Migration creation and diversion in the EU: Any crowding-out effects from the CEECs?[1]

Helena Marques
Department of Economics
Sir Richard Morris Building
Loughborough University
Loughborough LE11 3TU
United Kingdom
Tel: +44 1509 222704
h.i.marques@lboro.ac.uk

Abstract

This paper applies the concepts of trade creation and trade diversion to immigration into the EU-15 in the 1980s and 1990s, in order to investigate whether the extension of the EU Single Market to the new member countries may crowd-out non-EU immigrants. The results broadly support migration creation for the CEECS. There is evidence of some diversion away from non-European countries, as well as from the former Yugoslavia and Turkey. The high impact of a common language, compared to distance or a common border, may help preserve migration channels from outside Europe. Within Europe, to be an EU outsider can have a negative impact on migration patterns.

Keywords: EU enlargement, migration, creation and diversion, gravity model
JEL: F15, F16, F22, J61

1 Introduction

The 1990s have seen a process of East-West integration in Europe that culminated in the 2004 enlargement. The real wages in the new member countries are on average five times lower than in Greece, Portugal and Spain, and ten times lower than in the wealthiest EU countries. These high wage differentials created anticipation for large flows of East-West migration and most of the EU-15 countries decided not to apply the Single Market requirement of free movement of labour for up to seven years after the enlargement. When these restrictions come to an end, the new member countries may find themselves in a privileged position with

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respect to outsiders. Given the free supply of workers from the new member states, the old EU members may decide to reduce the quotas of non-EU migrants. Hence the process of East-West integration could create immigration from the new member countries and at the same time divert migration from non-EU countries.

In order to investigate the potential for migration creation and diversion caused by integration of the CEECs, this paper uses two types of migration data from Eurostat's NewCronos Database, which covers virtually all countries in the world in a period that spans from 1981 to 2000: code 2 (immigration flows by country of previous residence) and code 6 (stock of foreign population by citizenship). They shall be referred to as respectively "flows" and "stocks". A preliminary inspection of this data reveals that, in the period 1985-99, Germany and Austria were the countries receiving the highest immigration flows as a share of its population (1% to 1.5%). The countries and time periods involved seem to hint at some impact of the East-West migration. Whereas immigration flows have been quite volatile, the stocks of foreign citizens in each EU-15 country as a share of its population have remained remarkably stable in the period 1985-2000. This seems to indicate that at least some immigration is temporary and the inflows do not contribute to commensurate increases in the stocks. The stock data reinforces the view that Germany, together with Austria and Belgium, has the highest percentages of foreign citizens (around 9% each in 1998). Between 1988 and 1994 there was a sharp increase in the stock of foreigners in Germany and Austria, again hinting that immigration into these countries may be associated with the changes in Eastern Europe. On the contrary, Belgium seems to have a static foreign population, possibly already resident before the start of the transition process.

A deeper investigation requires some information on the origin of the immigrants. The share of world regions[2] in immigration flows and stock of foreign citizens differs across the EU-15 countries. Both the inflow of CEECS nationals, and the share of CEECS in the stock of foreign nationals, was the highest in Austria and Germany, and also in Greece. However, in other EU-15 countries other world regions have the highest share: North Africa in France, Spain, Italy, the Netherlands and Belgium; Latin America in Spain and to a lesser extent in Portugal; Sub-Saharan Africa in Portugal; Asia in the UK; Middle East and Former Yugoslavia in Sweden. All in all, the allocation of immigrants during the 1980s and 1990s has differed quite substantially across the EU-15. It is not clear – apart from perhaps Germany and Austria – whether the CEECS have

[2] The world regions used throughout the paper are: CEECS (Central and Eastern European Countries), TURKEY, ALBANIA, EXYUGO (Former Yugoslavia), EXUSSR (Former Soviet Union), TINY, EASTAF (East Africa), NORAF (North Africa), CENAF (Central Africa), SOUAF (South Africa), WESTAF (West Africa), NORAM (North America), CENAM (Central America), SOUAM (South America), EASTAS (East Asia), SEASTAS (Southeast Asia), SOUAS (South Asia), MIDEAST (Middle East), OCE (Oceania). In Table 2, some of these regions are further grouped in SOUAF (Central Africa, South Africa and West Africa), LATAM (Central America and South America) and SOUAS (South Asia and Southeast Asia).

dominated or whether other groups have kept their relative importance. Hence the question remains: are CEECS immigrants crowding-out others?

