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Southern enlargement of the European Union and capital account liberalization: Lessons for Central and Eastern Europe

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and Capital Account Liberalization:
Lessons for Central and Eastern Europe**

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Claudia M. Buch, Ralph P. Heinrich, Daniel Piazzolo



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Claudia M. Buch, Ralph P. Heinrich, Daniel Piazzolo
Kiel Institute of World Economics

Abstract

The integration of the central and eastern European countries into the international capital markets has been and will be determined by the process of European Union (EU) integration. Our analysis shows that southern and eastern European countries already appear to be surprisingly similar regarding FDI flows from EU members. The central and eastern European countries, however, are likely to attract increased portfolio flows in the years to come. We argue that membership alone in a regional arrangement like the EU is neither sufficient for sustained capital inflows nor is it the guarantee for increased investment activities. Rather, domestic economic policy has to change in accordance: Liberalization matters, not only membership.

JEL Classification: F 15, F 21, F 32, F 43.

Key Words: Capital Account Liberalization; European Union Enlargement; Capital Flows; Eastern Europe; Economic Growth.

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1. The Issue

The future integration of the transition economies of central and eastern Europe into the international capital market will to a great degree be shaped by the process of European Union (EU) enlargement. At least for the capital markets of the more advanced transition economies, the White Book of the EU and the Agenda 2000 have important implications. Most importantly, membership in the EU requires the abolition of remaining capital controls (except for episodes of severe macroeconomic imbalances) and postulates the adoption of common capital market and banking regulations, notably of the EU's Second Banking Directive. Because the eastern enlargement of the EU shares many similarities with the process of southern enlargement, it is useful to study the effects that the latter has had for the integration of those new members into international capital flows.

This contribution starts by giving a short account of why southern enlargement differed from other liberalization periods and why it is of particular relevance for the new members. It then looks at potential links between capital account liberalization and growth, derives the stylized facts of enlargement, and attempts to explain the lack of re-

semblance of the expected and actual integration effects. Finally, the conclusions for the new candidates for EU-membership are drawn.

We find that the southern EU members and the transition economies recently have appeared to be surprisingly similar with regard to the volume and structure of FDI. In order to isolate intra-EU capital flows, we specifically look at capital imports from Germany. In the early 1990s, when Germany was a net capital importer overall, net capital flows from Germany into the two regions were positive. Also, the structure of German foreign direct investment looks more similar for the two groups of countries than for the rest of Europe. The main difference between the two regions is the greater importance of portfolio investment for the southern states. Yet, as the transition process continues, there is quite a potential for increased portfolio flows to central and eastern Europe as market opportunities still differ quite substantially from those in more developed market economies.

The fact that net capital flows into the southern economies do not appear to be directly linked to the process of enlargement as such points to the hypothesis that membership alone in a regional arrangement like the European Union¹ cannot guarantee increased investment

¹ Throughout the paper the term European Union will be also used as a synonym for the predecessor European Community.

activities and accelerated growth. Domestic economic policy has to change in accordance with the commitments arising from the regional arrangement to foster a sustainable development of the economy. Therefore, the main conclusion of this contribution and consequently the message for the central and eastern European transition economies is that reforms at the EU level need to be accompanied by structural reforms at the national level: liberalization matters, not only membership.

2. Capital Account Liberalization and Growth

Capital account liberalization and structural reforms at the national level have not been a unique experience of the new southern members of the EU.² Many developing countries have embarked upon encompassing reform and liberalization programs, hereby spurring growth

² We restrict ourselves predominantly to the analysis of Greece, Spain, and Portugal which in 1981 (Greece) and 1986, respectively, joined the EU. It would also be interesting to compare the experience of these new member states to that of Ireland which has made remarkable achievements in converging to EU-levels of per capita income. The main reason why we confine our analysis mainly to the southern members is the fact that Ireland joined the EU already in the early 1970s. Ireland's experiences with integration were made in a completely different external environment, in particular with regard to international capital markets, which complicates a comparison with later enlargements. We include Ireland only at the end for the analysis whether the Gross Domestic Product per capita of the "Four Poor" have converged towards the average of all 15 EU members. For an encompassing analysis see Laaser (1997) who argues that Ireland established sound economic policies only quite some time after becoming a member of the EU. Hence, the country has been able to reap the rewards from a liberal market economy, from EU transfers, and from the common European market only within the last years.

and investment. Yet, EU membership is an important goal for the transition economies of central and eastern Europe, evidently so because the countries hope to reap benefits which reforms at the national level alone would not bring about. This suggests that EU membership has special characteristics and that studying its implications holds important lessons for the new members.

2.1 What is Special About Enlargement?

The experience with the southern enlargement of the EU and the accompanied liberalization of capital flows indeed differs from other liberalization experiences. During the process of EU enlargement, capital account liberalization and other elements of economic integration have been combined. These other elements comprise the creation of a common market, the participation in the structural funds and in the CAP of the EU as well as the adoption of a common legal and institutional framework. This combination can have positive feedback effects on the success of capital account liberalization. Combining capital account liberalization and a broader adjustment package may ease the adjustment to adverse external shocks. Integration potentially reduces uncertainty about future investment conditions. *Ceteris paribus*, this

should contribute to a greater inflow of irreversible, long-term investment because the value of postponing investment is reduced. By tying the hands of domestic policymakers, integration and enlargement make a reversal of policies in the future less likely, hereby reducing uncertainty and promoting investment. However, the access to transfer payments which EU accession entails might also undermine the resolve of new members to introduce reforms which would promote economic growth.

There are several reasons that justify a comparison of southern and eastern enlargement of the EU. Apart from similarity in expected integration effects as mentioned above, the two groups of countries will have similar comparative advantages within an enlarged Union. Both regions industrialized late compared to the core-EU-countries and became integrated into the international markets during the second half of the last century. Hence, they shared similarities prior to the take-over of the communist regime. Later on, while the economies of central and eastern Europe were dominated during the socialist period by the state, the southern European countries had – until the 1980s – an overinflated and cumbersome state that played the principal role in the economy.

It might also be objected to our approach that eastern enlargement takes place under entirely different conditions than southern enlargement because the Single Market has already been created. We agree that the pre-conditions for membership have changed. The conclusion that we draw from this is, however, that lessons regarding policies needed for a successful enlargement become more important in the new environment.

Therefore, studying the process of southern enlargement is highly relevant for the transition economies. It allows a first assessment of integration effects and of the magnitude of capital flows that can be expected. In order to limit the analysis, the paper will mainly look at the impact of integration and of capital account liberalization for the structure and volume of financial flows. We will look at the capital inflows of southern Europe and of central and eastern Europe from all partner countries as well as at the German capital exports into the two regions since this allows us to isolate developments within Europe to the best possible degree. Some tentative conclusions regarding the impact of liberalization for investment and growth will be drawn.

2.2 How can Economic Growth be Explained?

From a theoretical point of view, the liberalization of capital flows can have positive static and dynamic effects on domestic investment and growth. Most importantly, liberalizing capital flows allows a country to draw on foreign savings to finance domestic investment. Neoclassical growth accounting would predict that mobile capital flows primarily out of capital-abundant developed economies into capital-strapped developing and transition economies. This is because by the law of diminishing returns marginal returns to capital in the latter should exceed marginal returns in the former. By lifting capital controls, the world capital stock is allocated optimally, and growth rates increase until a new steady state level of income is reached.

Yet, the traditional growth models cannot convincingly account for the fact that capital is typically found to be much less mobile internationally than the standard theory assumes. Lucas (1990) has used a model incorporating a human capital externality to explain why capital flows to developing countries have – at least until very recently – remained limited to an extent incompatible with neoclassical growth accounting.³ He

³ This is true even when taking into account that capital is actually far from perfectly mobile internationally (Feldstein and Horioka 1980).

argues that the return to physical capital will *ceteris paribus* be highest where the endowment with human capital is highest, and that human capital creates a positive externality which disproportionately increases the return to physical capital. The reason for capital flows to developing countries remaining limited would then be that the rates of return to physical capital in developing countries are constrained by low endowments with human capital. Thus, a lack of human capital is able to explain a lack of capital inflows. Conversely then, relative abundance of human capital should be expected to attract foreign capital.

A corollary of this framework is that investment into human capital can increase a country's attractiveness for foreign investors. Presumably, however, these investments into human capital must be financed from domestic rather than foreign savings (Barro et al. 1995). This is because securing access to external financial sources for investment into human capital is already a difficult task in a domestic setting. International borrowing for investment into human capital is virtually impossible. This can explain why capital mobility – including mobility of human capital – is less than perfect, and why convergence remains less pronounced than neoclassical growth theory would predict. At the same time, creating a legal and institutional framework

conducive to international financing of investment into human capital would be growth-promoting.

