

THE IMPACT OF EASTERN ENLARGEMENT ON EU-LABOUR MARKETS

by

Herbert Brücker, German Institute for Economic Research (DIW Berlin)

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1. Introduction

Eastern Enlargement will change the character of the European Union (EU). While the EU was a club of rich economies at least from global perspectives throughout the post-war period, it will face a distinct gap in per capita income levels among its Members after accession of the ten candidate countries from Central and Eastern Europe (CEE). Given the magnitude of income and wage differentials, there are mounting concerns among the present EU Members that Eastern Enlargement may have a number of undesirable effects on labour markets and income distribution. In particular, a deterioration of living standards of the unskilled, associated with job displacement and wage losses triggered by the accession of low-income countries is feared.

The textbook models of trade theory do not fully dismiss those concerns. Although the standard Heckscher-Ohlin-Samuelson (HOS) model predicts that the integration of economies which differ in their initial endowments will provide gains for all countries involved, it also states the relative price of the scarce factor in each country will fall until factor prices are eventually equalised. Increasing returns to scale create additional benefits from intra-industry trade, but leave the basic propositions from the HOS-model unchanged. Moreover, if factor prices do not adjust to an additional supply of labour, integration may involve unemployment and even a net loss in welfare. Since trade and factor movements are substitutes in the standard HOS-model, it does not matter whether the barriers to trade or obstacles to factor movements are lifted. Either, trade or factor mobility, or both, contribute to the convergence of factor prices.

Needless to say, a number of caveats apply to the predictions of the HOS-model. First, neither the EU nor the CEECs resemble the case of two previously autarkic economies which suddenly open up to bilateral trade flows as in the $2 \times 2 \times 2$ case (two countries, two goods, two factors) of basic trade models. In already open economies such as the present EU Members, only a large size of trade and factor flows can have a significant impact on domestic labour markets, at least at aggregate levels. Second, even if the CEECs were not 'too small to matter', transport and transaction costs could prevent trade and factor flows from reaching levels required to affect wages or employment in the present EU. Third, differences in technologies and factor intensities between the EU and the CEE countries may mitigate or reverse the implications of the standard models of trade and factor mobility. Thus, factor price equalisation is just an extreme outcome within a broad range of possible consequences of

Eastern Enlargement. An in-depth empirical analysis of the size and structure of trade, capital flows and labour migration is needed in order to assess the impact of Eastern Enlargement on domestic labour markets of the present EU Members.

The remainder of this paper summarises the key findings of a recent study¹ on the likely impact of Eastern Enlargement on employment and wages in the present EU Member States.² As the levels and the dynamics of wage and income differentials play a crucial role in this context, the paper starts by assessing the differences in factor endowments and the likely speed of convergence of the CEECs to EU income levels. Then the analysis focuses on three main channels, along which enlargement may affect labour markets in the present EU countries, namely i) trade in goods and services, ii) movement of capital, and iii) migration of labour. The enlargement process has clearly many other facets, which will, in one way or another, affect wages and employment. This is true in particular for the Common Agricultural Policy (CAP) and the reform of structural and regional policies in the EU. However, an assessment of these issues goes far beyond the scope of this paper.

1. Differences in factor endowments and the likely speed of convergence

The economic conditions at the outset of Eastern Enlargement are characterised by a distinct gap in per capita incomes between the present EU Members and the accession candidates, which can be traced back to differences in factor endowments, technologies and institutions. Per capita GDP levels at current exchange rates, which may serve as a proxy for the productivity of the tradable sectors, amounted in the ten CEE countries to around one-tenth of the respective levels of the present EU countries in 1998. Per capita GDP levels at purchasing power parities, which are a proxy for differences in real living standards, are estimated by the World Bank at around one-third, and by Eurostat at around two-fifth of those in the present EU. This gap in per capita income levels is considerably wider than in past accession rounds. However, the variance of income levels across individual CEE countries is large: According to the World Bank estimates, per capita GNP levels at current exchange rates vary between 5

¹ Tito Boeri/Herbert Brücker et al: The Impact of Eastern Enlargement on Employment and Labour Markets in the EU Member States, DIW, CEPR, FIEF, IGIER, IHS, Berlin and Milano 2000, http://europa.eu.int/comm/dgs/employment_social/news_en.htm. A revised edition for the publication is just in prepared. The report draws on contributions from Heike Berlitz, Giuseppe Bertola, Michael Burda, Fabrizio Coricelli, Juan Dolado, Per-Ander Edin, Michael Fertig, Peter Fredriksson, Helmut Hofer, Elmar Hönekopp, Peter Huber, Juan Jimeno, Janos Köllö, Michaela Kreyenfeld, Martina Lubyova, Per Lundborg, Uta Möbius, Mattia Makovec, Daniel Munich, Richard Portes, Wolfram Schrettl, Jörg Schröpler, Dieter Schumacher, Gilles St.Paul and Parvati Trübswetter.

² This paper draws on an article of the author and Tito Boeri which will be published in World Economics, Vol. 2, No. 1, 2001 (forthcoming).

per cent and 40 per cent, and at purchasing power parities between 20 per cent and 60 per cent, of respective figures in the present EU (Table 1). Moreover, in the regions of CEE countries immediately bordering to the EU, wage levels vary between 20 and 60 per cent of those prevailing on the other side of the border (Figure 1).

