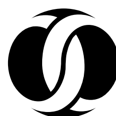

European Bank
for Reconstruction and Development

Implications of the euro for the integration process of the transition economies in central and eastern Europe

by Horst Köhler and Marina Wes

Abstract

This paper discusses some of the consequences and challenges of the introduction of the euro for the transition economies in central and eastern Europe (CEE). The first part of this paper identifies the various channels through which EMU may affect financial and commercial relations in central and eastern Europe. The second part of this paper turns to a discussion of the institutional implications for those transition economies that have applied to accede to the EU. Real convergence is likely to take much longer than meeting the Maastricht convergence criteria and transition economies should not peg their currencies to the euro too quickly. In addition, a gradual approach to financial integration and thus a sequencing of capital account liberalisation seems appropriate. This paper concludes by considering some of the possible effects of EMU on political debates about eastward enlargement of the EU.

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1. INTRODUCTION

The introduction of the euro is a major event for international monetary relations and the international monetary system. It has important consequences for the resilience and dynamism of the European economy and the functioning of European money and capital markets. The size of the euro zone, the emphasis on price stability in the policy framework and the integration of previously segmented financial markets imply that the euro may soon become a major world currency.

The introduction of the euro has important repercussions for the transition economies in central and east European countries right from the start. These countries are highly dependent on the European Union (EU). This dependency reflects the proximity to the EU, and the close political, economic and financial bonds built quickly since the onset of the transition. Between one-half and two-thirds of foreign trade of the central and east European countries is with the EU and this share is growing. Furthermore, many transition economies that used to peg to the DM or to a basket in which the DM had a large weight now peg to the euro.[1] For many countries in the region, the euro will also become increasingly attractive as a vehicle currency and as a reserve asset.[2]

Table 1: The role of the euro as an international currency [3]

Function	Private sector	Public sector
Unit of account	Invoicing of foreign trade; international financial transactions; quotation of prices on international markets	Target of exchange rate relationships (bands, pegs, etc.)
Medium of exchange	Settling of international trade and financial obligations; vehicle currency	Interventions in foreign exchange markets; official financial flows
Store of value	Denomination of financial instruments	Denomination of official international reserves

The various channels of transmission through which the introduction of the euro as an international currency will affect financial and commercial relations with central and east European transition economies are summarised in Table 1.[4] Of course the extent to which individual countries will be affected by the introduction of the euro varies from one case to another, depending on factors such as the intensity of a country's trade and financial relations with the euro zone, its access to international capital markets, and the exchange rate policy of its authorities.

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[1] Note that we are using the term pegging in the sense of using the euro as the reserve currency of reference rather than establishing fixed parities to the euro.

[2] A vehicle currency is one that is widely used to denominate international contracts made by parties who do not reside in the country that issues the vehicle currency. There is a close synergy between the use of a currency as a vehicle and as a currency of denomination for financial assets.

[3] This table is based on Bekx (1998).

[4] For instance, the international private use of a currency as a medium of exchange comprises the payment of international trade flows and the discharging of international financial obligations, including foreign exchange operations. In public sector use, the medium-of-exchange function includes the use of a currency for interventions on foreign exchange markets, and for the settling of official financial flows (e.g. state-to-state loans).

For the countries negotiating accession, the introduction of the euro also has more direct implications. The EU has concluded wide-ranging Europe Agreements with 10 of the central and east European (CEE) countries, which all aspire not only to membership of the EU but also ultimately to the adoption of the euro and full participation in economic and monetary union (EMU). An important medium-term challenge is how to organise the transition from the present exchange rate arrangements to an irrevocable fix to the euro.

The impact of the introduction of the euro on central and east European countries will be broad-ranging. As the EU becomes a more powerful and bigger union, the countries in central and eastern Europe will have to consider their relationship with the community even more carefully. This paper discusses some of the consequences and challenges of EMU for the transition economies in central and eastern Europe.

- In Section 2, we discuss the impact of the euro on trade flows between the euro zone and the CEE countries. If successful, EMU will increase growth in the EU and raise import demand for products from transition economies. EMU will also increase clarity and reduce transaction costs for businesses, both in the EU and in the countries of central and eastern Europe. This will benefit especially small firms as well as those that export to several euro-zone countries.
- In Section 3, we discuss the impact of the euro on financial flows between the euro zone and the CEE countries. In the long run, transition economies are likely to benefit from EMU as lower real interest rates can facilitate the financing of economic restructuring. However, in the short run, the speculative interest in some of the currencies in central and eastern Europe may increase, which has important implications for economic policy (for instance in the areas of exchange rate policy, capital account liberalisation and structural reform).
- The institutional implications for those transition economies that have applied to accede to the EU are outlined in Section 4. This section emphasises that real convergence is likely to take much longer than meeting the Maastricht criteria.
- In the second half of the paper we turn to some of the important policy challenges that EMU raises for the transition economies. The discussion in Section 5, which focuses on exchange rate policy, suggests that transition economies should not peg their currencies to the euro too early. Instead, they should exploit the flexibility offered by ERM II.
- Section 6 considers capital flows. What are the implications of the capital account liberalisation required as a prerequisite for EU accession? The analysis suggests a gradual approach to financial integration and thus a sequencing of capital account liberalisation.
- Section 7 concludes by considering some of the political arguments. Monetary union could have a major impact on the CEE countries through its effects on political debates about eastward enlargement with the EU. In this context, the success of the euro is very important. If the euro fails to produce the expected benefits and brings economic and political disruption in the EU, it may also damage the prospects of CEE countries.

2. IMPLICATIONS OF THE EURO FOR TRADE RELATIONS WITH TRANSITION ECONOMIES

2.1 INTERNATIONAL TRADE

Growth effects

One of the main channels of transmission through which the introduction of the euro will affect the integration process runs via international trade relations. Economic and monetary union may result in an amplification of the type of economic benefits that have followed from previous integration efforts. EU members are unable to obtain the full gains from an integrated market unless they completely eliminate the exchange rate risks and conversion costs arising from the use of separate national currencies. Two types of permanent effects are expected to result from EMU:[5]

1. ***Microeconomic efficiency gains***, arising from the elimination of exchange rate uncertainty and transaction costs within the EU. This will stimulate trade within the EU, leading to a permanent increase in output because of a higher overall factor productivity and a larger capital stock. Hence, growth will increase to a higher level steady-state.
2. ***Macroeconomic stability effects***, arising both from the elimination of intra-EU exchange rates and from greater discipline in fiscal and monetary policies. This will lower the risk premia built into interest rates and thus lead to higher investment. These stability effects will also reduce the variability of prices, output and other macroeconomic variables, boosting economic growth.