These results point to the beneficial effects of EU enlargement. The new member states are already relatively well-endowed with human capital, and enlargement brings about a more stable institutional environment. Incidentally, and putting measurement problems aside, the data suggest that the transition economies have a higher endowment in human capital than the southern members of the EU (Barro and Lee 1996) A priori, this would suggest that a lack of access to skilled and trained personnel is not an obstacle to foreign investment into these economies.

One shortcoming of the standard neo-classical model, however, is its inability to explain long-run economic growth. Growth merely occurs as a one-time adjustment to a new steady state; long-run growth is bound to be zero. Short-run growth comes only in response to exogenous shocks such as technological innovations, increases in the savings rate, or an abolition of capital controls.

Dynamic growth effects can be captured in models of endogenous growth. One implication of this class of models is that technological innovations or human capital accumulation can give rise to a positive

externality so that the marginal returns to investment need not decrease. Accumulation of technological knowledge or of human capital can arise endogenously and can be a source of sustained long-run growth. Baldwin and Forslid (1996) argue that the growth effects of a policy measure depend on the incipient increase in Tobin's q , i.e., the ratio of the market value of capital and its replacement costs. Their results are driven by the fact that investment in knowledge capital reduces the marginal costs of production, giving rise to worldwide economies of scale. In particular, they show that financial liberalization in the form of (i) the liberalization of the market entry for new domestic or foreign banks, and/or (ii) the liberalization of international financial transactions, which lowers the marginal costs of domestic financial intermediaries to make loans abroad, are growth-promoting. Because of the various distortions in the domestic banking systems both of the southern members prior to enlargement and in the transition economies, this mechanism could be particularly relevant during enlargement.⁴

⁴ See Caminal et al. and Borges (1990) for studies of the Spanish and Portuguese financial system. An overview of banking reforms in transition economies is given in Buch (1996).

2.3 Is there a Case for Capital Controls?

While the benefits from integrating into the international capital market seem to be relatively obvious, public and academic debate about the necessity to restrict (short-term) capital flows abounds. Not least in response to the recent turmoil on Asia's foreign exchange and financial markets, such outright restrictions (Tobin taxes on short-term capital flows, for example), are more and more often proposed as a cushion against highly volatile financial flows. While we cannot go into a comprehensive discussion of the costs and benefits of such measures, two approaches which call into question the benefits of capital controls are worthwhile mentioning:

First, Labán and Larrain (1997) have shown that abolishing controls on capital outflows may increase net inflows because the liberalization of capital flows lowers the irreversibility of investment. In a situation of general uncertainty about the future, foreign investors gain from exploiting an option value of waiting, from postponing their investment, and from waiting for better information about future policies. Incidentally, the fact that an option value of waiting exists can explain why marginal rates of returns across countries are not equalized even in the absence of capital controls. Hence, the paper by Labán and Larrain predicts an

increase in investment in response to (i) an abolition of capital controls and (ii) reduction of uncertainty about the future. This finding directly links to the issue of EU enlargement because enlargement implies both reduced barriers to the free flow of capital *and* a reduction of uncertainty, and should thus lead to higher investment.

Second, Bartolini and Drazen (1997) show that capital controls can have negative effects on total investment because they send negative signals about future policies to investors. Their result hinges on the assumption that information about the type of a government is asymmetrically distributed between investors and governments. Governments can raise revenue by taxing the capital stock in their country, and they differ with respect to the alternative sources of income to which they have access. In this model, the imposition of capital controls sends a negative signal to investors that governments lack alternative sources of income and are thus likely to impose controls in the future. Conversely, abolishing controls on capital outflows sends a positive signal and increases net capital inflows.

The plea for capital controls is oftentimes justified on the grounds that controls on short-term capital discourage highly volatile portfolio capital flows while not tampering with "healthy" and sustainable flows

of foreign direct investment. Portfolio capital flows, it is argued, do not necessarily add to the capital stock of an economy and are, in addition, easily reversed.

This argument has some truth to it because the most important channel through which new technologies can be introduced is FDI by transnational corporations. Hence, inflows of FDI not only foster economic growth by supplementing domestic savings, but also by providing access to new technologies. FDI may result directly in the importing of more advanced technologies, but also in the transfer of managerial and production-oriented skills. In addition, FDI may generate positive externalities in that domestic firms may be able to acquire new knowledge while supplying inputs to the foreign firm or while competing with it for customers (Bertschek 1995). This in turn may stimulate additional domestic investment. However, the extent to which new foreign technology can be absorbed by the host economy, be it directly via domestic subsidiaries of foreign transnational corporations or indirectly via spillovers to domestic firms, must be expected to depend on the stock of human capital present in the host economy, as human capital and advanced technology tend to be complementary inputs (Lichtenberg 1993). Empirical studies suggest that inward FDI can have positive

externalities for countries with a relatively good human capital endowment (Borensztein et al. 1994) and in countries which follow an export-promoting development strategy (Balasubramanyam et al. 1996).

However, it would be grossly misleading to attribute positive growth effects to FDI flows alone. Foreign direct investment contributes only a relatively small share to global capital flows. In 1996, the share of FDI inflows in global capital inflows was only 16 percent (IMF 1998a). Portfolio and other forms of capital transfers – notably bank credits – can also contribute to economic growth because they allow worldwide portfolios to be optimized, individual investment risks to be lowered, and – to the extent that savers are risk averse – overall savings to increase.

In addition to the better diversification of risk that the liberalization of portfolio capital allows, the presence of foreign investors in the home market may be to the benefit of the home country because market liquidity increases. Typically, bond and stock markets in emerging market economies are relatively illiquid. Hence, due to a low trading volume, asset prices may be quite volatile, and investors may find themselves unable to divest assets unless they accept high discounts. Access to international bank credit can furthermore enhance the quality of

domestic investment if foreign banks have better risk assessment skills than the incumbent domestic banks.

To sum up, our brief review of the literature on capital account liberalization leads us to expect (i) an inflow of capital in response to the abolition of capital controls, (ii) a net flow of funds towards countries with high real rates of return on capital, particularly if the quality of human capital is high, and (iii) a relatively high share of long-term investment (such as FDI) in countries with credible policies.⁵

3. Enlargement and Capital Flows — the Stylized Facts

Both economic integration with the EU and the transformation of formerly centrally planned economies are important structural changes which can be expected to exert a significant impact on cross-border capital flows. After accession, higher rates of return in the new member countries should trigger more capital imports and should lead to higher investment ratios. Until the new steady state is reached, investment and growth should increase.

⁵ Buch et al. (1998) show that governments can influence the structure of capital flows towards relatively more long-term investment by implementing credible stabilization policies and institutional reforms.

Prior to their accession to the EU and the concomitant liberalization of capital flows, the new southern members were only loosely integrated into the international capital markets. For the time between 1960 and 1988, Argimón and Roldán (1994) find capital mobility to be substantially lower for Spain, France, Italy, Denmark, Belgium, and Ireland than for Germany, the Netherlands, and the UK. Presumably, Greece and Portugal would fall into the first group of countries which exhibited low capital mobility.