Table 1 Selected Indicators on Income Levels and Factor Prices in the CEE-10 and the EU-15 1998

	GNP per capita ¹⁾		PPP-GNP per capita ²⁾		gross wages and salaries ⁴⁾		ICOR ⁵⁾
	in USD	in % of EU-15	in USD	in % of EU-15	in EURO	in % of EU-15	
Bulgaria	1,200	6	4,304 ³⁾	21	0.63	6	5.50
Czech Republic	5,047	23	9,545 ³⁾	47	1.94	18	-
Estonia	3,300	15	5,736 ³⁾	28	1.57	14	7.68
Hungary	4,400	20	8,085 ³⁾	40	1.69	15	4.11
Latvia	2,288	11	5,346 ³⁾	26	1.09	10	-
Lithuania	2,581	12	4,803	24	1.44	13	5.06
Poland	3,500	16	6,740	33	1.90	17	5.07
Romania	1,546	7	3,970	20	0.97	9	-
Slovak Republic	3,624	17	8,566 ³⁾	42	1.52	14	7.96
Slovenia	9,037	42	12,833 ³⁾	64	5.09	46	6.12
CEE-10 countries	3,186	15	6,435	32	1.61	15	-
Austria	..		22,740	113	11.24	102	8.73
Belgium	..		23,480	116	12.74	115	8.18
Denmark	..		23,830	118	17.32	157	7.99
Finland	..		20,270	100	11.87	107	4.15
France	..		22,320	111	11.11	101	5.66
Germany	..		20,810	103	16.71	151	10.00
Greece	..		13,010	64	5.62	51	2.20
Ireland	..		18,340	91	10.76	97	2.08
Italy	..		20,200	100	8.26	75	12.08
Luxembourg	..		37,420	185	14.72	133	8.18
Netherlands	..		21,620	107	12.12	110	6.16
Portugal	..		14,380	71	4.28	39	7.86
Spain	..		16,060	80	7.91	72	6.96
Sweden	..		19,480	97	16.00	145	5.51
United Kingdom	..		20,640	102	11.80	107	8.31
EU-15	21,617	100	20,176	100	11.05	100	-

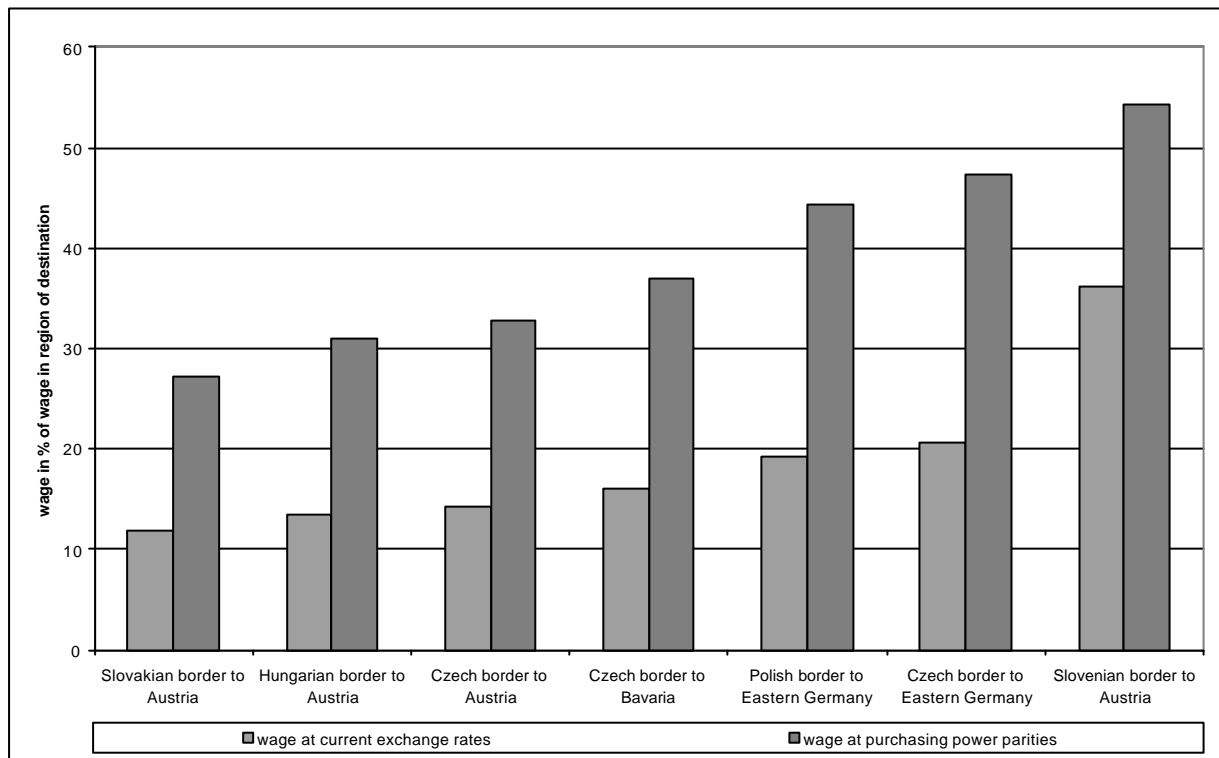
1) GDP per capita at current exchange rates. - 2) PPP-GNP by the World Bank in 1998; some figures are extrapolated with the real growth rate per capita. - 3) Extrapolated from 1997 estimate by real GDP growth per capita. - 4) Gross wages and salaries excl. indirect labour costs. Note that the comparison is affected by national differences in methodology. CEE-10 countries: Gross monthly wages and salaries divided by working hours per month. EU-15: Extrapolation of 1995 figures by nominal wage index. - 5) Incremental Capital Output Ratio (ICOR): Low values of the ICOR are an indication for a high marginal productivity of the capital stock and vice versa. Note that the ICOR can only be calculated for positive growth rates of the GDP.

Sources : World Development Indicators, CD-Rom, Washington, D.C. 2000, IMF: International Financial Statistics, various editions, Washington, D.C. 2000; EUROSTAT, national statistical offices, authors' calculations.

Such marked income gaps are corresponds to a distinct difference in endowments with physical and human capital. The book-value of physical capital stocks in the CEE countries

are reported at around one-tenth of the EU-average. Rather low values of the Incremental Capital Output Ratio (ICOR) in the CEE countries indicate that the marginal productivity of real investments in the CEE countries is high relative to that of the present EU countries (Table 1).

Figure 1 Wage gap in selected regions at current exchange rates and purchasing power parities 1998



Sources: National statistical offices, authors' calculations.

Human capital endowments, measured by formal indicators such as school enrolment rates and average years of schooling, are significantly below those of most EU Members, too. Moreover, the quality of education does not quite reach EU standards (Boeri 2000).