The introduction of the euro will give a substantial growth impetus to the countries of the EU. To the extent that EMU becomes a catalyst for economic reform, not only in the fiscal area, but also in labour and product markets, there are likely to be further important benefits for participating countries. This will have positive spillover effects for the transition economies of central and eastern Europe. If reforms within the EU succeed in making labour markets more flexible, adverse shocks would tend to impose smaller economic costs (in terms of output losses and higher unemployment) within the euro zone as well as in the transition economies of central and eastern Europe.[6] The IMF (1997) has estimated that if EMU also serves as a catalyst for further structural reform (leading to greater real wage flexibility and a reduction in the natural rate of employment), the level of output in EMU member states may be up to 3 per cent higher than in the base case by 2010.[7]

As a result of a higher growth level in the EU, demand for imports from transition economies will be boosted. A recent study by the IMF (1998) estimates that a 1 per cent increase in real GDP in the EMU 11 states would have a knock-on effect of an increase in GDP of 0.2-0.5 per cent in the CEE economies. In addition, the increase in exports of CEE economies would be in the range of 0.7-1.6 per cent.

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[5] More details can be found in European Commission (1990) and Bekx (1998).

[6] Greater labour market flexibility could express itself in greater real wage flexibility and/or a reduction in the natural rate of unemployment. The effects would also be less persistent, with the economy returning relatively quickly to its longer-run potential growth path.

[7] The European Commission (1990) estimated that the transaction costs related with the existence of different currencies in the EU amounted to 0.5% of GDP in the mid-1980s. A more recent German IFO study quoted in European Commission (1996) puts this figure at 1% for the mid-1990s. While difficult to quantify, the efficiency costs of resource misallocation due to exchange rate risk may be considerably larger.

An important feature of the transition process in central and east European countries has been a reorientation of trade towards the EU, associated with the liberalisation of trade restrictions and the exploitation of comparative advantage (see Table 2). Although during the socialist period CEE countries faced considerable trade barriers, EU trade policy responded quickly to the political and economic changes in central and eastern Europe. In the first half of the 1990s, Europe Agreements were signed with 10 central and east European transition economies (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia), giving preferential treatment to exports from the associated countries to the EU. The growth rate of exports to the EU has been very high, and has on average exceeded 30 per cent a year for the 10 accession countries during the 1993-97 period.

Table 2: Exports from central and eastern Europe to the EU

	Bulgaria	Czech Repubic	Estonia	Hungary	Latvia	Lithuania	Poland	Romania	Slovak Republic	Slovenia
Share of EU exports in 1993	48	55	49	58	32	67	69	41	33	63
Share of EU exports in 1997	45	60	62	71	49	45	64	57	47	64
Average annual growth rate of exports to EU	19	28	84	43	36	21	17	34	32	10

Source: Direction of Trade Statistics, IMF, 1998.

Reduction in transaction costs

The effect of EMU on trade relations with CEE countries depends not only on the external spillovers from the euro's effect on economic growth in the euro zone, but also on the extent to which the euro is used in international transactions. Over the medium term, several factors suggest a broader role and thus greater demand for the euro than for the previous EU currencies, which are under-represented in global transactions relative to the US dollar. For instance, until now, around 40 per cent of trade between the CEE countries and the EU has been invoiced in dollars – mainly for historical reasons. This is very high, given the structure of trade, and has grown increasingly inconvenient given that many of the region's currencies track the major European currencies.[8]

The large economic base of the euro and the elimination of the transaction costs involved with multiple exchange rates are likely to increase gradually the use of the euro as a unit of account in the denomination of trade flows in transactions between the euro zone and transition economies. Over the medium and long term, there is therefore likely to be a change in invoicing patterns relating to changing patterns of trade. ***As a consequence of increased invoicing in euros, exporters in transition economies may find that market access has been made easier because of lower transaction costs within the euro zone***. The euro will make trade within the EU easier by eliminating exchange rate uncertainty, allowing companies to compare costs and save money on foreign exchange hedging. ***These benefits will be particularly pronounced for small and medium-sized enterprises.***[9]

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[8] The internationalisation ratio of the dollar, which is defined as the invoicing share of the dollar in world exports to the share of the US in world exports, and which gives an indication of the extent to which the dollar plays a role as an international currency, was almost three times higher than the internationalisation rate of the DM in 1995.

[9] Most larger firms already have the resources to manage and negotiate international finance deals. Case studies of several enterprises can be found in *Business Central Europe*, June 1998.

For those countries that have a credible exchange rate link to the euro, there will be further reductions in transaction costs and business risks. Given the region's increasing integration with the euro zone through trade and investment flows, those east European countries that can shadow the euro credibly will be able to reduce significantly exchange rate risks, and benefit from the wider economic impact of EMU in a way similar to countries in the euro zone. In this way, monetary union may boost growth in the euro zone and will facilitate east-west trade. Furthermore, ***the introduction of the euro will also stimulate and facilitate intra-regional trade, thus promoting integration among central and east European countries.***

The increased clarity in transactions will be constructive for international trade. To the extent that intense competition highlights restrictive trade practices from the EU, it also accelerates the process of dismantling tariff and non-tariff trade barriers. This will be particularly important in the so-called "sensitive sectors", including agriculture and steel. The Europe Agreements were an important and timely response to the onset of the transition process, and have promoted liberalisation and growth in transition economies. ***EMU may contribute to ensuring that export markets of the CEE countries are not contracted by slow growth or protection.*** In this context, the recent increase in anti-dumping cases against producers of the transition economies in central and eastern Europe raises some concern.[10]

Terms-of-trade gains

Countries in central and eastern Europe tend to have similar shares of imports and exports with the EU. None the less, a strong euro might lead to relatively lower prices for dollar-denominated energy imports.[11] In this fashion, euro appreciation against the dollar would help boost the price competitiveness of east European goods, cushioning weaker exporters. However, these benefits could be outweighed by negative effects if EMU coincides with and exacerbates a cyclical downturn in the west European economies that depresses demands and contracts markets for east European exports.[12]

2.2 Investment

Over the coming years, a number of factors could cause a temporary surge in investment in the accession countries. This investment will be driven in large measure by the recognition and anticipation of economic growth, the need to comply with investment requirements to meet EU norms, and the opportunities and competitive pressures associated with market integration. ***Economic and monetary union increases the competitive pressures associated with market integration and may lead to a surge in investment, triggered by a favourable change in the investment climate.***

In all 10 accession countries, quality and productivity differentials are reflected in low labour remuneration compared with current EU member states, low unit prices of manufacturing exports to the EU, and continuing protection through tariffs, non-tariff barriers and indirect subsidies. The real appreciation of exchange rates, rising real wages, declining levels of

[10] As highlighted in IMF (1998), if countries in the euro area progress only slowly with structural reforms and unemployment remains high, there is a greater risk of protectionist pressures that may limit exports from the CEE countries to the EU.