For none of the southern EU-members has entry into the EU been paralleled by a full abolition of capital controls (Table 1). This is a feature which sets southern and eastern enlargement partly apart – the new eastern members have already liberalized capital flows to a quite substantial degree (Backé 1996). According to the annual report on exchange rate restrictions published by the IMF, the transition economies under review had indeed imposed less controls on capital account items in 1995 than the southern Europeans in the early 1990s (IMF 1996). Although a simple comparison of these indicators has several flaws – primarily because of the lack of qualitative information on

Table 1 — Liberalization of Capital Flows by the EU's Southern Members

<i>EU-wide</i>	
1979–1990	capital controls in large member countries were fully abolished: 1979 (United Kingdom), 1981 (Germany), 1989 (France), 1990 (Italy)
1983	White Policy Paper on financial integration
1988	proposal for a second banking directive
1992	second Banking Directive becomes effective; member states have to remove all remaining barriers to trade
<i>Greece</i>	
1981, January 1	EU membership
1985, November 22	authorization to take safeguard measures through the EEC
1988, November 29	safeguard clause extended through end 1989
1989, December 17	derogation extended for another 6 months
1994, May 16	all remaining restrictions on capital flows abolished
<i>Portugal</i>	
1986, January 1	EU membership
1989, March 28	foreign travel allowances relaxed
1989, September 20	controls on purchase of foreign securities relaxed
1989, December 31	inward FDI not subject to permission
1990, March 28	acquisition of foreign securities eased
1991, June 14	outward portfolio investment and FDI liberalized
1992, April	membership in the EMS
1992, September 1	compulsory deposit requirement on foreign exchange accounts abolished
1992, December 16	all remaining restrictions abolished
<i>Spain</i>	
1986, January 1	EU membership
1986, November 7	controls on outward FDI are relaxed
1987, October 20	controls on foreign currency operations of commercial banks are relaxed
1988, December 22	outward FDI and trade in medium and long-term foreign securities liberalized
1989, January 31	reserve requirement on foreign financial credits imposed (non-remunerated)
1989, July	membership in the EMS
1989, September 26	residents can open ECU accounts
1990, April 4	further relaxation capital flows
1991, April 16	opening of F/X accounts eased
1992, February 1	all remaining restrictions abolished
1992, September 24	reintroduction of short-term controls
1992, November 24	all remaining restrictions abolished

Source: Bakker (1994), Gros (1993).

the importance of these restrictions – the pattern is unlikely to reverse if additional information was taken into account.⁶

3.1 Effectiveness of Capital Controls

The liberalization of capital flows in the EU has proceeded gradually (Table 1). Capital controls in the large member countries have fully been abolished only in the late 1970s. New members of the Union, in contrast, in principle have to provide for a free flow of capital within the EU. While safeguard measures in times of balance of payments problems may be introduced, pre-conditions for EU membership in the field of financial markets have become much more stringent and demanding.

The new southern members have made use of the option to retain capital controls during the first years of their membership. After becoming members of the EU in 1981 (Greece) and 1986 (Portugal and Spain), the countries retained controls on capital flows up to 1992 (Spain and Portugal) and 1994 (Greece), respectively. Controls on capital flows outside Europe were even maintained until 1993 in Spain

⁶ A more appropriate measure of the presence and effectiveness of capital controls would be empirical tests of the interest parity conditions between foreign and domestic interest rates as well as between onshore and offshore rates. However, lacking sufficiently long time series, primarily for forward rates, such tests have not been feasible.

and 1995 in Greece (IMF 1996). The potential new eastern members, in contrast, have a relatively liberal capital account regime already prior to their EU-accession.⁷ A priori, the effects of abolishing remaining controls in the context of EU membership can thus be expected to be smaller than for the southern members.

Several papers have studied the effectiveness of capital controls. Baccechetta (1996) finds that controls on capital outflows have been effective in Spain prior to 1986 but that the effectiveness of capital controls has vanished subsequently.⁸ For Greece, Christodoulakis and Karamouzis (1993) likewise find that capital controls have been temporarily effective at best. Ötker and Pazarbasioglu (1994) argues that capital controls have allowed Ireland and Spain to buy some time during episodes of speculative crises but – again – have not been effective over longer time periods. Gros (1993) compares the reasons for the maintenance of capital controls across Europe. He shows that Portugal and Spain have used capital controls mainly to prevent capital inflows from counteracting restrictive monetary policies. In France and Italy, in contrast, capital controls were used to keep interest rates low

⁷ See Backé (1996), Buch and Heinrich (1997a, 1997b).

⁸ Controls on capital inflows were not binding between August 1986 and April 1987, were binding from April 1987 to April 1990, and again relatively ineffective afterwards.

through expansionary monetary policies. In both cases, capital controls have not been effective in the long-run. Yet, they have been effective in the short-run in Portugal and Spain.

3.2 Structure of Capital Flows

For the southern members, the impact of integration on (net) capital inflows has not been uniform (Table 2, Graphs 1 and 2). In particular, capital inflows do not appear to be directly linked to membership in the EU. As for Greece, capital inflows relative to GDP were only 0.4 percentage points higher in the post- than in the pre-accession phase. Inflows peaked a few years after accession, in 1985. Similarly, capital inflows to Portugal seem to have responded not to EU accession directly, but to the onset of capital account liberalization three years later. But even at that time, capital inflows did not reach the level of the years 1981-82, when they exceeded 10 percent of GDP. In Spain, in contrast, capital inflows relative to GDP increased already in the year prior to accession. Neither in Portugal nor in Spain were the high initial levels of inflows sustained. Taking into account that data on net capital inflows include transfers from the EU, public capital flows have thus at

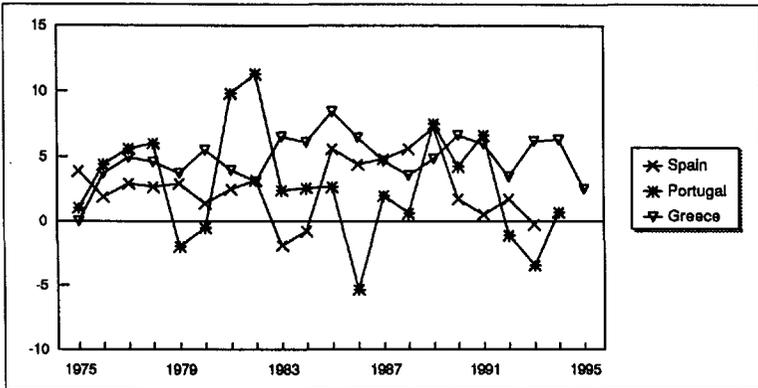
least to a certain degree tended to substitute rather than to complement private capital flows.

Table 2 — Capital Inflows and Investment Pre- and Post-Accession to the EU

	Pre-accession	Post-accession
<i>Gross fixed investment / GDP [%]</i>		
Greece	23.6	20.9
Portugal	26.5	23.3
Spain	21.3	21.7
<i>Capital inflows / GDP [%]</i>		
Greece	4.5	4.9
Portugal	4.1	1.3
Spain	2.2	2.9
<i>FDI / Gross inflows [%]</i>		
Greece	29.1	25.4
Portugal	4.5	30.6
Spain	30.4	28.1
<p>For Greece, the pre-accession period comprises the time between 1975 and 1980. For Portugal and Spain, the years 1975-1986 are considered. The post-accession period starts in the first year of membership and runs through 1994 for Portugal, 1995 for Spain, and 1995 for Greece (gross fixed investment: 1996).</p>		

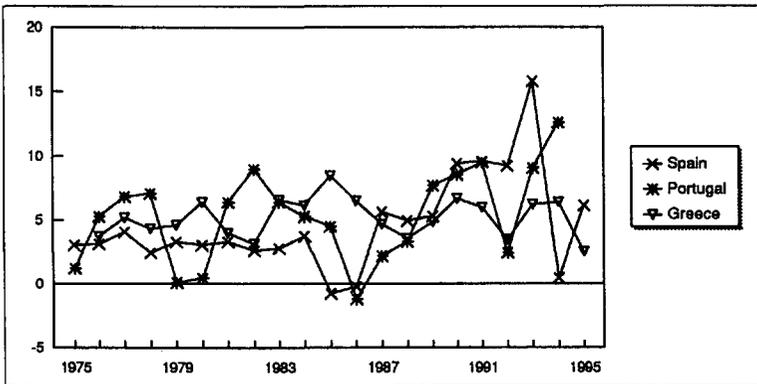
Source: IMF (1998a), World Bank (1996, 1997); author's calculations.

Graph 1 — Net Capital Inflows in Percent of GDP 1975-1995



Source: IMF (1998b), World Bank (1997)

Graph 2 — Gross Capital Inflows in Percent of GDP 1975-1995



Source: IMF (1998b), World Bank (1997)

One possible explanation for the surge of inflows into Portugal in the early 1980s is the fact that a right-wing government was elected in 1980 which may have increased the credibility of reforms (Gibson and Tsakalotos 1993). In addition, Portugal and Spain were fairly active in preparing their membership in the Union after they had applied for membership in 1977 (Laaser and Schrader 1994). Greece, in contrast, which had already applied in 1975, seems not to have utilized the time until accession for an active adjustment of regulations and institutions to EU-standards.

During the 20 years between 1975 and 1995, foreign direct investment contributed about one fourth to total capital inflows in southern Europe. While this share has been relatively constant over time for Greece, Portugal and Spain experienced above-average inflows of FDI in the 1980s (Table 3). This points to a positive impact of EU-membership on imports of FDI. Portfolio investment has been negligible in Greece, while contributing a rising share of capital inflows in the case of Spain (the share of equity securities being falling).