Although the CEE countries are 'small' in terms of output and capital stocks, their labour force is not. It amounts for almost one-third of the labour force in the present EU and is relatively cheap: average wage levels number 15% (at current exchange rates) or one-fourth (at purchasing power parities) of EU levels.

The reported differences in factor endowments cannot, by themselves, account for the huge income gap between the West and the East in Europe. Total factor productivity is substantially lower in the CEE countries than in the EU. This can be traced back to various factors, in particular to differences in technologies and institutions. A more efficient use of

resources already available in the CEECs has therefore the potential to reduce the income gap significantly.

Enlargement policies of the present EU are based on the crucial assumption that per capita GDPs in the CEECs will converge to those prevailing in the present Member States. Growth theory does not provide unequivocal answers to the question whether per capita income levels in 'poor' economies tend to converge to those of rich one. Historical experience among European market economies suggests that convergence may indeed occur, but only over a long time span. Per capita income levels within the current EU Members as well as those of the other European market economies have been slowly converged throughout the post-war period.³ If we apply the same rate of convergence among the present EU Members and the other European market economies to the CEECs, the half-life of the income gap of the CEECs vis-à-vis the EU is longer than 30 years. It should be noted that growth rates recently observed in the CEECs following the trough of the so-called "transitional recession" are generally in line with those of the post-war experience.

Nevertheless, we should not expect that the speed of convergence will be uniform in all transition countries. Differences in institutions, economic policies and initial endowments with human capital will affect the speed of convergence. A reallocation of public expenditures away from salaries of public servants to public investment and an allocation of social spending attributing a higher weight to policies easing the reallocation of workers have the potential to increase the speed of convergence by up to 10 per cent. Improvements in institutional quality and an increase in primary and secondary education enrolment rates are also likely to foster growth in the CEECs (Boeri/Brücker et al. 2000, Part B).

Moreover, Eastern Enlargement is likely to speed up the convergence of per capita incomes by itself. Estimates based on computable general equilibrium models predict that Eastern Enlargement will raise per capita GNP levels in the candidate countries by 1.5 per cent under conservative assumptions, and by around 19 per cent if we take into account the impact of EU membership on risk premiums and capital accumulation (Baldwin, Francois and Portes 1997). Nevertheless, any realistic policy scenario has to acknowledge that large differences in

³ We applied different measures of convergence to a sample of the present EU countries and a broader sample of European market economies, e.g. the development of the variance of per capita GDP levels over time, unit-root tests, and Barro-type regressions of growth rates against initial income levels. All tests suggest that GDP levels have in fact converged over time in both country samples, but we observed a high variance in the speed of convergence across countries, too (cf. Boeri/Brücker et al. 2000, Part A, pp. 94-102, Annex A, pp. 146-152).

factor endowments and incomes between the current EU Members and the accession candidates will persist for decades rather than simply for years.

3. Will the removal of trade barriers foster imports of cheap labour?

Most trade restrictions between the EU and the CEECs-10 have already been dismantled. Thus a rather strong degree of trade integration has already been attained: exports from EU countries to the CEECs-10 have grown in the last decade by a factor of 6.5, and imports from the CEECs-10 to the EU by a factor of 4.5. The enlargement involves the integration of the CEECs-10 into the Common Agricultural Policy (CAP) of the EU, the harmonisation of product quality standards and liability rules, and the removal of the remaining trade barriers, which are confined to the service sector and agriculture.

Standard trade theory predicts that free trade between economies with large differences in factor endowments has the potential to generate large benefits in terms of income and consumer surplus at the aggregate level, but that the gains and losses are unevenly distributed among the various factors of production. In particular, stronger trade integration of the CEECs-10 into the EU markets for goods and services could affect wages and employment by increasing imports of labour-intensive goods and exports of (physical and human) capital intensive goods, which would in turn increase the relative price of physical and human capital, and decrease wages of unskilled workers.

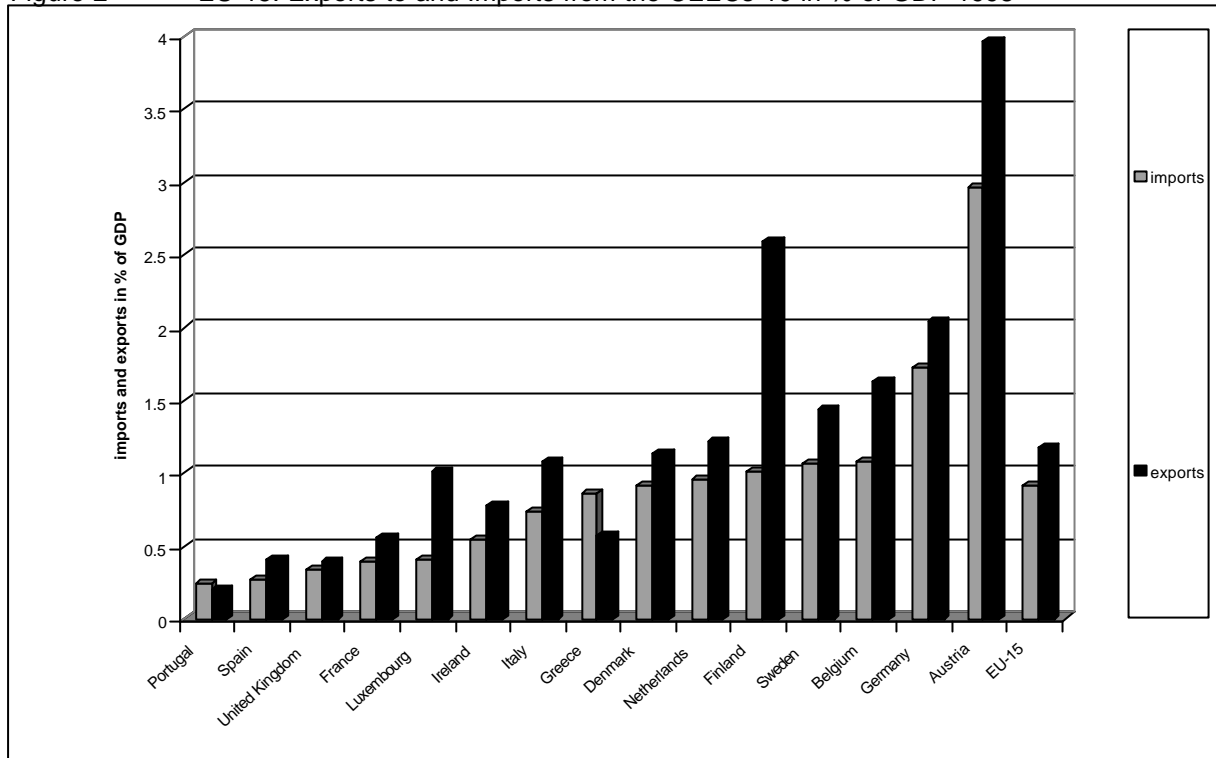
The composition of trade flows between the EU and the CEECs-10 is broadly in line with the predictions of these models. EU exports to the CEECs-10 are concentrated in goods with a relatively high content of physical capital and requiring highly-skilled labour, while imports from the candidate countries are based on (unskilled) labour intensive techniques. The import penetration of the CEECs-10 in the EU markets is stronger in sectors like clothing and footwear, while the EU experiences a large trade-surplus vis-à-vis the CEECs-10 in physical and human capital intensive industries such as communication equipment, computers and motor vehicles. Nevertheless, inter-sectoral differences in trade flows are less marked than expected by the large differences in factor endowments and tend to decline significantly over time. However, persistently large differences in unit-values between the EU and the CEECs-10 indicate that intra-industry trade is mainly of the vertical type (that is, involving goods of a different quality produced within the same industry). Thus, we observe a substitution of inter-industrial differences in the factor content of traded goods by intra-industrial differences.