[11] The domestic currency price of imports would fall and the price of exports would rise unless shifts in global supply and demand resulting from the exchange rate movement would lead to offsetting changes in euro and dollar prices.

[12] A more detailed discussion can be found in IMF (1997).

protection and subsidisation will exert considerable pressure for adjustment in a wide range of industries (including agriculture, steel, shipyards, mining, power, heavy industry, food and textiles). Equally importantly, ***the increased competition for EU markets from within the euro-zone countries underlines the urgent need for continued structural reform in the transition economies of central and eastern Europe.***

Pressures for adjustment can be met partly by improved management practices, but a broad modernisation and upgrading of the capital stock will also be required. Most of these investments would come with or without E(M)U accession as part of capital replacement, but the prospective competition associated with accession and the introduction of the euro is likely to accelerate this process. The small and medium-sized enterprise sector, the backbone of industrial flexibility and innovation in many countries, could play an important role in raising competitiveness. Further contributions to raising competitiveness could also come from foreign direct investment (FDI). Additional FDI may be attracted by several factors, including increased growth in the EU as well as in the markets of central and eastern Europe, cost advantages and, more broadly, by the scope for efficiency gains through Europe-wide production networks.

3. THE EURO IN FINANCIAL MARKETS AND IMPLICATIONS FOR TRANSITION ECONOMIES

In the medium and long run, the role of the euro will expand in international financial markets. The use of the euro in an area whose economic and commercial weight is equivalent to that of the USA will reduce the information and transaction costs associated with its use. The present segmentation of national markets will be largely overcome and the European financial market will become truly integrated, providing opportunities in the form of broader funding and investment possibilities. Since the level and liquidity of the leading euro-debt markets will be higher, a reduction in the liquidity premium in nominal interest rates is likely to occur, lowering funding costs for sovereign and private borrowers both in the EU and in central and eastern Europe. ***In the long run the transition economies may benefit as lower real interest rates can facilitate the financing of the continuing economic restructuring.***

The dawn of the euro will significantly deepen markets into which central and east European countries will be able to float euro-denominated bonds. The advent of a fully integrated bond market in euros may incite companies (in the EU as well as in central and eastern Europe) to appeal increasingly to the bond market for obtaining credit, away from banks. The existence of a well-functioning euro market will reduce the costs and increase the benefits of issuing corporate bonds. With greater competition and greater efficiency, enterprises will be able to approach the capital markets directly. ***The search by investors for better yields will allow issuers with lower credit rating access to the securities market.*** Both developments are likely to increase securitisation in the EU-11 as well as in central and eastern Europe.

However, lower transaction costs in the EU will only help if the transition economies in central and eastern Europe are able to attract long-term investments, rather than short-term portfolio flows drawn by uncovered interest rate differentials. One of the implications of EMU is that there is less scope for portfolio diversification within the EU. As a result, ***in the short run speculative interest in some of the currencies of central and eastern Europe may increase.*** This will make it even more important for countries with large deficits on their current accounts to reduce the shortfall and to boost structural reform and inflows of FDI. It also has important implications for the sequencing of capital account liberalisation as well as for exchange rate policy. These are elaborated on in Sections 5 and 6 below.

The degree of variability of the euro's exchange rate will affect all transition economies, partly because of trade links (see Section 2). In addition, many central and east European currencies are somehow linked to the euro, while countries pay contractual financial obligations on their debt in dollars. ***The denomination of the outstanding external debt of CEE countries is somewhat less diversified than their trade flows, with substantial obligations in dollars.*** With such a mismatch, a depreciation of the euro would lead to an increase in the domestic currency cost of debt service, probably without a fully offsetting benefit in the trade account. This is likely to be a particular concern for highly indebted countries that are constrained in their ability to diversify their liabilities, because of limited access to international capital markets. For countries with access to private capital, EMU will provide a deeper market into which to float euro-denominated bonds, allowing countries that currently borrow heavily in dollars to reduce the mis-match between the currency of their exchange rate peg and their financial obligations.

The euro is also likely to complement the dollar increasingly as a major reserve currency, partly for intervention purposes. However, the greater depth and breadth of markets in euro-denominated financial assets will provide incentives for countries to diversify their reserve holdings to be more in line with the currency composition of their trade and financial transactions.

4. EU AND EMU ACCESSION: INSTITUTIONAL IMPLICATIONS [13]

The principle of an EU enlargement to the associated CEE countries was first announced at the European Council of Copenhagen in June 1993. The EU committed to admitting all associated CEE countries that meet certain economic and political conditions, which have become known since as the "Copenhagen criteria".[14] These are:

(i) The existence of stable institutions guaranteeing democracy, the rule of law, human rights and respect for the protection of minorities;

(ii) The existence of a functioning market economy and the capacity to cope with competitive pressures and market forces within the EU;

(iii) The ability to take on the obligations of membership, including adherence to the aims of political, economic and monetary union.

Since the Copenhagen Council, a pre-accession strategy for the associated CEE countries has progressively taken shape. In the so-called Agenda 2000, which was presented in mid-1997, the Commission proposed to start membership negotiations with five associated CEE countries, namely the Czech Republic, Estonia, Hungary, Poland and Slovenia. These negotiations were initiated in March 1998. ***Negotiations with the CEE countries on their prospective EU membership have focused on the need for structural improvement, without any reference to exchange rate arrangements.*** At present, not even the first five countries negotiating accession are required to either fix the parities to the euro or participate in ERM II.

Only when these countries join the EU, on current plans no sooner than 2002, can they be expected to comply with the *acquis communautaire* and to join ERM II. ***EMU is part of the acquis communautaire and, since the EU has decided that no more opt-out clauses will be accorded, all new EU members will have to join.***[15] Furthermore, all countries negotiating accession are expected to adopt the EU institutional and legal provisions in the area of EMU applicable to EU countries remaining outside the euro zone. In many respects, these institutional and legal provisions mirror the objective of the economic transition (as, for instance, set out in Article I of the Agreement Establishing the EBRD). None the less, in some areas, complicated policy questions will arise (see Sections 5 and 6).