Table 3 — Structure of Total Capital Inflows 1975-1996

	1975-80	1981-90	1991-95
<i>FDI / gross inflows [%]</i>			
Greece	29.1	26.1	24.7
Portugal	12.9	35.9	18.8
Spain	21.7	41.1	22.7
<i>Portfolio investment / gross inflows [%]</i>			
Greece	-0.0	0.0	0.0
Portugal	-0.3	29.3	19.3
Spain	0.2	24.2	42.5
<i>Equity securities / portfolio investment [%]</i>			
Greece	44.1	39.8	58.3
Portugal	1.1	28.1	20.8
Spain	23.6	68.8	19.8
<i>Other liabilities / gross inflows [%]</i>			
Greece	70.9	73.9	75.4
Portugal	87.4	34.9	61.9
Spain	78.1	34.7	34.9

Source: IMF (1998a)

3.3 Southern versus Eastern Europe

This section compares the capital flows for the two regions southern Europe ("EU South" – Spain, Portugal, and Greece) and central and eastern Europe ("CEE3" – the Czech Republic, Hungary, and Poland). Concerning total capital inflows it is striking, that CEE3 has received only a small fraction compared to the funds directed towards the EU

South (Graph 3a). This holds true for all time periods since 1975, including the ones after the beginning of the transition process in CEE3. However, a more detailed analysis reveals considerable differences for FDI, portfolio, and other flows⁹ (Graph 3b, 3c and 3d).

The beginning of the reform process around 1990 in the transition countries marks the start of rising inflows of FDI. The establishment of new economic policies has encouraged investors with a long-term perspective to commit their resources to projects in the transition countries. In 1995, CEE3 attracted more FDI than the EU South (Graph 3b). As discussed in the previous part about the structure of capital flows to the EU South, EU membership had a significant impact on FDI inflows to these countries. However, Graph 3b reveals that FDI flows to the EU South started to decrease with the beginning of the reform process in CEE3. The attractiveness for FDI of a region or a country is always depending on the relative position within the pool of potential candidates. Eyeballing the graph appears to indicate that some of the FDI funds going to CEE3 were diverted from the EU South. Nevertheless, it is difficult to determine, how much FDI one should expect under "normal circumstances". It might well be that a

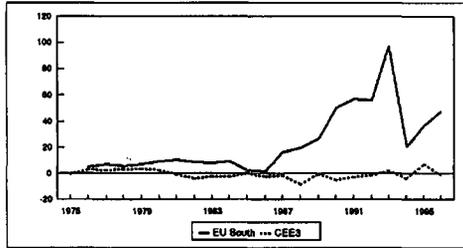
⁹ Other capital flows comprise bank loans and deposits, supplier credits etc.

country experiences high FDI inflows after the establishment of attractive investment conditions until the "normal" stock of FDI has been reached. Consequently, one should expect a decline of the FDI inflows towards the level sufficient to compensate for depreciation and necessary "FDI-widening" in response to economic growth. The FDI inflow in the EU South rose significantly from 1984 until 1990 and has declined since then. Following the above argument, this might be quite "normal", and one could expect a similar leveling off for the transition countries after the FDI stock has reached its "normal" level.

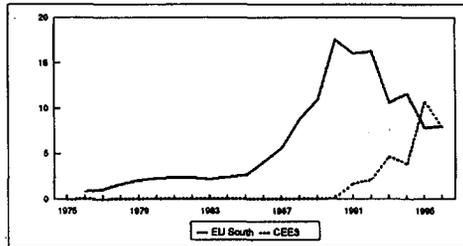
In terms of portfolio and other flows, CEE3 has never reached the amounts going to the EU South (Graph 3c and 3d). The beginning of the transition had a significant impact on the portfolio flows heading towards CEE3, but it did not markedly affect the pattern of the other capital flows. Portfolio flows towards the CEE3 have started at the beginning of the 1990s and have remained positive since then, whereas the other flows have continued to meander from positive to negative values.

Graph 3 — Total Capital Inflows (billion US-Dollar) 1975-1996

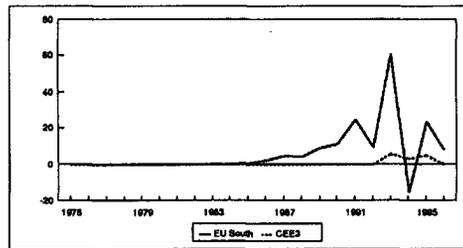
a) Total



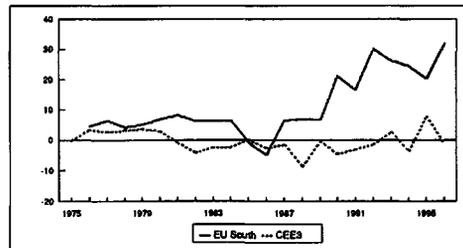
b) FDI



c) Portfolio



d) Other



Source: IMF (1998b)

3.4 German Capital Exports

In order to isolate capital flows within Europe which – arguably – are more likely to be affected by integration effects than those from outside the region, we now look at German capital exports only. Between 1990 and 1997, southern and eastern Europe accounted for 4.3 and 1.7 percent of Germany's gross capital exports, respectively (Table 4). This was more than in the 1980s but – in the case of eastern Europe – not more than in the 1970s when these economies received quite substantial amounts of foreign loans.

Table 4 — Share (in Percent) of Southern and Eastern Europe in Germany's Gross Capital Exports 1971-1997

	1971-1979	1980-1989	1990-1997
<i>Southern Europe^a</i>			
Total	3.70	1.61	4.26
FDI	9.91	5.99	4.47
Portfolio	2.84	1.94	5.67
Credits	1.88	0.41	3.29
<i>Eastern Europe^b</i>			
Total	2.84	0.72	1.71
FDI	0.00	0.06	5.85
Portfolio	1.22	0.51	0.92
Credits	3.90	1.00	0.48

a) Greece, Portugal, and Spain. — b) Czech Republic, Hungary, and Poland.

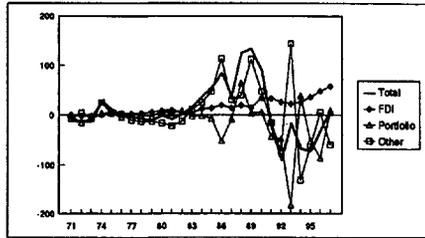
Source: Deutsche Bundesbank (1998)

As expected, total German *net capital exports* are strongly influenced by the re-unification (Graph 4). Following unification, sizable capital exports of the previous years turned into capital imports which have gradually become smaller through 1997. Interestingly, Germany has remained a net exporter of foreign direct investment throughout. Capital imports have mainly come from industrialized countries. Net capital exports to Spain, Portugal, and central and eastern Europe, in contrast, have by and large been positive throughout. This, by itself, suggests that the motives of Germans to invest abroad are more similar for the southern EU-members and the transition economies than for these countries and other industrialized economies.

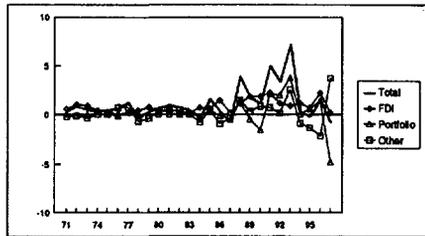
Net capital exports do not show a uniform EU-effect. While for Spain net capital imports from Germany increased with membership, this effect was not clearly visible for Portugal and Greece. In the case of Spain, however, inflows of FDI peaked only a couple of years after EU accession. For Greece, membership has hardly had a discernible effect on capital flows for about five years.

Graph 4 — German Net Capital Exports (billion DM) 1971-1997

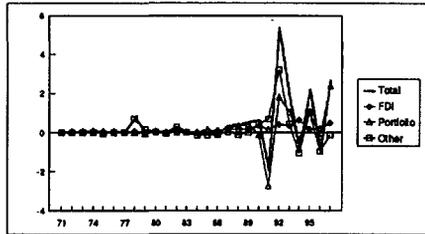
a) Total



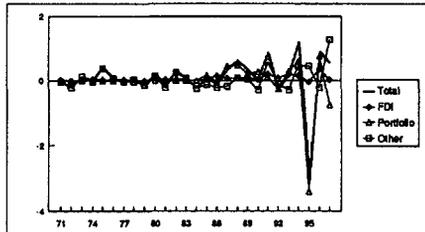
b) Spain



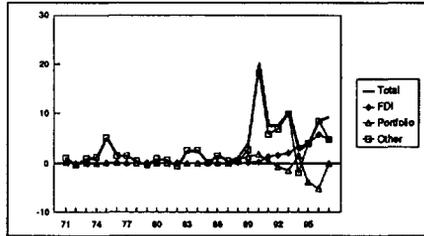
c) Portugal



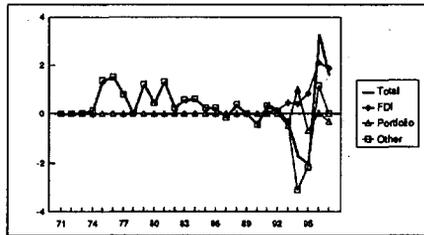
d) Greece



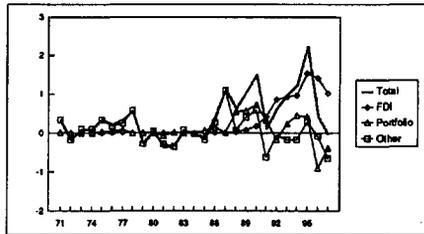
e) CEEs



f) Poland



g) Hungary



In billion current D-Mark. CEE = transition economies of central and eastern Europe.