Altogether, actual trade patterns between the EU and the CEECs-10 would seem to imply a convergence in factor prices. However, there are at least two good reasons to believe that further trade integration will not, by itself, significantly affect relative wages and employment even in the EU countries most involved in trade with the CEECs-10:

1. Actual and projected trade volumes are just too small to affect prices in open economies. In order to affect relative wages in open economies, the CEECs-10 must become the suppliers for any additional demand of labour intensive goods. This is not likely to happen in view of the (economic) scale of the CEECs-10 and the EU. Both, EU-exports to the CEECs-10 and EU-imports from the accession candidate account for, at most, 1 per cent of the GDP of the European Union. In no country of the EU exports and imports to and from these countries exceed 4 per cent of GDP. Empirical analyses of the impact of trade on wages, employment and labour mobility based on micro data in some of the EU countries most closely integrated with the CEECs-10 (i.e. Austria, Germany and Sweden) are consistent with this view. Wage and employment effects of further trade integration are bound to be negligible.
2. The large gap in unit-values indicates that the CEECs-10 are not specialised in the same quality segments of markets as are producers in the EU. Under these circumstances, trade theory suggests that all factors of production should benefit from trade, leaving relative wages of skilled and unskilled workers unaffected.

All this does not rule out the possibility of wage and employment losses involving unskilled workers in well-defined sectors and regions. Although the magnitudes are small, trade flows are likely to be concentrated in specific EU areas because of transport costs and, due to the low mobility of workers in the EU, these regionally concentrated trade flows may locally harm the position of unskilled workers. Three quarters of trade between the EU and the CEECs-10 is indeed concentrated in the EU countries immediately bordering the accession candidate, that is, Austria, Germany, Greece, Italy and Finland (Figure 2). Moreover, within these countries, trade turnover is concentrated in the border regions. If an impact of trade on wages and employment will be felt at all in the EU, this will occur precisely in these regions.

Figure 2 EU-15: Exports to and Imports from the CEECs-10 in % of GDP 1998



Sources: OECD, Direction of Trade Statistics, authors' calculations.

While many concerns related to the effects of trade on wages of unskilled workers appear to be ill-founded, many optimistic views as to the job generation potential of accession are likewise lacking an empirical support. It is often argued that the large surplus in EU-trade with the CEECs-10 is a job-generating machine. No doubt, the combined trade-surplus is sizeable (of the order of US-\$ 25 billions in 1998) and has steadily increased since the fall of the Berlin wall. The other side of the coin of these trade surpluses is a deficit in the capital balance as income is transferred from the EU to the CEECs-10 in order to finance their trade deficits. Increasing capital transfers to the CEECs-10 associated with the enlargement are likely to result in even larger trade surpluses. We estimate that the compounded deficit in the trade balance of the CEECs-10 may double in the course of accession.

It is difficult to establish whether trade in manufacturing goods between the EU and the CEECs-10 will significantly increase in the course of accession. Estimates based on gravity models, which explain trade flows in terms of geographical distance, population size and GDP levels at current exchange rates, suggest that actual trade flows between the EU and the CEECs-10 have already reached the potential, as they exceed 'normal' volumes registered between market economies with similar characteristics (Brenton/Mauro 1998). However, trade between the EU and the CEECs-10 is still growing at double-digit rates and there is

considerable uncertainty as to the measurement of value added in transitional economies while predictions of gravity models are very sensitive to revisions of GDP series. Schumacher (1999) shows that if one uses in gravity models GDP at purchasing power parities rather than GDP at current exchange rates, actual EU exports to the CEECs-10 in 1998 were only at about 50 per cent of 'normal' export volumes among market economies and imports at 40 per cent of their potential.

An unambiguous prediction of our study is that trade in services will increase as a result of the dismantling of the remaining barriers to trade in this field. This may have a significant effect on the supply of non-tradable goods in countries and regions bordering the CEECs-10, notably in the construction and transport sectors. However, it is worth noting that present levels of service trade are low, and hence they will only rise to proportions which are unlikely to affect wages and employment at the aggregate level.