The most important institutional and legal requirements in the area of EMU applicable to EU member states outside the euro zone are:

1. ***Participation in ERM II.*** As in the case of the ERM, membership of ERM II will be voluntary, but EU countries with a derogation "can be expected to join the mechanism". Participation in the ERM II for at least two years remains a criterion for admission to the euro zone. *Its voluntary nature, the wide bands, calls for timely realignments and the possibility of closer exchange rate links for certain countries make ERM II a flexible system, accommodating for the varying circumstances of CEE countries*. Although countries with currency boards or other fixed pegs could continue with similar arrangements within ERM II, countries with pre-announced crawling pegs (e.g. Hungary, Poland) or floating exchange rates would have to modify their exchange rate regime to join ERM II.

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[13] This section draws extensively on Temprano-Arroyo and Feldman (1998).

[14] The associated CEE countries are those that have concluded Europe Agreements with the EU.

[15] In principle, newcomers could get formal transitory periods. However, for various reasons (discussed for instance in Temprano-Arroyo and Feldman, 1998) this is unlikely.

2. ***Independence of the central bank***, including

   - The compliance with rules on the appointment, dismissal, and term of office of the chief executive of the central bank;
   - The capacity of the central bank to formulate monetary and exchange rate policy without government interference;
   - The primary objective of the central bank should be the maintenance of price stability;
   - Limitations on the central bank's ability to lend to the public sector.

   Many CEE countries assigned a relatively high degree of statutory (although not necessarily de facto) independence to their new central banks at the beginning of the transition process. None the less, *a significant number of further legal amendments will be needed to comply with the provisions in the area of central bank independence.*

3. ***Financing of the government.*** The Maastricht Treaty requires all countries to renounce any form of direct central bank financing of government deficits. Privileged access by public authorities to financial institutions has also been prohibited. A no bail-out provision has been introduced, which prohibits the assumption of liabilities of an EU country by another EU country or the EU budget. As of 1998, only Bulgaria, Estonia and Lithuania (all operating currency boards) comply in full with these requirements. *Without additional developments of the capital markets in transition economies, it will be difficult for many CEE countries to comply with these criteria.*

4. ***Participation in the European System of Central Banks.*** All EU central bank governors will be members of the General Council of the ECB. EU members outside EMU will be obliged to consult the ECB on any draft legislative proposal in its field of competence, and their financial institutions could be subject to prudential supervision by the ECB.

5. ***Liberalisation of capital flows***. Free capital movements are an essential component of monetary union. Prior to accession, transition economies will need to make further changes in the area of capital account liberalisation. With the exception of transactions relating to FDI, restrictions remain on many types of capital movements in some countries (in particular financial credits, portfolio flows and real estate). The Baltic countries introduced a high degree of capital account liberalisation early in the transition process, and the Czech Republic, Hungary and Poland have committed to significant liberalisation, putting these countries in a favourable position. Some of the important policy choices related to the sequencing of capital account liberalisation are discussed in Section 6 below.

6. ***Policy coordination and surveillance.*** From the date of accession, new EU members will be obliged to regard their economic policies as a matter of common concern. They will also have to be part of a number of EU mechanisms for the multilateral coordination and surveillance of the macroeconomic policies of the member states, including the broad economic policy guidelines, the convergence programmes and the excessive deficit procedure.[16] *The tight fiscal and monetary policies needed to be part of these initiatives*

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[16] The broad economic policy guidelines provide a key overall medium-term framework for the conduct of both macroeconomic and structural policies in the EU. All member states with a derogation present annual convergence programmes, intending the strategy a country intends to pursue, and the concrete measures it intends to take, to ensure future compliance with the convergence criteria. Under the excessive deficit procedure, strengthened by the 1997 Stability and Growth pact, all EU countries must aim for a medium-term budgetary position close to balance or in surplus.

may be difficult to reconcile with the large public investment needs in the transition economies.

7. ***An efficient market-oriented financial sector.*** The prospect of EU membership increases pressure on non-EU candidate countries to make progress towards developing a healthy, efficient and market-oriented financial sector. *Without additional developments of the capital markets in transition economies, it will be difficult for many CEE countries to comply with some of the Maastricht rules.* Structural weaknesses can complicate a country's participation in the euro zone. For example, insufficient competition amongst banks can reduce the responsiveness of bank lending rates to monetary policy changes.
8. ***The payment system.*** An essential component of EMU will be the creation of an EU-wide payments system, named TARGET, that will handle large-value euro-payments and will be composed of the national real-time gross settlement (RTGS) systems connected through an interlink network. Many of the CEE countries are still in the early stages of developing a modern national payments system.

All 10 applicant countries are already making preparations to join EMU eventually: they are maintaining fiscal and monetary discipline, and many have started pegging their currencies to the euro. Although no applicant is required to adopt the euro immediately upon accession to the EU, Estonia and Slovenia officially aim to do so, while the other countries in negotiations want to join as soon as possible. Joining EMU is seen across the region as an important way of gaining policy credibility, as well as being part of a commitment to full EU membership.

To join EMU, accession countries will need to meet the convergence criteria of the Maastricht treaty in addition to the legal and institutional requirements outlined above. An evaluation of the current performance of the CEE countries *vis-à-vis* the convergence criteria is provided in Table 3.

In 1997, none of the countries satisfied all criteria, although many countries satisfied at least two. General government balances are in a number of cases below 3 per cent, but are not necessarily defined in a way consistent with Maastricht definitions. These performances can partly be attributed to the accrual of privatisation revenues (which were excluded from the calculations for EU countries), and several governments are still responsible for considerable hidden debts in the form of bad loans consolidated into state-owned banking institutions. As major privatisation programmes conclude in the front-runner countries over the next 2-3 years, governments will lose the buffer of these revenues and will need to work harder to keep their balance sheet positive.

At the same time, the infrastructure upgrading necessary for transition will require high levels of public investment. Improving the efficiency of public spending will help, as will innovative public-private joint ventures for improving transport and communications infrastructure, but it will still be a challenge to meet infrastructure spending requirements while keeping within the deficit and debt criteria. However, if money is not spent on public investment, the east European states may sacrifice the growth necessary to bring their economies in line with EU standards of living. ***Tight fiscal and monetary policies may be difficult to reconcile with public investment needs, and real convergence (e.g. in terms of per capita income) is likely to take much longer than meeting the Maastricht criteria.***

Inflation and interest rates are still considerably above those in the EU. Croatia, the Czech Republic, Estonia, the Slovak Republic and the Baltic countries all met two of the criteria. Meeting the Maastricht criteria will increase pressure on accession countries to design their fiscal, monetary and exchange rate policies in ways that promote convergence. Submitting to

EMU discipline will undoubtedly bring down inflation in the region and will help to stabilise consumer-led monetary growth in the strongest east European economies. ***One of the possible implications of meeting the Maastricht inflation criterion early is that high interest rates will slow growth.***

