Prospects*, in Russian and Eastern European Financial Trade, v. 34, nº 5, 1998.
- Lavrac, V., *Slovenia: Monetary Policy and Monetary Integration into the EU*, Österreichische Nationalbank, 1999.
- Lipschitz, L., Monetary Policy in Central and Eastern Europe: Strategies, Instruments and Transmission Mechanisms, Österreichische Nationalbank, 1996.
- Makúch, J., Monetary Policy in Slovakia: Strategies, Instruments and Transmission Mechanisms, Österreichische Nationalbank, 1996.
- Makuch, J., *The Monetary Policy of the National Bank of Slovakia -Past and Current Issues*, Report of the National Bank of Slovakia presented at the 6th International Fair of Banking, Finance and Insurance.
- Nemenyi, J., Challenges of Monetary Policy in the run-up to European Union Accession, 1998, mimeo.

Monetary Policy in Hungary: Strategies, Instruments and Transmission Mechanisms, Österreichische Nationalbank, 1996.

- Polanski, Z., "The Challenge of European Monetary Integration and the Polish Monetary Policy", in *Meeting the Converge Criteria of EMU: Problems of the Countries in Transition*, Polish Economic Society, Warsaw, 1997.
- Radzyner, O. & Reisinger, S., Central Bank Independence in Transition: Legislation and Reality in Central and Eastern Europe, Österreichische Nationalbank, 1998.

Transition Issues

- Berengaut, J; Lopez-Claros, A; Le Gall, F; Jones, D; Stern, R; Wetin, A; Psalida, E; and Garibaldi, P., *The Baltic Countries From Economic Stabilisation to EU Accession*, IMF Occasional Paper 173, 1998.
- Buch, C., *Russian Monetary Policy-Assessing the Track Record*, in Economic Systems, V. 22, nº 2, 1998.
- Borish, M., Ding, W. & Noël, M., On the Road to EU Accession: Financial Sector Development in Central Europe, World Bank Discussion Paper, n. 345, 1996.
- Forum Report on Economic Policy Initiative, *Monetary and Exchange Rate Policies, EMU and Central Eastern Europe*, CEPR, 1999.
- Gaspar, V. & Pereira, A., *The Impact of Financial Integration and Unilateral Public Transfers on Investment and Growth in EC Capital-Importing Economies*, Journal of Development Economics, 1995.
- Krzak, M., Estonia, Latvia and Lithuania: From Plan to Market-Selected Issues, Österreichische Nationalbank, 1998.
- Matos, J., *Recent Experience with Successful Transformation-The Case of Portugal*, Österreichische Nationalbank, 1996.
- Nissinen, M., Latvia's Transition to a Market Economy, MacMillan, 1999.
- Polanski, Z., Poland and International Financial Turbulence of the Second Half of the 1990s, mimeo, 1999.
- Vinhas de Souza, L., "The Portuguese Legal Framework for Foreign Direct Investment", in Dimon, D., Tomlimson, A. & Nichols, S. (eds), Competitiveness in International Business, V. I, A & M. University, USA, 1996.

EU Documentation

European Central Bank, Monthly Bulletin, October, 1999(a).

, Speech by Dr. Willem F. Duisenberg, President of the European Central Bank, *EU enlargement, some views from the ECB*, Bank of Greece, 15 October, 1999(b).

, Speech by Dr. Willem F. Duisenberg, President of the European Central Bank, *The Past and Future of European Integration: a Central Banker's Perspective*, FED, Washington D.C., 26 September, 1999(c).

Commission of the European Communities, *Enlarging the European Union - Accession Partnerships*, Brussels, Belgium, 1998 (b).

European Agreements and Beyond: A Strategy to Prepare the Countries of Central and Eastern Europe for Accession, COM (94) 320, Brussels, Belgium, 1994.

Green Paper on: *The Relationships between the EU and the ACP Countries at the Turn of the 21 Century*, Brussels, 20 November, COM(96) 570 def, 1996. , *The European Community as a world trade partner*, European Economy, No. 52, Directorate-General for Economic and Financial Affairs (DG II), 1993.

Commission of the European Union, Regular Report from The Commission on Bulgaria's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Cyprus's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Czech Republic's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Estonia's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Hungary's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Latvia's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Lithuania's Progress Towards Accession, Brussels, 1998(a) and 1999.

<u>Regular Report from The Commission on Malta's</u> Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Poland's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Slovakia's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Slovenia's Progress Towards Accession, Brussels, 1998(a) and 1999.

Regular Report from The Commission on Romania's Progress Towards Accession, Brussels, 1998(a) and 1999.

Report Updating the Commission's Opinion on Malta's Application for Membership, Brussels, Belgium, 1999(a).

Council of the European Communities, Report from the Council to the Essen European Council on a Strategy to Prepare the Accession of the Associated CEECs, Brussels, Belgium, 1994.