Overall, the impact of trade on employment and wages is likely to be confined to the EU countries geographically closest to the CEECs-10, and to be, in any event, concentrated in the bordering regions of these countries. Although the benefits from trade integration – in terms of increased consumers' surplus – will be significant, there will be some losers in these bordering regions, notably among the unskilled workers operating in the sectors which have so far been sheltered from the competition of low-cost labour from the CEECs-10, e.g., construction, transport and textiles.

4. *Will capital market liberalisation effect the export of jobs to the East?*

The barriers to foreign direct investment and other capital movements have been largely removed. However, certain shortcomings in the regulation and supervision of capital markets and the banking systems are still present. From the perspective of the present EU Members, capital flows to CEE countries are, in any event, "too small to matter": yearly capital flows currently account for barely 0.2 per cent of the EU GDP and 0.8 per cent of gross fixed investment in the EU. Even a significant increase in capital flows from such low levels, can hardly have any impact on interest rates and factor incomes in the EU. FDIs originating in the EU are, however, large for the CEECs-10 (in 1998 they accounted for 7 per cent of their GDP and more than 25 per cent of their gross fixed investment) and hence an increase in FDIs may significantly contribute to capital formation, growth, and increasing wages in the countries candidate to accession.

Foreign capital flows to CEECs-10 mainly take the form of foreign direct investments. Portfolio capital inflows are well below those observed in other countries at comparable income levels. This suggests that equity and security markets of the CEECs-10 are still at their infant stage. We expect the portfolio capital flows to significantly pick-up as the harmonisation of the regulation of financial markets gains momentum. We also estimate FDIs to the CEECs-10 to double in the wake of accession. Experience from past enlargement episodes suggests that accession to the EU can considerably increase capital inflows: this happened especially in Spain and Portugal in the aftermath of the Southern enlargement of the EU. Furthermore, our projections for the trade potentials imply that capital flows to the CEECs-10 fall short of their potential as trade and current account deficits are usually matched by capital inflows. Such an increase in capital movements from the EU to the CEECs-10 may contribute significantly to growth in the CEECs-10, hence to income convergence.

There are widespread concerns in the EU that labour intensive productions will relocate from the EU to the CEECs-10 as a result of the enlargement. However, a detailed analysis of the structure of FDIs does not provide support to these views. Nearly half of the FDIs originating from the EU is directed at non-tradable sectors in the CEECs-10 (mainly public utilities and communication, as well as financial services). The branch structure of investment, as well as enterprise surveys, indicate that market access is the primary reason for the investment. Only about one-fifth of foreign investment is allocated to industries where low labour costs play a significant role and the share of unskilled labour is relatively high⁴.

Overall, only a minor fraction of FDI is driven by low-wage costs in the CEECs-10 and hence may displace production and employment in the EU. FDIs are mainly induced by market access considerations: this means that they are either neutral for employment and wages in the EU or are complementary to trade, thereby exerting a positive effect on employment and wages in the enterprises and branches involved. The small fraction of FDIs induced by low labour costs is associated with a specialisation of production in human capital intensive processes in the EU and labour intensive activities in the accession candidates. This structure of FDIs may actually hurt wages and employment of unskilled workers in specific enterprises and branches, such as clothing, footwear, electrical machinery, rubber and plastic products. However, in these branches large trade surpluses vis-à-vis the CEECs-10 are observed, which

⁴ In particular, in clothing and footwear, electrical machinery, rubber and plastic products, parent companies would seem to focus on significantly more capital intensive activities than their foreign affiliates.

suggests that the undesirable effects of FDIs on wages and employment of unskilled workers may be offset by increasing exports to the CEECs-10.

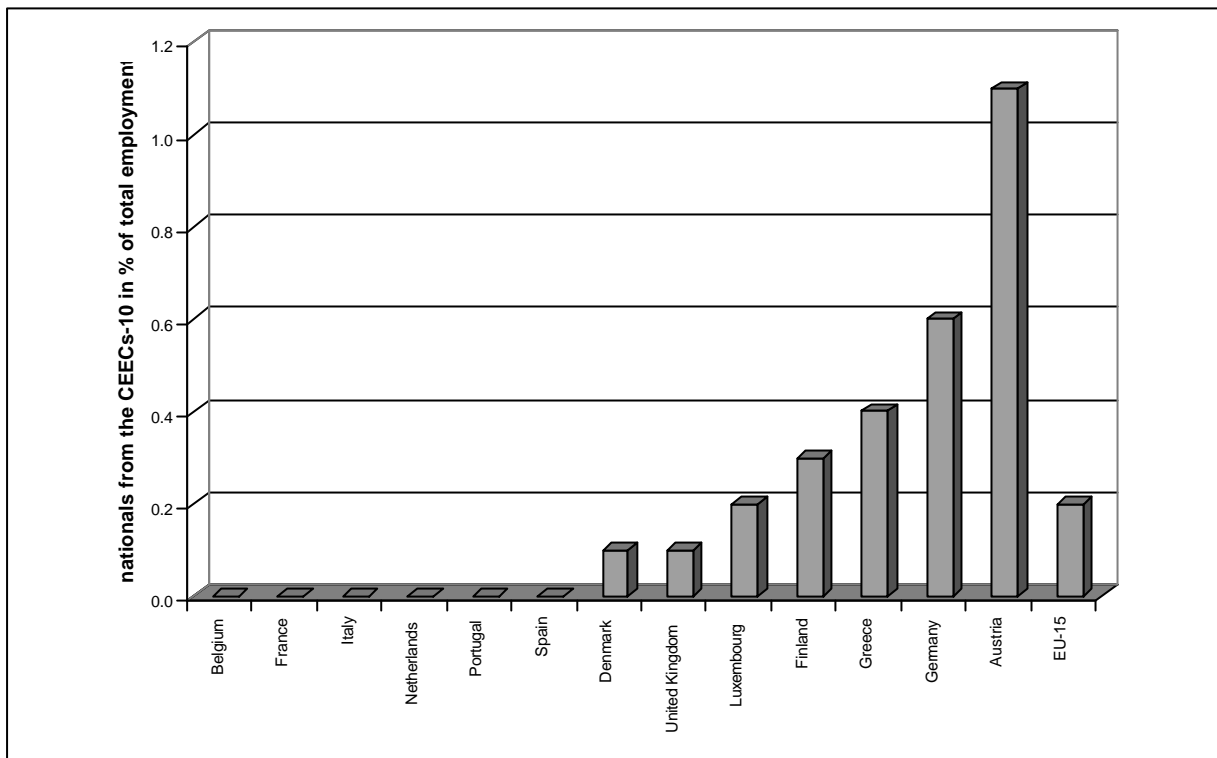
5. *Will EU labour markets be swamped by migrants from the East?*