Source: Deutsche Bundesbank (1998)

For the transition economies, in contrast, the start of the reform process has had a quite significant impact on capital flows. Initially, however, the share of FDI was minor, and FDI came to dominate only since

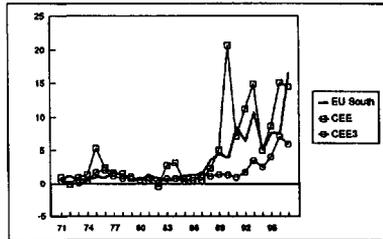
1994. With respect to portfolio capital, the region has been a net exporter of capital vis-à-vis Germany during the transition period.

At least two explanations for the relatively weak effect of southern enlargement on the volume of capital (in)flows are conceivable. *First*, an anticipation effect may have been at work. As integration has been expected prior to the actual enlargement, some positive integration effects have occurred already before membership became effective. *Second*, because capital controls were maintained during a prolonged period after accession, the irreversibility of investment may not have declined enough. In addition, the possibility to re-introduce controls in times of macroeconomic distress may have undermined investors' confidence in a liberal regime. Hence, de facto liberalization may have been insufficient.

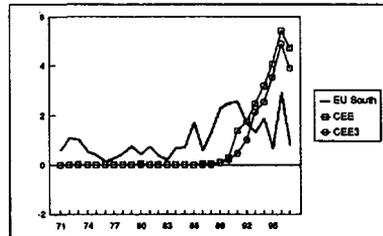
Looking at the *gross capital exports* of Germany and comparing absolute values for the EU South (Spain, Portugal, Greece) and the transition economies (including Russia) shows that although gross flows to eastern Europe have been larger overall than flows to southern Europe, the trends are similar (Graph 5). The CEE3 (Hungary, Czech Republic and Poland) have received the bulk of FDI going into eastern

Graph 5 — German Gross Capital Exports by Region (billion DM) 1971-1997

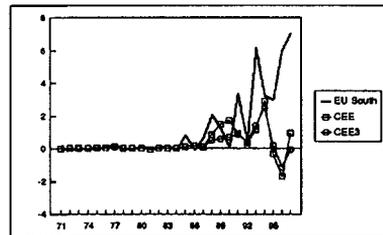
a) Total



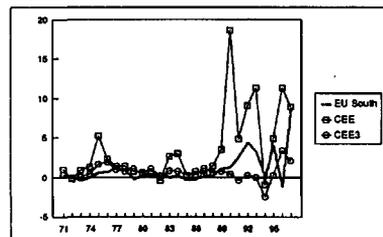
b) FDI



c) Portfolio Capital



d) Other Capital Exports



In billion current D-Mark. CEE = transition economies of central and eastern Europe, CEE3 = Czech Republic, Hungary, and Poland

Source: Deutsche Bundesbank (1998).

Europe. Perhaps more surprisingly, the overall volume of FDI inflows into the CEE3 since 1992 has been larger than the flows to southern Europe. Notice that these figures are influenced by the greater proximity of Germany to central Europe. As the aggregated data have shown, the flow of total FDI to southern Europe was substantially higher than for eastern Europe. In the 1990s, eastern Europe has received 5.9 percent of Germany's FDI abroad as opposed to 4.5 percent for southern Europe (Table 4). Again, the integration effect for southern Europe seems to be weaker than the liberalization effect for the CEEs.

The picture looks entirely different for portfolio investment. Whereas southern Europe has been a gross importer of portfolio capital, the CEEs have temporarily even been gross exporters. "Other" flows are substantially different for the CEE3 than for the CEEs, mainly reflecting lending to Russia.

Data on the structure of the stock of German FDI abroad reveals that Portugal and Spain seem to have more in common with the CEEs than with the rest of Europe.¹⁰ While less than 30 percent of Germany's FDI in the EU has been in manufacturing in 1995, the respective shares are

¹⁰ Comparable data for Greece have not been available. Data referred to in the following paragraph were taken from Deutsche Bundesbank (1997).

62 and 66 percent for southern and eastern Europe. For the EU as a whole, financial intermediation and insurance is relatively important as well (40 percent of total stock); for southern and eastern Europe, these sectors account only for about 9 percent of the stock of FDI.

Overall, the amount of foreign direct investment which the three advanced transition economies of central and eastern Europe have already attracted seems large relative to the aggregate level of FDI in southern Europe (Portugal and Spain). This comparison confirms the findings by Brenton et al. (1998). While the transition economies may already be close to their potential with respect to FDI, their access to foreign portfolio capital is still minor. In the past, external debt finance of – in many cases – mainly public lenders has been important for some countries. In the future, private capital, and in particular portfolio capital, is likely to gain in importance. The creation of a single market for capital, as required for EU-membership, may be particularly conducive to this process. For the less advanced reform states of central and eastern Europe which are not covered in this paper, in contrast, the prediction is less clear-cut. As all countries have already embarked on reform programs of some sort, future reforms would need to have substantial signaling effects in order to yield effects on imports of FDI.

The case of Greece shows that investors' confidence need not necessarily be enhanced through outside commitments.

In summary, the capital flows from Germany and the flows from all countries towards the EU South and CEE differ: For Germany, CEE had a greater importance than for the total of all partner countries. As mentioned before, this might be determined through the proximity of Germany to the CEE countries. Furthermore, historical links and some language advantages (German was the only "Western" language that could be easily learned within the Socialist bloc, and unified Germany has many inhabitants that had to learn Russian at school) might have helped in establishing closer links. With regard to portfolio capital, however, the picture looks similar in that both flows from Germany and total flows of portfolio capital towards the EU South exceed those to CEE by a substantial margin.

3.5 Market Opportunities and Portfolio Choice

The previous discussion has shown that, in quantity terms, the degree of portfolio investment in the transition economies is below that of the southern European economies. This may not seem very surprising, considering that bonds and equities have only fairly recently become

available in the transition economies and that foreigners face legal and institutional obstacles when trying to acquire those assets. Hence, current portfolio structures are to a substantial degree distorted by institutional factors rather than reflecting market opportunities. Despite these concerns, the present section takes a closer look at the market opportunities foreign investors are facing.

Portfolio theory suggests that optimal portfolio choices are determined by the risk and the return of financial assets as well as the correlation of rates of return between individual assets. Buch and Lapp (1998) calculate annual data for bond and stock markets in Spain and Euroland and relates these to market performance in Germany.¹¹ For the purpose of our analysis, it is particularly of interest to see whether correlations between bond and equity returns in Spain and Germany have increased after the unification of the capital market in Europe, i.e., after 1992. The data reveal that this has indeed been the case for bond market returns, independent from being calculated in local currency, D-Mark or hedged returns. With regard to hedged and local currency re-

¹¹ The results of Buch and Lapp also reveal that market opportunities seem to play a relatively limited role in investment decisions as investment patterns display a very strong home or currency bias. Accordingly, investment in emerging markets accounts only for a small fraction of total asset holdings. Yet, there is no reason to assume that *given* the small share allocated to emerging markets, the emerging market portfolio itself is *not* allocated on the basis of market opportunities.

turns, correlations between Spanish and German stock returns have also increased while this is hardly the case for D-Mark returns. *Ceteris paribus*, the incentive of Germans to invest in Spanish bonds has thus declined with the increasing integration of markets if investors hedge or are interested in local returns.