Dvorsky, S., Backé, P. & Radzyner, O. *The 1998 Reports of the European Commission on Progress by Candidate Countries from Central and Eastern Europe*, Focus on Transition, v. 2, ONB, Vienna, 1998.

European Commission, Composite Paper *Reports on Progress towards Accession by Each of the Candidate Countries*, Brussels, 1998 and 1999.

European Commission, Agenda 2000, 1997.

European Commission, One Market, One Money: An Evaluation Of The Potential Benefits And Costs Of Forming An Economic And Monetary Union, European Economy, n. 44, October 1990. Economic Commission, European Economy, Supplement C, *Economic Reform Monitor*, several issues.

European Parliament, *EMU and Enlargement*, EMU Briefing Paper 38 (rev.5), Luxembourg, 1999.

German Unification

- Bofinger, P., "The German Currency Union of 1990-A Critical Assessment: The Impact on German Monetary Policy", in *The German Currency Union of 1990-A Critical Assessment*, Holscher, J. & Frowen, S. (eds), MacMillan, 1997.
- ECE, The Unification of Germany, Economic Bulletin for Europe, v. 42, 1990.
- Hochberg, A., "Lessons from German Unification for European Integration? A Conceptual Approach", in *East Germany's Economic Development Since Unification*, Hölscher, J. & Hochberg, A. (eds), McMillan, 1998.
- Hölscher, J. & Stephan, J., "The 'German Model' in Decline", *in East Germany's Economic Development Since Unification*, Hölscher, J. & Hochberg, A. (eds), McMillan, 1998.
- Kaser, M., "The Eastern Länder as a Transition Economy", in *East Germany's Economic Development Since Unification*, Hölscher, J. & Hochberg, A. (eds), McMillan, 1998.
- Lythe, C., What Does the Experience of German Monetary Union Tell Us About the Theory of Monetary Union?, International Review of Applied Economics, v. 9, n. 2, 1995.
- Siebert, H., *Eastern Germany in the Fifth Year -Investment Hammering in the Basement?*, Kiel Discussion Papers, n. 250, April, 1995.
- Smith, E., "Economic Aspect of German Unification: Lessons for European Integration", in *East Germany's Economic Development Since Unification*, Hölscher, J. & Hochberg, A. (eds), McMillan, 1998.
- Stephan, J., Economic Transition in Hungary and East Germany, MacMillan, 1999.

Miscellaneous

Barro, R., *Economic Growth in a Cross Section of Countries*, Quarterly Journal of Economics, V.106, 1991.

Tinbergen, J., On the Theory of Economic Policy, North-Holland, Amsterdam, The Netherlands, 1952.

EBRD, Transition Report 1998, 1998.

EBRD, Transition Report Update, April 1999.

IMF, 1998, International Financial Statistics, Yearbook, 1998.

IMF, World Economic Outlook1997b.

IMF, *IMF Approves Augmentation and Extension of Bosnia and Herzegovina's Stand-by Credit*, Press Release No.99/26, June 28, 1999.

IMF, Bosnia's and Herzegovina's Letter of Intent, June 7, 1999.

IMF, Bosnia and Herzegovina: Selected Issues, August 1998.

- IMF, Bulgaria Recent Economic Developments and Statistical Appendix, Staff Country Report No.99/26,1999.
- IMF, *IMFConcludes Article IV Consultation with Bulgaria*, Public Information Notice No.99/20, 1999.
- IMF, Czech Republic- Selected Issues and Statistical Annex, IMF Staff Country Reports No.98/36 and 98/37.
- IMF, *Hungary- Selected Issues and Statistical Appendix*, IMF Staff Country Reports No. 99/27 and 97/104.
- IMF, *Republic of Estonia Selected Issues and Statistical Appendix*, IMF Staff Country Reports No.98/12.
- IMF, *Republic of Estonia: Staff Report for the 1999 Article IV Consultation*, IMF Staff Country Report No.99/59.
- IMF, IMF Concludes Article IV Consultation with Estonia, PIN No.99/55, July 1, 1999.
- Countries in Transition 1998, Vienna Institute for International Economic Studies, 1998.
- IMF, Republic of Latvia –Selected Issues and Statistical Appendix, IMF Staff Country Reports No.98/47.
- IMF, *Republic of Lithuania Selected Issues and Statistical Appendix*, IMF Staff Country Reports No.98/92.
- IMF, *Republic of Lithuania: Staff Country Report for the 1999 Article IV Consultation*, IMF Staff Country Report No.99/73.
- IMF, Republic of Poland –Selected Issues, IMF Staff Country Report No.99/32.
- IMF, *Republic of Poland –Selected Issues and Statistical Appendix*, IMF Staff Country Report No.98/51.
- IMF, Romania Statistical Appendix, IMF Staff Country Reports No. 98/123.
- IMF, *Republic of Slovenia- Recent Economic Developments and Selected Issues*, IMF Staff Country Reports No.98/19 and No.98/20.
- IMF, Republic of Slovenia- Statistical Appendix, IMF Staff Country Reports No.99/23.