Ten years after the start of economic transition in Eastern Europe, immigration from the CEECs-10 is still heavily restricted by the EU Members. Neither do the Europe Agreements (EAs) impair the authority of individual EU Members to regulate the immigration of labour and persons from the CEECs-10. The removal of the barriers to free labour mobility is therefore the single dimension of economic integration, which is likely to be most affected by the Eastern enlargement of the EU.

The evidence presented above does not suggest that trade and capital movements can lead to an equalisation of factor prices. Insofar as large wage and income gaps between the CEECs-10 and the EU are likely to persist for decades, strong economic incentives to migration are bound to be present well beyond the date of accession. This holds true particularly for the richest regions of the EU which are bordering the CEECs-10, such as the Bavarian border with the Czech Republic and the Austrian borders with Slovakia, Hungary and the Czech Republic. However, international migration is hindered by high transaction costs and by the limited absorption capacity of labour markets in the countries of destination.

Present stocks of employees and residents from CEECs-10 in the EU clearly reflect the restrictions to labour mobility and are, in view of the large gap in per capita incomes, rather negligible. The stock of foreign residents immigrated from the CEECs-10 to the EU is estimated at some 850,000 individuals, while the stock of foreign employees amounts to about 300,000 workers. The latter figure includes the full-time equivalent of temporary and seasonal workers. Such figures account for barely 0.2 per cent of the EU population and 0.3 per cent of the EU workforce, respectively. Around 80 per cent of the migrants from the CEECs-10 reside in Austria and Germany (Figure 3). However, the official statistics do not cover illegal migration as well as workers which are employed by foreign companies supplying services in the present EU countries.

Figure 3 Nationals from the CEECs-10 in employment of the EU-15 Members

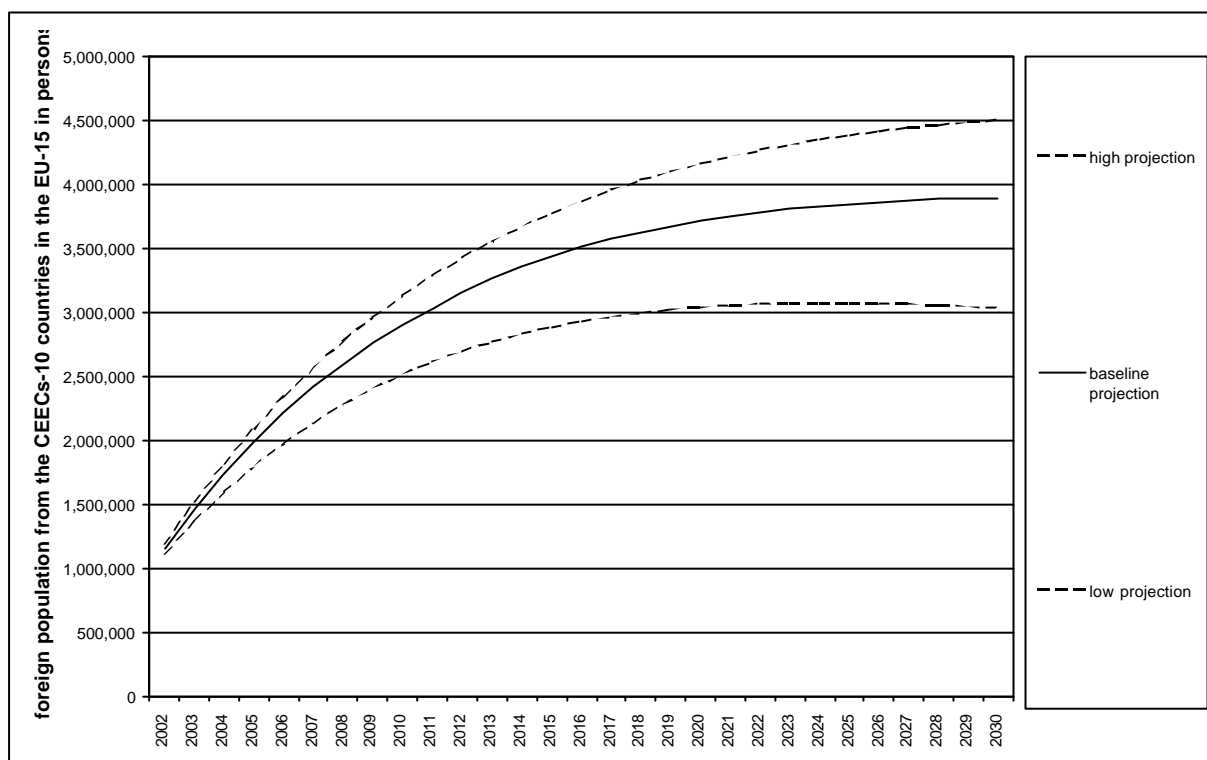


Sources: Eurostat Labour Force Survey, authors' calculations.

Our estimates of the migration potential associated with the Eastern enlargement draw from a time series model of immigration to Germany in the 1967-98 period, which explicitly takes into account the formation of expectations. This model allows to estimate the long-term equilibrium level of CEECs-10 individuals and workers residing in the EU, as well as the speed at which the adjustment to the potential takes place. The most important factors affecting the estimates of the migration potential are the differences in *per capita* incomes, and the employment rates both in the destination countries and in the countries of origin. Institutional restrictions to migration, variables capturing the presence in the host country of ethnic minorities originating from the CEECs-10 and the possibility to use a common language as well as indicators for the standard of living, were also found to significantly affect migration. Interestingly enough, our estimates suggest that the propensity to migrate decreases with the number of those who have already emigrated from each accession candidate. Thus, network effects, e.g., associated with the presence in the EU of a core group of migrants originating from the same country, would seem to influence the distribution of migrants between the different EU countries, but not to encourage a persisting expansion of migration flows.