Table 5 in the Appendix presents similar data for bond and equity returns in three central European economies (Czech Republic, Hungary, and Poland), two southern European countries (Portugal and Spain), as well as for Germany and the United States. Because of the lack of longer-run time series, monthly data have been used. Evidently, the higher frequency of the data leads to greater variation because seasonal factors are not isolated. For bond returns, only data for the years 1996 through 1998 (May) have been available while for stock indices data started in 1994. Monthly returns in local currency (c) were calculated as

$$(1) \quad \text{Monthly Return}_c = \left(\frac{\text{Index}_{t+1}}{\text{Index}_t} - 1 \right) * 100$$

with t being the current period. Returns in D-Mark were calculated as

$$(2) \quad \text{Monthly Return}_{DM} = \left[\left(\frac{\text{Index}_{t+1}}{\text{Index}_t} \right) \left(\frac{S_t}{S_{t+1}} \right) - 1 \right] * 100$$

with S being the spot rate of the respective currency against the D-Mark. Standard deviations are calculated as a measure of volatility.

For stock market returns, there are differences between the performance in local currency and in foreign currency, in particular for the case of Hungary. While returns in Forint were greater during the entire period (1994-1998) than local returns in other currencies (corresponding also to a greater volatility in returns), this difference disappeared if returns were calculated in foreign currency (DM or US-Dollar). Returns on Hungarian bonds were now roughly in line with those in the West. The Czech and the Polish stock markets, in contrast, showed negative returns on average.

Throughout eastern Europe, volatility was higher than in the West. Yet, return correlations were similar when comparing Hungary to southern Europe both relative to returns in Germany and in the US. In view of the similar return performance and the higher volatility, investors would thus not have gained from investing in Hungary rather than in southern Europe. Gains from diversification were higher for the Czech Republic and for Poland. Returns on Czech stocks particularly showed a low correlation to US stock returns.

In the second sub-period (1996-1998) in Western stock markets both returns and return correlations tended to be higher than in the entire sample. Standard deviations had remained fairly unchanged. Returns in eastern Europe were somewhat higher while standard deviations of returns had declined. For the Czech Republic and Poland – not for Hungary –, return correlations both with the German and with the US market were lower than in the entire period. Hence, the potential for risk diversification had increased. During the past three years, stock markets in the Czech Republic and Poland were thus attractive from the point of view of a German or US investor because of their relatively low correlation with Western markets. Yet, substantially lower returns and higher volatility were a potential impediment to portfolio diversification. Conversely, Polish and Czech investors could have gained from investing abroad.

Data for bond market returns have only been available for this second period. While compared to Germany average bond returns were lower in the West than in the East, bonds in Europe generally performed worse than bonds in the US. Likewise, DM-returns on eastern European bonds tended to have higher standard deviations than Western European bonds but were not decidedly different from other

European bonds when compared to US bonds. Correlations of Spanish with German bond returns were similar to those of eastern European bond returns while all European bonds showed fairly little correlation to US bonds. From the point of view of a German investor, eastern Europe bond markets thus offered slightly higher risks and returns than Spanish bonds but not really benefits from diversification. For US investors, both eastern and western Europe offered gains from diversification due to low correlations with US bond returns but also much lower returns.

The data presented in Table 5 suggests that there are still substantial differences between stock and bond markets in southern and eastern Europe. While the limited evidence from Portugal and Spain suggests that these markets are already relatively closely integrated with markets in Germany and in the US, this is not the case for eastern markets, in particular in the Czech Republic and in Poland. While there are potential gains from diversification, somewhat lower returns and greater volatility also have to be taken into account. The Hungarian market, in contrast, already looks more like markets in southern Europe than like its eastern European counterparts. The situation on bond markets differs somewhat from these stylized facts because dif-

ferences in risks and returns are not as pronounced. Both eastern and western Europe show fairly low correlations with US bonds.

The above exercise can provide only a fairly stylized picture of the integration of financial markets. In an additional step, we have tested for the degree of cointegration between stock markets. Essentially, cointegration analysis can be viewed as a more sophisticated method of detecting co-movements between the two markets by imposing a causal structure on the data. A close integration of markets would thus imply that the potential for diversification is relatively low.

Similar studies have been made by Linne (1997, 1998). He finds that over the past years, stock markets in eastern Europe were not very closely linked to world portfolios and that there is a potential for portfolio diversification. He also finds that stock returns in the East and the West have been converging but that this process has not necessarily been speeded up by official capital account liberalization. Our approach differs because we use total return indices rather than price indices, because we consider southern European markets as well, and because we only test for cointegration with Germany. Table 6 presents the results of an ADF-Test on a unit root for the logs of the levels and first differences of the stock market indices. Except for the Polish stock

index, all indices are I(1). We have then estimated an error correction model (ECM), explaining each of the eastern and southern stock indices by the German stock index and a linear time trend

$$(3) \quad \Delta I_t = \mu + (\bar{\alpha}_0 - 1) [I_{t-1} + \beta I^*_{t-1}] - \sum_{i=1}^{n-1} \bar{\alpha}_i \Delta I_{t-i} - \sum_{i=1}^{m-1} \bar{\beta}_i \Delta I^*_{t-i} + T_t + \varepsilon_t$$

where I = domestic stock index, I^* = German stock index, and T = (linear) time trend. A maximum of four lags has been allowed for, and insignificant lags have been dropped. The ECM allows us to test whether there is a stable long-run relationship between these variables (Hansen 1993). It implies that changes in the domestic stock index depend (i) on deviations from long-run-equilibrium, i.e., on the error-correction term in brackets, (ii) on short-run effects of changes in the German and in the domestic stock index, and (iii) on an error term ε . If the coefficient $(\bar{\alpha}_0 - 1)$ is significantly less than zero, the domestic stock index declines (increases) if it has been above (below) its equilibrium level in the previous period. There would thus be a stationary long-run relationship between the domestic and the foreign stock index, i.e., the variables would be cointegrated.

Table 6 — Unit Root Tests for European Stock Market Indices 1994–1998

	Levels		First Differences		Degree of Integration
	Specification ^a	t-value	Specification ^a	t-value	
Czech Republic	C,1	-2.42	0	-4.61***	I(1)
Hungary	T,C,1	-2.11	T,C,1	-5.34***	I(1)
Poland	T,C,3	-3.55**	T,C,0	-7.78**	I(0)
Germany	T,C,1	-1.19	T,C,1	-5.55***	I(1)
Portugal	T,C,2	-0.51	T,C,3	-5.42***	I(1)
Spain	T,C,1	-0.96	T,C,1	-5.15***	I(1)

The table reports the results of an augmented Dickey-Fuller-Test. A regression has been run for the first difference of each seasonally adjusted variable X, including all exogenous and endogenous variables, on its lagged level and on its first differences. The hypothesis that variable X is non-stationary is tested against the hypothesis, i.e., X is stationary. The lag-length has been extended such that the residuals are white noise. A trend (t) and/or a constant term (μ) have been included upon visual inspection of the respective time series. Because under H_0 the LHS variables are non-stationary, standard critical values cannot be used, and the MacKinnon critical values are referred to. If the value of the t-statistic is above the critical level $|t| > |t^*|$, X is at least I(1), i.e., it has to be differenced once to become stationary. Similarly, running the ADF-test for the differenced variables implies a test of H_0 : X is I(2). — a) Trend, intercept, lag length. — All variables in logarithms.

The results are presented in Table 7. In terms of statistical significance, there are cointegration relations only between the Hungarian and the Spanish stock index vis-à-vis the German stock index. The significance of the error correction term can not be rejected at the 10-

percent level of confidence in both cases, and the R^2 s exceed 0.4 and 0.6, respectively. The relationship between the indices is also significant in economic terms: an increase in the German stock index by 1 percent raises the stock indices in Spain and Hungary by nearly 1.5 and 2 percent, respectively. Results for the other three stock markets are less satisfying from a statistical point of view: there are no significant cointegration relationships at the conventional significance levels, the R^2 s are much smaller for the Czech Republic and Poland, and the impact of the German stock index is not significant in these two cases. The latter two indicators are somewhat better for Portugal but this equation fails most of the conventional tests on the assumptions of the OLS-model.¹² Notice, however, that the weaker integration of markets, the greater the potential for diversification.

In summary, our analysis has shown that a relatively weak correlation of returns on eastern and western securities' markets, coupled with higher returns in the east should induce investors to increase the share of eastern assets in their portfolios. Higher risks in the east have a countervailing effect, in contrast. Because we have not explicitly de

¹² Unless indicated otherwise, the equations pass the conventional tests.