This paper borrows two techniques, both previously used in the European integration literature, to first analyse creation and diversion effects in immigration into the EU-15 and then try and understand the reasons for those migration creation and diversion effects. The first technique, Truman shares (Truman 1969), was one of the techniques initially used to measure trade creation and trade diversion in Europe (see, among others, Viner 1950, Verdoorn and Meyer-zu-Schlochtern 1964, Balassa 1967, Clavaux 1969, Kreinin 1969, Truman 1969, Sellekaerts 1973, Balassa 1974, Dayal and Dayal 1977). However, the trade creation and trade diversion concepts have not been – to the best of the author's knowledge – applied to migration. The second technique used in this paper, gravity models, has also been used extensively to assess the trade impact of European integration (see, among others, Glejser and Dramais 1969, Kreinin 1969, Fidrmuc 1998, Brulhart and Kelly 1999, Paas 2000, Sanz 2000).

The paper's findings broadly support migration creation for the CEECS, but the evidence on the migration diversion hypothesis is mixed. There is evidence of some diversion away from non-European countries, as well as from the former Yugoslavia and Turkey, in favour of the new Central and Eastern European members. The average schooling level of the destination country, the size of the already existent immigrant community in the destination country, and a common language are the most important factors explaining immigration into the EU-15. The high impact of a common language, when compared to distance or even a common border, may help preserving migration channels from outside Europe. Within Europe, shorter distances and common borders become more relevant, giving an advantage to the CEECS.

The paper is organised as follows. Sections 2 and 3 introduce and discuss the results of respectively Truman shares and gravity models. Section 4 concludes.

2 Truman Shares

Truman (1972), p. 272-73, wrote about trade flows, *"If the increase in the partners' share of imports reflects replacement of higher cost domestic production, then one has evidence of trade creation. If it were the result of the displacement of lower cost imports from non-member countries, then it was due to trade diversion."* In the context of this paper, it is not enough to say whether the flow of CEECS immigrants has increased or decreased. The changes may have happened because the EU-15 has become respectively more open or more closed to immigration overall, and not because there is positive or negative discrimination of CEECS

immigrants. Only after controlling for internal conditions of the recipient countries a conclusion regarding migration creation or diversion can be reached. The share of an origin country *j* in the immigration flows into a country *i* in a year *t* can be written simply as the ratio of the number of immigrants (M) to the population (POP) of the recipient country:

$$S_{ijt} = \frac{M_{ijt}}{POP_{it}} \tag{1}$$

Migration creation or diversion is indicated by the change in shares. An increase in the share of the CEECS alone can represent migration creation if it happens at the expense of intra-EU-15 migration, in which case the shares of other non-EU countries should not be affected; but if those shares decrease, there is an argument for migration diversion in favour of the CEECS. The rate of change in the CEECS shares for immigration flows in 1986-2000 and three sub-periods (1986-90, 1991-95, and 1996-2000) are shown in Table 1. Overall, there is strong evidence in favour of migration creation, both for the EU as a whole and for most EU-15 countries.

Table 1: Change in the Share of CEECS (%) in immigration flows by citizenship (code (2))

	1986-2000	***1986-1990***	***1991-1995***	***1996-2000***
Austria	***-7.59***			***-7.59***
Belgium	13.36	12.65	15.21	11.93
Germany	1.86	14.96	***-9.08***	***-0.84***
Denmark	7.33	4.05	***-7.99***	53.85
Spain	10.87		***-6.68***	24.02
Finland	13.76	13.64	28.75	***-4.84***
France				
Greece	9.76	20.03	***-1.70***	12.76
Ireland				
Italy	67.14			67.14
Luxembourg	***-0.31***		***-14.74***	3.29
Netherlands	9.45	24.79	0.14	1.92
Portugal	1.37		***-9.20***	9.29
Sweden	1.20	2.68	1.51	***-1.03***
United Kingdom	24.26	***-5.08***	46.00	33.76
EU	17.03	4.71	4.89	19.64