The above econometric results can be used to simulate potential migration from the CEECs-10 into the EU under various scenarios of income convergence and unemployment. Needless to say, the simulations should only be seen as broad indications as to the likely magnitudes of future migration flows originating from the CEECs-10 and are conditional on the assumptions being made as to the pace of income convergence to the EU levels and on labour market developments in the East and the West.

Figure 4 Simulation: Foreign population in the EU-15 after introduction of free movement



Sources: Authors' estimates and simulations. Note that in the high (low) projection a convergence rate of 3% (1%), an unemployment rate of 10% (5%) in the country of destination, and an unemployment rate of 15% (5%) in the country of origin is assumed.

Our baseline simulations assume that per capita incomes between the EU and the CEECs-10 will converge at a rate of 2% per annum – which is consistent with the speed of income convergence in Post-war Europe -- and that the unemployment rates in the EU and the CEECs-10 remain constant. They suggest that the foreign population originating from the CEECs-10 and residing in the EU may rise from about 0.85 to 3.9 million under the enlargement scenario. This corresponds to roughly 4% of the CEECs-10 population and one per cent of the population of the EU-15 countries. The peak in the size of the population of migrants is expected to be reached 30 years after the liberalisation of labour movements. Net migration inflows in the EU are bound to increase immediately reaching a maximum of about 335,000 individuals per year, and subsequently decline to a more modest 100,000 to 150,000 people per annum. Different assumptions as to the speed of convergence as well as the unemployment rates prevailing in the countries of destination and origin, yield long-run

stocks of foreign residents from the CEECs-10 in the EU-15 ranging from 2.9 to 4.5 million (Figure 4).

Thus, according to our simulations, migration flows stimulated by the accession will neither be negligible -- as was the case at the time of the accession of the Southern EU Members -- nor as large as often feared in the EU. The stock of foreign residents from the Southern EU Members had already reached its equilibrium level when the free movement was introduced, according to our estimates. This will hardly be the case when the CEECs-10 enters the EU. Moreover many speculations depicting Western Europe as being swamped by large cohorts of migrants originating from the CEECs-10 ignore the fact that migration is hindered by high transaction costs and do not factor in the limited absorption capacity of labour markets in the destination countries. Even in Germany during the 1960s, under full-employment and publicly-sponsored efforts to attract guest-workers from abroad, average net immigration from *all* countries did not exceed 220,000 persons per year.

Migration flows will not be evenly distributed across the EU. Germany and Austria currently attract about 80% of the migrants originating from the CEECs-10. If this geographical concentration of migration flows will not change, Germany and Austria should be expected to receive 220,000 and 40,000 people per year, respectively, after free labour mobility is introduced. As in the case of trade flows, migration flows are also concentrated in the Austrian and German regions bordering the CEECs-10, with the notable exception of the former GDR. At the borders of Eastern Germany with Poland and the Czech Republic, migration shares are at one-third of the German average, a factor which can be attributed to the lower income levels and higher unemployment rates registered in the Eastern Länder.

Contrary to conventional wisdom, economic theory predicts that migration enhances aggregate welfare of natives in the host countries, while natives in the home countries lose out. This can be traced back to fact, that wages of the intra-marginal migrants are below her/his contribution to GDP. However, the gains and losses are not distributed equally across the factors of production: while factors complementary to migrant labour are supposed to gain from migration, factors which can be substituted by immigrant labour may lose out. In particular, it is feared that unskilled labour may be affected by migration in terms of wages and employment in host countries. The findings of this report, as well as the findings of a number of other studies, suggest that undesirable effects of migration are concentrated on blue-collar workers in manufacturing industries and on unskilled labour in services. Nevertheless, the impact of migration on the labour market performance of natives is much

smaller than widely believed. The reason is that migrants move into prosperous branches and regions and that furthermore output and investment adjust according to the increase in the labour supply. Our study has found that an increase in the migrant share, in a given branch, by one percentage point decreases average wages there by 0.25 per cent in the Austrian and 0.6 per cent in the German regressions. At the same time, the individual risk of dismissal increases by 0.8 percentage points in the Austrian and by 0.2 percentage points in the German sample. The impact of migration on white collar workers is slightly positive or neutral. Thus, since the increase in the share of foreigners from the CEE countries is expected to last for rather long time periods, the impact of migration on wages and employment is likely to be rather moderate even in the two most affected countries, Austria and Germany.

Moreover, the impact of migration might be more dispersed across skill groups in case of immigration from CEE than in case of traditional immigration. Formal education levels of migrants from CEE are surprisingly high. Nevertheless, the branch structure of employment shows that nationals from CEE are employed in the same branches as other foreigners and most probably, at the same qualification levels. Furthermore, additional information on the labour market performance of ethnic Germans who have immigrated from CEE suggests that the returns on human capital attained are extremely low even when migrants possess good language skills. Although immigrants from CEE compete at present for jobs in manufacturing and construction sectors with blue-collar workers and unskilled workers, they may become over time more able to adapt to the skill profile of demand of EU labour markets, and hence increasingly compete with high-skilled workers. Gains and losses from migration will not be uniformly distributed across the various factors of production in the EU: while complements to migrant labour will gain, substitutes may lose out. Once more, it is mainly unskilled labour that may experience wage and employment losses as a result of the enlargement. Such undesirable distributional effects are likely to be concentrated on blue-collar workers in manufacturing industries and on unskilled labour in services. As to the size of such effects, it should not be over-estimated: the impact of migration on the labour market performance of natives is much smaller than widely believed. The reason is that migrants tend to move into the most prosperous branches and regions and that output and investment are responsive to the increase in labour supply. Microeconomic exercises carried out in the context of the study suggest that an increase in the migrant share, in a given branch, by about one percentage point decreases average wages of natives by only 0.25 per cent in Austria and 0.6 per cent in the Germany. At the same time, the individual risk of dismissal increases by 0.8 percentage points in the Austrian and by 0.2 percentage points in the German sample. The impact of

migration on white collar workers is found in these regressions to be slightly positive or neutral. Since the increase in the share of foreigners from the CEECs-10 is expected to last for a relatively long time period, the impact of migration on wages and employment is likely to be rather moderate even in Austria and Germany.