Table 3: Maastricht Convergence Indicators

	Consumer price inflation [1]			General government balance to GDP [2]			Government debt/GDP [3]		Long-term interest rates [4]	
	1996	1997	1998	1996	1997	1998	1996	1997	1996	1997
Bulgaria	123.0	1082.2	25.0	-13.4	-4.4	0.0	105.8	105.2	300.1	209.9
Czech Republic	8.8	8.4	10.7	-1.2	-2.1	-2.9	10.2	10.9	12.5	13.2
Estonia	16.7	11.3	10.6	-1.5	2.0	1.1	6.9	5.6	12.3	11.4
Hungary	23.6	18.0	14.3	-5.1	-5.7	-6.8	74.1	68.0	28.2	23.1
Latvia	17.6	8.4	4.7	-1.3	1.3	-0.7	13.8	10.8	26.2	14.4
Lithuania	24.7	8.8	5.1	-4.6	-1.9	-3.0	23.7	22.2	24.1	3.0
Poland	19.9	15.1	10.5	-3.3	-3.6	-3.1	49.2	48.2	19.6	3.9
Romania	38.8	155.0	59.0	-3.9	-3.5	-5.5	23.4	31.3	71.5	7.0
Slovak Republic	5.8	6.1	6.7	-1.3	-4.8	-5.4	24.5	26.7	13.5	20.9
Slovenia	9.7	9.1	8.0	-0.1	-1.8	-1.2	23.5	24.1	23.7	21.3

Source: Based on Temprano-Arroyo and Feldman (1998).

Note: The table shows IMF and EBRD staff estimates of the convergence criteria mentioned in the Maastricht Treaty, except for the exchange rate. The convergence criteria are: (1) annual consumer price inflation must not exceed that of the three best-performing countries by more than 1.5 percentage points; (2) interest rates on long-term government securities must not be more than 2 percentage points higher than those in the three member states with the lowest inflation; and (3) the government deficit should not be excessive. In this context, a country will be considered to have an excessive deficit if either the general government deficit exceeds 3% of GDP (unless this ratio has been declining substantially and continually and is close to the reference value, or the excess over the reference value is exceptional and temporary), or if its public debt exceeds 60% of GDP (unless this ratio is sufficiently declining and approaching that reference value at a satisfactory rate). The exchange criterion is that the currency must have been traded without severe tensions within the normal fluctuation bands for at least two years, in particular without a devaluation at the initiative of the member state in question.

[1] Consumer price inflation data are based on national statistics and may not be consistent with the harmonised consumer prices constructed by EUROSTAT, which are those that will be used in applying the Maastricht criteria. The data shown in the table are average inflation rates. 1998 data are EBRD estimates.

[2] May not correspond to EUROSTAT definitions and coverage. Excludes privatisation revenues. For Croatia and Cyprus, balance of the consolidated central government. For Hungary, balance adjusted for some items (mostly sales of assets) that should be treated as financing items. For the Baltic countries, data includes net lending as expenditure. 1998 data are EBRD estimates.

[3] Data on public debt may not be consistent with the definition agreed in Maastricht. Data for Albania only includes domestic public debt. For Estonia, public and publicly guaranteed foreign debt. IMF staff estimates.

[4] The Maastricht criterion refers to yields on government bonds of 10-year (or nearest) maturities. Owing to the lack of long-term bonds with market-based yields, the interest rates shown for most CEECs are bank lending rates. For Albania, rate on 90-day T-bills. For the Slovak Republic, end-of-period rates. IMF staff estimates.

5. EXCHANGE RATE POLICY

5.1 OVERVIEW OF EXCHANGE RATE ARRANGEMENTS

In their transition from centrally planned economies, the CEE countries have opted for a range of exchange rate regimes, ranging from complete fixity in the form of a currency board to a free float. A summary of the existing exchange rate regimes prevailing as of October 1998 is provided in Table 4.

Table 4: Currency regimes in central and eastern Europe and the Baltics
(21 January 1999)

	Exchange Rate Regime	**Basket/Target, Fluctuation Band**	**Changes as of 1 January 1999**
Albania	Managed float		
Bosnia and Herzegovina	Currency board	Euro	Currency board used to be denominated in DM
Bulgaria	Currency board	Euro	Currency board used to be denominated in DM
Croatia	Managed float		The kuna remains unofficially linked to the DM
Czech Republic	Managed float		
Estonia	Currency board	Euro	Currency board used to be denominated in DM
Hungary	Crawling peg	Basket: euro (70%), US$ (30%) Band: ± 2.25%	Previous basket: DM (70%), US$ (30%) Mid-point of the band is devalued monthly by 0.6% against the basket
Latvia	Fixed peg	SDR	No immediate intention to repeg currency to euro
Lithuania	Fixed peg	US$	Peg may be changed to a euro-peg or a basket of euros and dollars
FYR Macedonia	Fixed peg	De facto peg to DM	
Poland	Crawling peg	Basket: euro (55%), US$ (45%) Band: ± 12.5% 0.5% monthly devaluation	Previous basket: US$ (45%), DM (35%), £ (10%), FF (5%), SWF (5%)
Romania	Floating		
Slovak Republic	Floating		
Slovenia	Managed float	Unofficial shadowing of DM	

Source: EBRD (1999)

The launch of the euro has already caused east European states to reconsider their exchange rate policies. Many countries have started to use the euro as a reference point in currency management, either by switching from the DM to the euro in a peg basket, or by shadowing the euro in a managed float. Poland has already increased the weighting of the euro in its peg basket and both Poland and Hungary may further increase the weighting of the euro to reflect the growing importance of the euro zone in their trade structures. However, the dollar will keep a balancing role. The Baltic states are also moving to a closer euro-link, with Estonia and Lithuania likely to peg their currencies to the euro. Bulgaria's currency board has substituted the euro for its current DM peg. The Czech Republic, the Slovak Republic and Romania will shadow the euro as part of a managed float.

5.2. WHAT EXCHANGE RATE POLICY TO PURSUE?

The transition economies in central and eastern Europe should be careful not to establish a hard peg with the euro too quickly. Market-based systems are still in their infancy, relative prices have not yet fully adjusted, asymmetric shocks are likely to occur and, under these circumstances, it is hard to determine the equilibrium level of real exchange rates. The transition economies are still catching up and productivity will generally grow faster than in the EU. This differential would ordinarily provide an exchange rate appreciation and may provide tension if the exchange rate is fixed too early. Positive expectations related to EU accession can provide further pressure. The flexibility offered within ERM II will be important for transition economies.[17] Given the current variety of exchange rate arrangements, the transition path to the adoption of the euro will vary a great deal.