Table 7 — Cointegration of Stock Markets in Europe with the German Stock Market

	Czech Republic	Hungary	Poland	Spain	Portugal
Constant	0.11 (0.37)	-2.04 (-3.00)	1.04 (0.77)	-4.11 (-4.16)	-2.76 (-2.86)
I-1	-0.12 (-2.29)	-0.17* (-3.00)	-0.21 (-2.61)	-0.45** (-3.76)	-0.23 (-2.41)
I* -1	0.01 (0.19)	0.33 (3.02)	-0.07 (-0.31)	0.67 (4.14)	0.42 (2.86)
Δ I-1	0.35 (2.36)		-0.13 (-1.04)		
Δ I*	0.04 (0.15)	0.39 (4.60)	-0.79 (-1.85)	1.11 (8.15)	0.78 5.14
Trend			0.01 (1.37)		-0.002 (-1.67)
Dummy				97:6	
JB	0.36	0.47	0.77	0.18	0.92
LM1	0.76	0.24	0.17	0.84	0.01**
LM4	0.07**	0.81	0.24	0.14	0.08*
White	0.31	0.87	0.02**	0.90	0.00***
\bar{R}^2	0.14	0.41	0.27	0.62	0.41
Period	94:6-98:2	94:1-98:1	94:3-98:2	93:12-98:2	93:12-98:1

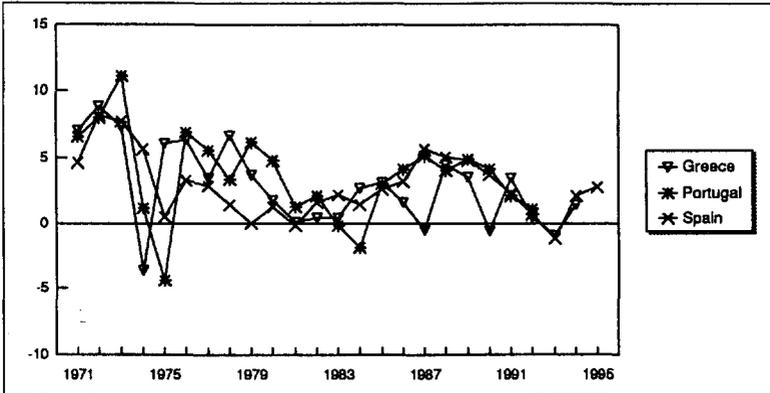
I = domestic stock index in DM, I* = German stock index. See Table 5 for data sources. — A maximum lag length of four months has been allowed for ($\Delta -x$, $x = 1, \dots, 4$). — (**, ***) = significant at 1 (5, 10) percent level. Critical values were taken from Banerjee et al. (1992) for T=50. t-values appear in parantheses. — Dummy variables are set equal to 1 in the month indicated. — JB = reports result of Jarque Bera test on normal distribution of the residuals (probability of not rejecting the hypothesis that the residuals follow a normal distribution); — LM1 and LM4 = report result of Lagrange Multiplier Tests on 1st and 4th order autocorrelation (probability of not rejecting the hypothesis that the residuals are uncorrelated); — White = reports result of White test on heteroscedasticity (probability of not rejecting the hypothesis that the residuals are homoscedastic)

rived the structure of an optimal portfolio, we cannot weigh these factors. It is also problematic to extrapolate market opportunities of the past into the future as structural breaks may occur. One such structural break is the introduction of the Euro. Because of the elimination of exchange rate risk between members of Euroland, we could expect some portfolio re-allocation towards eastern markets to the extent that investors wish to retain a certain currency diversification of their portfolios.

4. Enlargement, Investment, and Growth

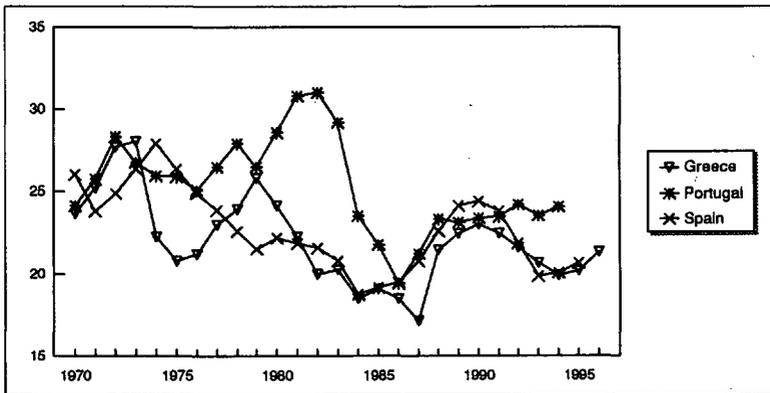
Economic theory would predict that the integration of capital-rich and capital-poor countries and in particular the liberalization of capital flows would lead to higher investment and growth. Contrary to these expectations, however, the stylized facts of enlargement reveal that membership in the EU has not led to a significant sustained increase in capital imports, in the investment share of GDP, and in growth rates in new member states (Graphs 6, 7).

Graph 6 — GDP Growth 1970-1995



Source: IMF (1998b)

Graph 7 — Fixed Investment in Percent of GDP 1970-1996



Source: IMF (1998b)

While gross investment in fixed capital has generally increased after accession to the EU, it has not been sustained at this higher level. In Greece, gross investment hardly responded to EU membership, and an increase in the investment rate could only be observed after 1988. While Spain experienced a phase of investment-led growth in the years immediately following accession (Baldwin 1993: 137), the share of investment in GDP fell in the 1990s. In Portugal, fixed investment had already soared in the early 1980s in response to the increased capital inflows. In contrast to Spain, however, a decline in the investment rate in later years could be averted.

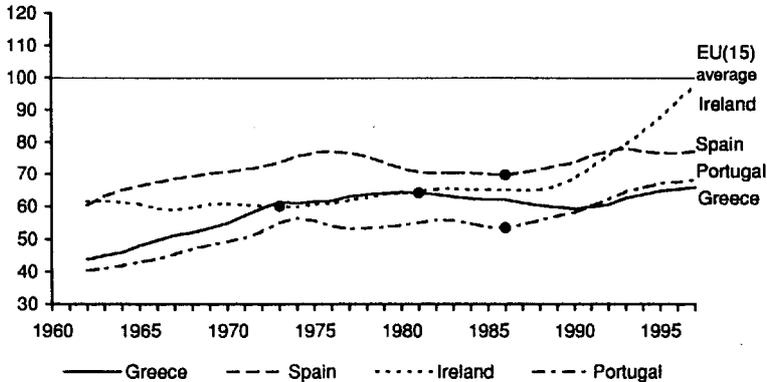
On average, the share of investment in GDP has not been higher in the years after accession to the EU than before and has even come down a little (Table 2). This implies that (at least) temporarily higher capital imports, i.e., foreign savings, have tended to substitute rather than to augment domestic savings. In a static sense, they would not have contributed to higher growth. Yet, this interpretation leaves the efficiency gains through foreign (direct) investment out of consideration: the same amount of investment in absolute terms may result in higher growth if foreign investors use the capital stock more efficiently.

GDP-growth in the pre-accession periods has been about the same as in the post-accession period (Graph 6). This may indeed imply that the efficiency of investment has increased somewhat (because the same level of growth is achieved with lower investment). However, GDP growth is only a very rough proxy because it is affected also by a number of other variables (as, for example, the oil crises of the 1970s).

The difference between the national income and the EU average did not diminish continuously over time (Graph 8), let alone at an accelerated rate after membership in the European Union. Greece had already reached almost 63 percent of the EU average in 1973 and meandered around this value for more than 20 years – despite EU-membership in 1981 – before it could reduce the gap a bit further within the last five years. Spain enjoyed in 1975 already a higher GDP relative to the EU average than in 1997 – also despite EU-membership more than a decade ago. Portugal succeeded only in 1989 to surpass the GDP relative to the EU average it already had in 1973. Nevertheless, the economic development of Portugal since membership in 1986 allowed a continuous closing of the gap. One country which has managed to completely close the gap to the European mean within the last decade is Ireland. However, this cannot be attributed to EU membership. With a GDP per

capita of 64 percent of the EU average in 1986, Ireland had been just a bit richer than at the 61 percent it had in 1960 – despite EU-membership since 1971.¹³

Graph 8 — Convergence in the European Union 1960-1997



Gross Domestic Product at current market prices per head of population as percentage of EU (15) average. Three year moving average. Purchasing Power Estimates. The EU(15) average includes since 1991 the data for the unified Germany. • Membership in the European Community, Ireland 1973, Greece 1981, Portugal and Spain 1986.

Source: European Commission (1997); own calculations.