It should finally be stressed that migration from the CEECs-10 is likely to be more dispersed across skill groups than in previous immigration episodes. Formal educational attainments of migrants from the CEECs-10 are surprisingly high. Nevertheless, the branch structure of employment shows that nationals from CEECs-10 are employed in the same branches as other foreigners and most probably, at the same qualification levels. Furthermore, evidence on the labour market performance of ethnic Germans who have immigrated from CEECs-10 suggests that the returns on human capital are low even when migrants possess good language skills. Although immigrants from the CEECs-10 compete at present for jobs in manufacturing and construction sectors with native blue-collar workers and unskilled workers, they may become over time more able to adapt to the skill profile of labour demand in the EU, and increasingly compete for positions with highly-skilled workers.

6. *Conclusions*

Trade and FDI flows associated with the Eastern enlargement of the EU are unlikely to significantly affect wages and employment in the current Members of the EU. Some wage and job displacement effects of the accession may only be felt at a sub-national scale, involving unskilled workers, employed in specific industries (mainly in services, construction and transport) and resident in the relatively rich regions of the EU borders with the CEECs-10 (Austria and Bavaria). In these respects, trade and FDIs, CEECs are just “too small to matter” for the current EU Members.

Migration associated with the liberalisation of labour movements from the CEECs-10 will certainly be more sizeable, as income gaps between the EU and the candidate countries are large, bound to persist for decades and the CEECs workforce is about 30% that of the EU. However, history tells us that it takes a long time before migration stocks adjust to income differentials, which are themselves bound to decline over time. Even under prudent assumptions about the pace of income convergence, we expect an annual increase in the number of foreign residents from the CEECs-10 of around 220,000 persons for Germany and of 40,000 persons for Austria after lifting the barriers to labour migration. Such flows will decline over time: net flows will be halved within a decade. The above estimates assume that

there are no migration restrictions at all, that is, free movement of labour from the CEECs-10. About one-third of migrants are expected to be employees.

Although we are dealing with relatively small numbers, they may not look that small to populations of neighbouring regions who fear a concentration of migrants where they live, and consequent risks of wage losses and job displacement for the unskilled. Almost 80% of the migrants from the CEE countries in the EU reside in Austria and Germany, and -- with the notable exception of Eastern Germany -- they are concentrated in the Eastern regions. Educational attainments of Eastern migrants are often relatively high, but newcomers typically compete with residents for less-skilled jobs. While in tradable sectors output adjusts to an increasing supply of labour, competition of migrants from the East may bite in non-tradable sectors such as construction, hotels, restaurants or household services. Thus, Austria and Germany will be the main winners from a free movement of labour, but we cannot totally dismiss all concerns about undesirable effects on local labour markets in these two countries.

Sound enlargement policies should not neglect these concerns as well as the uncertainty inevitably associated with any estimate of the migration potential. It may therefore be advisable to keep actual migration flows under control for a transitional period. Although the chapter in the accession negotiations on the free movement of labour has been already opened, a joint position of the present EU Members regarding this fundamental issue is still missing. Some EU governments and, according to the last wave of the Eurobarometer survey, a majority of Austrians and Germans (the two populations likely to be most affected by migration flows) are against the enlargement to take place in the absence of migration restrictions, albeit temporary, vis-à-vis new entrants. Under these conditions, a delay of decisions on migration policies undermines the credibility of the commitment of the EU vis-à-vis the enlargement.

Postponing decisions and maintaining a high degree of uncertainty as to the timing and conditions of the Eastern Enlargement process will backfire. A lack of credibility of the accession of CEECs-10 reduces incentives for private investors to make irreversible commitments such as those involved by business start-ups in the East or FDIs. The capacity of candidate countries to implement badly needed institutional reforms also depends on a credible agenda for accession. The prospect of entry induces citizens in the CEECs-10 to comply with the law -- which is currently better enforced in the EU -- thus easing the reforms of the state machinery and the fight against corruption. Credibility of accession can also reduce migration pressures, as decisions to migrate depend heavily on expectations regarding

future income levels. In a nutshell, a lack of credibility of accession means slower convergence of per capita incomes of the CEECs-10 to EU levels and stronger incentives to migrate.

The commitment to Eastern enlargement would become more credible if the current EU Members open *gradually, but immediately*, their labour markets to migrants from the accession candidates. Macroeconomic conditions are favourable: Continental Europe is at the outset of an upswing in the business cycle. This eases the absorption of migration flows and minimises the risk of undesirable effects of migration on jobs and wages of unskilled workers resident in regions neighbouring the CEECs-10. In the case of the Southern enlargement of the EU, transitional periods were agreed upon which simply postponed labour migration. Those transitional periods do neither reduce the uncertainty on potential migration nor mitigate migration pressures. In contrast, immigration quotas could provide information on future migration pressures, thereby reducing the uncertainty associated with projections of migration flows, and allow to smooth pressures on host labour markets at the same time. If applications do not fill up the quotas, they can be lifted before time.

The rationale for having some *temporary* restrictions to migration is to prevent social tensions which may result in pressures for stronger and long-lasting migration restrictions. The credibility of the commitment of the EU to the enlargement would be stronger if such quotas are adopted immediately. It would also be enhanced if labour market and social policy institutions in the EU are reformed in such a way as to promote, rather than oppose, internal labour mobility in the EU. This would also avoid the concentration of the undesirable effects of migration on specific regions, which is the only way, after all, in which the enlargement can generate some losers in the EU.

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