Granted that the ultimate source of anti-inflationary credibility is domestic fiscal and monetary restraint, an open transition economy still has the option of pursuing an exchange rate peg (or some other rule for managing or targeting the exchange rate).[18] For many transition economies an initially and temporarily fixed exchange rate has been useful in ending a spell of high inflation by providing a nominal anchor, a focus for stable expectations and a break from the past. Pegged exchange rates, where monetary policy is based on rules rather than discretion, served a special (temporary) role in anchoring price levels and relative prices to those in market economies. ***The credibility to be gained from a formal link to the euro (for instance through participation in ERM II) definitely has certain attractions for accession countries, for example, by providing an anchor for macroeconomic policies, lowering interest rate premia and attracting long-term capital flows.*** The attractiveness of this link to the euro will increase as the new single currency evolves as an important international vehicle currency and as a reserve asset.

The pursuit of an exchange rate target does, however, imply constraints on the behaviour of domestic nominal variables and instruments. Domestic credit expansion (monetary base growth net of the increase in external assets of the central bank) cannot systematically exceed

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[17] However, it should also be stressed that flexible exchange rates convey little benefits if the underlying macroeconomic imbalances are not addressed. The resulting volatility in relative prices will impose severe burdens on private investors.

[18] Some countries in the region (including the Former Yugoslav Republic of Macedonia and Slovenia) have stabilised successfully using the money supply as an anchor for expectations. However, the general consensus is that money velocity is too unstable during the early phases of the transition process to serve as a nominal anchor (see for instance Cottarelli and Szapári 1998). The positive experience of some countries may simply show that economic policies and fundamentals (rather than nominal anchors) are ultimately most important in achieving stabilisation.

the growth of money demand at the target exchange rate. If it did, the country would eventually run out of reserves, and the external peg would have to be abandoned. Likewise, domestic unit cost inflation cannot systematically exceed the foreign rate of unit cost inflation plus the target depreciation rate of the nominal exchange rate. If it did, the country would become increasingly uncompetitive, and the credibility of the government's commitment to the exchange rate peg would be undermined. Therefore, even an external nominal anchor relies on the pursuit of prudent domestic monetary and budgetary policies for its credibility. Anti-inflationary credibility cannot be imported – it can at most be borrowed from abroad. Ultimately, anti-inflationary credibility is home-made (IMF, 1995).

Even if some east European countries meet the Maastricht targets early in the next century, their economic fundamentals are unlikely to be in line with those in the euro zone. Enterprise-level restructuring is improving competitiveness in some sectors, but real convergence with the euro zone will require changes to the structure of most east European economies. Price structures in transition countries are still quite different from those in the EU, particularly in non-tradables.

In considering the desirability of joining a common currency area, a crucial factor emphasised by the literature on "optimum currency areas" is whether the country concerned is likely to face different shocks from those hitting the currency area.[19] A simple measure of exposure to different real shocks would involve comparing the production structure of CEE countries and the EU. Similarity would make it less likely that countries experience different terms-of-trade shocks or different world demand conditions for their exports. Many CEE countries have a smaller proportion of their GDP in services, while agriculture constitutes a larger proportion of production than in the average EU country. ***The differing exposure to external real shocks between the EU and the accession countries was recently illustrated by the turmoil in Russia.*** The effects of the Russian crisis on parts of east European industry show that central and eastern Europe has considerable exposure to CIS economies – more so than the EU.

The transition economies of central and eastern Europe may also be exposed to different financial shocks. In this context, a fixed exchange rate regime may increase vulnerability to shifts in capital flows. As illustrated by the recent financial turmoil in East Asia, Russia and Brazil, there are (at least short-term) contagion effects that are only partly explained by economic fundamentals. The tremendous expansion of capital flows from industrial to emerging economies, though bringing benefits, also tends to make exchange rate commitments more fragile. Increasing integration and eventual EU membership will lead to a dismantling of capital controls, making it easier for investors to take large positions against a currency if it is viewed as being vulnerable to attack.

Partly because structural reforms are still incomplete, transition economies also display different trend behaviour from the EU. Since 1992, most CEE countries have experienced an uninterrupted trend of real appreciation, and real appreciation continues to be strongest in

[19] This work has built on the seminal article by Mundell (1961). See Masson and Taylor (1993) for a survey of the extensive literature on this topic.

those countries where nominal exchange rates are fixed.[20] There is evidence that this real appreciation will continue for some time to come.[21]

Masson (1998) illustrates ***the inconsistency of exchange rate and price stability for transition economies.*** He shows that, with a continuation of real appreciation, a peg to the euro would imply higher inflation than in the EU. Although this inflation is the result of equilibrium relative price movements, it conflicts with one of the Maastricht criteria, requiring that inflation be no more than 1.5 percentage points above that of the three best-performing EU members.[22]

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[20] Real appreciation is potentially of huge importance to investors and policy makers. Real exchange rates are one of the most important determinants of international competitiveness and also have implications for the rate of accumulation of capital, gains on real assets (adjusted for inflation and exchange rate changes), and for the relative prices facing individuals and enterprises in the region.

[21] A more detailed discussion of real appreciation can be found in Lago, Stern and Wes (1999).

[22] One alternative that has been suggested is to target inflation, one of the convergence criteria of EMU membership. However, although this has some advantage over pegged rates, it is unlikely to be the optimal monetary policy choice because the prerequisites for successfully implementing such a framework are not yet present. The transformation of the real sector of transition economies necessitates very drastic changes in relative prices. Given the downward stickiness of absolute prices, it stands to reason that the needed adjustment of relative prices would entail a lower cost to the real sector with inflation, at say 10%, than at 2% per annum.

6. LIBERALISATION OF THE CAPITAL ACCOUNT

Increased private capital inflows have raised investment levels and encouraged economic growth in many transition economies. However, these capital inflows can also have less desirable side effects. As the events in East Asia (1997) and in Russia (1998) have demonstrated, sudden reversals in the direction of capital flows can occur. ***The reverberations of East Asian and Russian financial turmoil have sharpened the awareness of risk throughout emerging markets and capital flows and currencies are now particularly sensitive to weaknesses in current accounts and fiscal management.***

Few transition economies have fully liberalised portfolio flows. Most countries lifted restrictions on FDI inflows at the beginning of the transition. Since early in the transition process, most countries have also guaranteed the free repatriation of both profits (current account convertibility) and FDI capital. Treatment of trade credits has also been liberal and in most countries individuals are allowed to hold and operate foreign exchange accounts at local banks, a privilege that most OECD countries accorded only at the latest stages of capital account liberalisation. In general, non-FDI-related transactions remain restricted in many countries, there are tighter controls on outflows than on inflows, and more serious restrictions on short-term than on long-term transactions. Only the Baltic states (and in particular Estonia) opted for a very high degree of capital account openness at the onset of the transition process.