Overall, the anticipated growth effects of EU-membership cannot be validated in a convincing manner by the empirical facts of the former enlargement of the European Union and the concomitant liberalization

¹³ Econometric tests did not reveal a significant, positive coefficient for an EU-membership dummy in regression equations for Greece, Portugal and Spain. GDP per capita as a percentage of the European average has been regressed on a time trend. Neither the change of the observed time period from 1960-1997 to the period 1970-1997 nor the inclusion of an additional German unification dummy led to significant, positive EU-membership dummies.

of capital flows. The fact that we are looking at only a relatively short time-span could be one explanation of this puzzle. If integration has only a gradual influence on growth and investment, its full effect may not be captured in the relatively short time series under consideration. Moreover, capital account liberalization and integration effects are only two factors which affect growth and investment. Rodrik (1997) particularly argues that a detailed analysis of the domestic investment climate is needed in order to assess the benefits of integration. Negative external shocks and adverse domestic policies have to some extent run counter to the positive integration effects. However, we have not captured these factors in our analysis.

Laaser (1997) essentially supports the latter hypothesis. He discusses the progress of the southern European countries for a set of essential criteria.¹⁴ Spain and Portugal confronted only with delay the challenges of integration and still suffer from some severe shortcomings in their policy environment. For example Spain still endures significant labor market rigidities and high unemployment and Portugal bears with considerable monopolies in the service sector. But both

¹⁴ These are the establishment of private ownership, opening up of all markets, securing competition, integration into the world economy, efficient distribution of macro-economic responsibilities, balance of power and establishment of the rule of law.

countries attempted in the last years – under considerable adjustment costs – to reform the macroeconomic setting of their economies, which were marked by high national debt and inflation rates. Overall, Spain and Portugal were successful in reducing the gap of the living standards of their inhabitants to the European average. As for Greece, market forces have even been weakened since the beginning of EU-membership, and too much seems to have been expected from the financial transfers from the European budget. Greece failed to reform its policies and its economy and fell back in the relative income level. This failure of Greece to reform and the willingness of Portugal and Spain to adjust their economies has been underlined by the recent decision to include the latter two but not Greece into the group of Euro-countries.

A final explanation for the lack of significant positive integration effects is connected to the households' high rate of time preference (Piazolo 1997). If households are reluctant to accept deviations from a uniform pattern of consumption over time, they would try to smoothen consumption over time. An improvement in the economic setting (for example in terms of lower transaction costs due to lower uncertainty because of EU-membership) will lead to higher production and therefore to an expected future increase in consumption. If households are

characterized by a high rate of time preference, consumption will be shifted from the future to the present, and investment financed by the domestic households will be low. Consequently, the income convergence with the average EU member will take a long time, although positive welfare effects through higher consumption will be felt already in the short run. Foreign investors will make use of the improved circumstances in the country, but this increase in savings might not be enough to compensate for the domestic move from investment to consumption.

The various strands of explanations point to different causes of missing or delaying the growth bonus of EU-membership and capital account liberalization, but the lack of adjustment of domestic policies and the shift from domestic investment to consumption are the most plausible explanations.

5. The Message for the Transition Economies

As regards the structure and volume of capital flows, the advanced transition economies under review and the southern members of the EU appear to be surprisingly similar. While the southern Europeans have attracted sizable capital inflows in the early 1990s which are not

necessarily linked to EU-membership but rather to the liberalization of capital flows within Europe, the transition economies have attracted substantial inflows of capital after starting the reform process. In particular with respect to FDI from Germany, the Czech Republic, Hungary, and Poland have surpassed southern Europe in recent years. With regard to the structure of FDI, the two groups of countries are closer to each other than to the EU-average.

The most important difference between the eastern and the southern Europeans is the lack of access to foreign portfolio capital of the former. As EU-membership requires further harmonization of financial market regulation and better market access of foreign financial institutions, this is likely to reverse. Differences in market opportunities and imperfect integration of stock and bond markets enhance the attractiveness of eastern European markets for Western investors. Just as Western investors can gain from increasing eastern Europe's share in their portfolios the transition economies can gain from being able to hold internationally diversified asset portfolios.

Membership in the European Union, participation in the Single Market, and the integration into the international capital markets can accelerate structural changes, foster economic growth and raise living

standards. If, however, domestic economic policies hamper the necessary transformation within an economy, EU-membership alone cannot assure significant amelioration of the economic setting.

This is borne out by the stylized facts from southern enlargement. Spain and Portugal implemented consistent and comprehensive economic reforms only with delay, while Greece even failed to make significant progress well into the 1990s. Moreover, as domestic savings have at times been substituted rather than complemented by foreign savings, the positive impact of capital inflows on domestic investment has been dampened. Thus, (net) capital inflows have not increased immediately after EU-membership, increased investment has not been sustained, and initial growth effects have leveled off.

The transition countries in central and eastern Europe can profit from these experiences. Membership in the European Union can support growth-enhancing developments and might even accelerate the catching up with the west European neighbors, but it cannot by itself guarantee ongoing convergence. Sound domestic policies within the central and eastern European Countries to facilitate further transformation and permanent structural change are the *conditio sine qua non* for rising living standards.

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Appendix

Table 5 — Monthly Bond and Equity Returns in Eastern and Western Europe 1994–1998

	Local currency			D-Mark			US-Dollar		
	Average return	Standard deviation	Correlation with Germany	Average return	Standard deviation	Correlation with Germany	Average return	Standard deviation	Correlation with US
<i>Stock markets (1994:1–1998:2)^a</i>									
<i>Eastern Europe</i>									
Czech Rep.	-0.80	5.79	0.27	-0.87	4.29	0.27	-1.28	6.20	-0.06
Hungary	2.42	11.9	0.46	1.07	12.49	0.58	0.94	11.04	0.31
Poland	-0.50	14.0	0.27	-1.26	14.40	0.33	-1.90	13.79	0.24
<i>Western Europe and US</i>									
Germany	1.61	4.39	1.00	1.61	4.33	1.00	1.36	3.54	0.49
Portugal	1.98	5.31	0.65	1.76	5.24	0.65	1.63	4.27	0.36
Spain	2.29	5.41	0.60	2.21	5.80	0.61	1.86	4.78	0.38
United States	1.91	3.05	0.62	...	...	...	1.91	3.05	1.00
<i>Stock markets (1996:1–1998:2)^a</i>									
<i>Eastern Europe</i>									
Czech Rep.	0.13	5.64	0.05	0.18	7.08	0.06	-1.03	6.69	-0.20
Hungary	5.13	11.10	0.44	4.43	11.68	0.46	3.54	10.44	0.30
Poland	2.08	8.13	0.11	1.82	8.77	0.24	0.14	7.85	0.02
<i>Western Europe and US</i>									
Germany	2.61	4.45	1.00	2.61	4.39	1.00	1.49	3.27	0.62
Portugal	4.19	5.39	0.75	3.90	5.22	0.73	2.99	3.91	0.46
Spain	4.08	6.19	0.56	4.04	6.12	0.51	2.78	5.52	0.37
United States	2.27	3.61	0.76	...	...	...	2.27	3.72	1.00
a) For the Czech Republic, index starts in 1994:5. For Hungary, index ends in 1998:3.									

Table 5 continues ...

... Table 5 (continued)

	Local currency			D-Mark			US-Dollar		
	Average return	Standard deviation	Correlation with Germany	Average return	Standard deviation	Correlation with Germany	Average return	Standard deviation	Correlation with US
<i>Bond markets (1996:1–1998:2)</i>									
<i>Eastern Europe</i>									
Czech R.	...	...	...	1.15	3.05	0.31	0.21	3.36	−0.03
Hungary	...	...	...	1.10	1.14	0.26	0.15	1.77	−0.12
Poland	...	...	...	1.47	1.42	0.26	0.51	1.78	−0.01
<i>Western Europe and US</i>									
Germany	0.36	0.29	1.00	0.36	0.29	1.00	−0.51	2.33	0.01
Spain	0.80	0.58	0.50	0.77	0.95	0.38	−0.07	2.14	0.10
United States	0.49	0.37	0.19	...	...	...	0.49	0.37	1.00

Note to Table 5:

Monthly returns. Average returns = geometric averages. End of period. *Share indices* = Datastream total return indices for Germany, Poland, United States, Portugal and Spain; IFC total return indices for Czech Republic and Hungary. *Bond indices* = Deutsche Morgan Grenfell DMG EE total return indices for eastern Europe (maturity of debt instruments = 3 months), Datastream total return indices for 1-3 year T-bills otherwise. *Exchange rates* to the D-Mark = spot rates.