Since 1995 there has been a gradual easing of restrictions on capital movements led by the Czech Republic, Hungary and Poland, as part of their accession to the OECD. The Annex presents an overview of specific controls on capital account transactions for transition economies. Table 5 provides indices of liberalisation for selected categories of capital flows in the central and east European countries and the Baltic states. They can take values between 0 and 100, with 100 representing the maximum degree of liberalisation. The evidence in Table 5 shows that within eastern Europe, capital flows have been most liberalised in countries at advanced stages of transition.

In the context of incomplete structural reforms, international capital flows carry considerable risks and may indeed magnify underlying macroeconomic and structural weaknesses. Tensions within the macroeconomic policy mix of several countries, including Poland in 1995 and the Czech and Slovak Republics and Russia in 1996-97, have been a major reason for the attraction of short-term portfolio flows. Significant uncovered interest differentials emerged as the result of tight monetary policies and pegged exchange rates, combined with a loose fiscal stance.[23] Macroeconomic policy inconsistencies in these countries often result from severe structural imperfections.[24] Thus, for at least part of these flows, it was the *absence* of transition combined with a reasonably liberal access for foreign investors that made investment attractive. In addition, the financial institutions and markets that intermediate part of these funds are still highly immature in many countries in transition. This heightens the risk of bank failures and associated dangers of volatility in capital flows.

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[23] In Russia, for instance, returns on investments in government securities in mid 1997 averaged 50% in foreign currency terms. Even higher returns were offered in some other CIS economies.

[24] For instance, fiscal deficits are often associated with the implicit subsidisation of loss-making enterprises. Because many of the necessary structural reforms require time, these economies are particularly vulnerable to inflows of short-term risk capital exploiting tensions in the resulting macroeconomic policy mix.

While it will be vital for the region to maintain the achievements in establishing current account convertibility, a sequencing of capital account liberalisation may therefore need to be considered*. *A gradual approach to financial market integration could conceivably allow economies at earlier stages of transition to reap some of the benefits of exposure to international capital, particularly in its longer-term varieties, while limiting the downside of volatility. The empirical evidence on capital controls suggests that, during the early stages of international financial integration, specific controls on short-term capital inflows have been able to affect temporarily the level and the composition of capital flows.[25] In practice, restrictions on capital flows have taken many forms and have varied greatly in effectiveness.

The Czech experience illustrates some of the policy dilemmas that transition economies face. The overriding policy objective of the authorities at the time was to bring inflation down to the EU average. However, the Czech Republic experienced net capital inflows mounting to 18 per cent of GDP in 1995. Almost half of the capital inflows were sterilised by the Central Bank pushing interest rates even higher and at a big quasi-fiscal cost. The sudden upsurge of a virulent current account deficit and the rapid real appreciation of the currency – the exchange rate was fixed at the time – gave rise to fears of devaluation, which in turn fuelled back into higher interest rates. This financial distress cycle broke into an open exchange crisis in mid-1997, when short-term capital flows were finally reversed. Ironically, the Czech economy had until then been viewed by many as one the best performers in transition, with reasonably strong public finances and an able Central Bank.

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[25] The efficacy of capital controls depends on a large number of factors, such as: the size of misalignment motivating inflows and outflows, the types of cross-border flows targeted by the controls, the size of trade flows (determining the scope for under- and over-invoicing as well as for altering leads and lags on trade credit), the structure of the domestic financial system, the state of technology and the efficiency of the controlling bureaucracy (for more detail see World Bank 1997). In general, domestic residents may be more prepared than foreign residents to evade restrictions, making controls on outflows less effective than controls on inflows.

Table 5: Indices of capital account liberalisation

(position as of December 1997, unless otherwise indicated)

	Albania	Bosnia	Bulgaria	Croatia	Czech Republic	Estonia	FYR Macedonia	Hungary	Latvia	Lithuania	Poland	Romania	Slovak Republic	Slovenia
Controls on direct investment [1, 2]	66.7	33.3	66.7	83.3	100.0	100.0	66.7	100.0	100.0	83.3	100.0	83.3	83.3	83.3
Controls on real estate investment [2]	75.0	0.0	50.0	0.0	50.0	75.0	0.0	75.0	75.0	50.0	50.0	0.0	50.0	50.0
Controls on credit operations [2, 3]	0.0	50.0	37.5	83.3	62.5	100.0	37.5	75.0	100.0	62.5	75.0	0.0	50.0	37.5
Controls on portfolio flows [2]	0.0	0.0	25.0	35.0	70.0	100.0	0.0	33.3	100.0	100.0	35.0	0.0	0.0	25.0
Overall index of liberalisation of the capital account [2]	16.7	17.6	35.3	44.4	73.7	97.6	23.3	59.5	97.6	85.7	55.3	12.5	23.7	40.5
Current account convertibility (date of acceptance)	Article XIV	Article XIV	Article VIII (Sep. 1998)	Article VIII (May 1995)	Article VIII (Oct. 1995)	Article VIII (Aug. 1994)	Article XIV	Article VIII (Jan. 1996)	Article VIII (June 1994)	Article VIII (May 1994)	Article VIII (June 1995)	Article VIII (Mar. 1998)	Article VIII (Oct. 1995)	Article VIII (Sep. 1995)

Source: Temprano and Feldman (1998); IMF (1997).

Notes:

[1] With the exception of sectors normally considered sensitive or of strategic national interest.

[2] The index can take values between 0 and 100, with 100 representing the maximum degree of liberalisation of capital flows under consideration. The index for a given country is constructed by adding up the values contained in each category of capital flows and dividing the total by the maximum possible score. Flows not subject to controls are assigned a value of 2; flows classified as being subject to partial controls are assigned a value of 1; flows subject to serious controls are given a value of 0. When information on a given capital transaction is not available, a value of 0 was assigned to both the numerator and the denominator.

[3] Borrowed or extended by residents other than banks.

7. CONCLUSION

This paper has provided an overview of some of the implications of the launch of the euro for the integration process of countries in central and eastern Europe. It should be stressed that ***the impact of EMU on the integration process between central and east European countries and the EU depends largely on the success of the euro. If its introduction promotes sustained growth in the EU, it will also generate further opportunities for CEE countries. If the euro fails to produce the expected benefits and brings economic and political disruption in the EU, it may also damage the prospects of CEE countries.*** Following the events over the past 18 months, the region has been threatened by the turmoil in international financial markets. To the extent that the euro can help create a more stable world, the transition economies in central and eastern Europe will benefit greatly.

Monetary union could have a major impact on eastern Europe through its effects on political debates about eastward enlargement with the EU. If EMU experiences problems in the first few years, the ensuing political crisis could slow the enlargement process, or even stall it. The perceived failure of EMU may leave member states with little inclination to undertake further major ventures, while difficulties with the launch of the euro would distract attention from accession negotiations.

The main risks to enlargement might come from increasing unemployment in the euro zone. Given the constraints on fiscal and monetary policy at the national level in the single currency area, the main pressure for adjustment to economic shocks under EMU is likely to fall on relatively immobile labour markets. If EMU is not accompanied by further progress with structural reforms and fiscal consolidation, there are likely to be serious consequences for Europe, and transition economies will bear part of the cost.[26]

[26] Rising jobless rates in the euro-zone would also affect enlargement politics in the competition for budgetary transfers. Already, the poorest EU member states are trying to prevent diversion of regional aid to the east European applicants, arguing that current recipients should keep both structural and cohesion fund transfers. If regional unemployment disparities widen across the EU as a result of EMU, demand will grow for more intra-EU transfers to help level out regional pockets of unemployment or pay for social security. This would increase the pressure for a larger fiscal policy-making capacity and budget for the Euro-zone, and would compete directly with allocation of funds for the east European states' accession needs.

ANNEX: CONTROLS ON THE CAPITAL ACCOUNT

Capital transactions describe regulations influencing capital movements. Controls on capital movements can include: prohibitions, need for prior approvals, authorisations and notifications, multiple currency practices, discriminatory taxes, and reserve requirements or interest penalties that regulate international capital flows. The following is an overview of definitions and possible controls on a wide range of capital account transactions. They should be read in conjunction with Table A1.

In the case of *capital and money market instruments* (capital market securities, money market instruments and collective investment securities) and *derivatives and other instruments*, possible controls are on the local purchase, sale or issue by non-residents, and on the purchase, sale or issue abroad by residents. These controls can be in the form of permit or licence requirements, and/or prior approval by the national bank, the ministry of finance, or the Securities and Exchange Commission. In a number of countries, restrictions on short-term capital flows do not extend to transactions with a maturity in excess of one year.

Credit operations include *commercial credits*, *financial credits*, *guarantees, sureties,* and *financial backup facilities*. Possible capital controls in these areas relate to transactions by residents to non-residents and from non-residents to residents. Controls can be in the form of permit or licence requirements, and/or prior approval by the national bank or the ministry of finance.

Controls on *direct investment* can be on outward direct investment and/or inward direct investment. Controls can also exist on the *liquidation of direct investment*, on the transfer of principal, including the initial capital, and capital gains. Controls on *real estate transactions* can affect the purchase abroad by residents, the local purchase by non-residents, and/or the local sale by non-residents. Controls can be through outright ownership restrictions, licence requirements, or prior authorisation from the national authorities (for instance for the liquidation of direct investments).

Provisions specific to commercial banks and other credit institutions describe regulations that are specific to these institutions, including monetary and prudential controls. Controls can exist on borrowing abroad, maintenance of accounts abroad, lending to non-residents (financial or commercial credit), lending locally in foreign exchange, the purchase of locally-issued securities denominated in foreign exchange, differential treatment of non-resident deposit accounts and/or deposit accounts in foreign exchange (in terms of reserve requirements, liquid asset requirements, interest rate controls, and credit controls), investment regulations, and open foreign exchange position limits.

Provisions specific to institutional investors describe controls specific to institutions, such as insurance companies and pension funds. They can include maximum limits on portfolio invested abroad, minimum limits on portfolio invested locally and currency matching regulations the assets and/or liabilities composition. *Other controls imposed by securities laws* refers to additional regulations on capital movements imposed by these laws, such as restrictions on the listing of foreign securities on local security markets.

Table A1: Summary features of exchange arrangements and regulatory frameworks for capital transactions in transition economies

	Percentage of all IMF members with this feature	Albania	Armenia	Azerbaijan	Belarus	Bosnia and Herzegovina	Bulgaria	Croatia	Czech Republic	Estonia	Georgia	Hungary	Kazakhstan	Kyrgyzstan	Latvia	Lithuania	FYR Macedonia	Moldova	Poland	Romania	Russia	Slovak Republic	Slovenia	Tajikistan	Turkmenistan	Ukraine	Uzbekistan
Exchange rate structure																											
Dual exchange rates	11.2%																								*	*	*
Multiple exchange rates	2.9%				*																						
Control on payments for invisible transactions and current transfers	60.0%			*	*		*				*		*				*	*	*	*		*		*	*	*	
Proceeds from exports and/or invisible transactions																											
Repatriation requirements	65.3%	*		*	*	*	*	*	*			*	*				*	*	*	*	*	*	*	*	*	*	*
Surrender requirements	50.0%				*							*					*				*	*	*		*		*
Capital transactions																											
Controls on:																											
Capital market securities	74.7%	*		*	*		*	*	*			*	*	*			*	*	*	*	*	*	*	*	*	*	*
Money market instruments	65.3%	*		-	*		*	*	*		*	*	*	*			*	*	*	*	*	*	*	*	*	*	*
Collective investment securities	60.0%	*		-	-		*		*			*	*				*	*	*	*	*	*	*	*		*	*
Derivatives and other instruments	48.2%	*		-	-		*		*		*	*	*				*	*	*	*	*	*	*	*	-	*	*
Commercial credits	64.7%	*		*	*	*	*	*				*	*	*			*	*	*	*	*		*	*	*	*	*
Financial credits	67.1%	*		*	*	*	*	*	*			*	*				*	*	*	*		*	*	*	*	*	*
Guarantees, sureties, and financial backup facilities	51.8%	*		-	-		*	*	*			*	*				*	*	*	-	*	*		*	*	*	*
Direct investment	84.1%	*		*	*		*	*				*	*		*	*	*	*	*	*	*	*	*	*	*	*	*
Liquidation of direct investment	31.8%			-									*					*									
Real estate transactions	75.3%	*		-	-	*	*	*	*	*	-	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Provisions specific to:																											
Commercial banks and other credit institutions	89.4%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Institutional investors	40.0%	-		-	-	-		*	*	-	-	*	*	*			-	*	*	-	*	*	*		*	*	*

Note: * indicates that the specified practice is a feature of the exchange system, - indicates that the data were not available. All information is as 31 December 1997.
Source: Exchange Arrangements and Exchange Restrictions, Annual Report 1998, IMF.

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