The evidence of migration creation might indicate either a general increase of immigration into the EU-15 or a preference for CEECS citizens. If the shares of immigrants from other world regions also increased, then the EU-15 became more open to immigration. But if other world regions lost share, then there was diversion from those groups to the CEECS. Table 2 shows the results of a two-sided sign test and a Wilcoxon signed-rank test. The first simply classifies changes as negative and positive, whilst the second additionally ranks them according to magnitude. When the P-values in Table 2 are smaller than 0.1, the sign of the change in shares significantly differs between the CEECS and other world regions, and two situations must be distinguished. For the EU as a whole, the share of CEECS in inflows of immigrants always increased. Hence, a first situation is migration creation for both the CEECS and other world regions. This happens when the P-values in Table 2 are higher than 0.1, and the sign of the change in shares does not significantly differ between the CEECS and other world regions. A second situation is migration creation for the CEECS with

migration diversion away from other world regions. This happens when the P-values in Table 2 are lower than 0.1, and the sign of the change in shares significantly differs between the CEECS and other world regions.

Table 2: P-values for inequality of signs between the change in the shares of flows of immigrants from the CEECS and other world regions in the EU-15 (Ho: same sign)

	Two-sided sign test				*Wilcoxon signed-rank test*			
	1986-2000	*1986-1990*	*1991-1995*	*1996-2000*	*1986-2000*	*1986-1990*	*1991-1995*	*1996-2000*
turkey	0.146	***0.070***	1.000	0.146	0.136	0.123	0.533	***0.015***
albania	***0.002***	1.000	0.289	0.109	***0.005***	0.285	***0.092***	***0.021***
exyugo	0.226	1.000	***0.003***	0.548	***0.091***	0.317	***0.007***	0.286
latam	***0.092***	0.726	0.343	1.000	0.115	0.327	***0.046***	0.506
eastas	***0.092***	1.000	0.226	0.581	***0.010***	0.674	0.130	0.463
souaf	***0.000***	0.726	***0.011***	0.581	***0.001***	***0.092***	***0.012***	0.115
exussr	***0.065***		***0.070***	1.000	***0.109***		***0.049***	1.000
tiny	***0.109***	0.625	0.726	***0.021***	0.332	0.144	0.327	***0.021***
noraf	0.266	0.726	0.548	1.000	***0.054***	0.674	0.533	0.382
noram	***0.022***	***0.070***	1.000	0.581	***0.005***	***0.025***	0.789	***0.039***
souas	***0.092***	0.289	0.753	0.266	***0.086***	***0.092***	0.646	0.278
mideast	1.000	0.726	0.753	0.581	0.861	0.888	0.878	0.753
oce	0.581	0.726	1.000	1.000	0.221	0.207	0.798	0.552

On the whole, Table 2 shows that in several cases the signs of changes in shares of sub-Saharan Africa, Ex-USSR, Albania and North America significantly differ from those of the CEECS. There is also some (but weaker) evidence of a negative correlation for Turkey, Ex-Yugoslavia Republics, Tiny European countries, Asia, Latin America and North Africa. Only the change in shares of the Middle East and Oceania are never negatively linked to the change in shares of the CEECS. This is probably due to the fact that immigration from the Middle East is more linked to asylum than to economic migration and immigration from Oceania falls in neither category. The share analysis can be improved upon by looking at characteristics of origin and recipient countries that may influence migration flows in general. The next section presents a gravity model approach to isolating the effects of such characteristics and distinguishing these from specific trends of each world region.

3 Gravity models

Two alternative gravity equations will be used in this paper. The first equation is built around three main hypotheses. First, bilateral migration flows are directly related to the size of the two countries concerned, and inversely related to the physical distance between them (DIST). Country size is proxied by either GDP or population (POP). Second, migration flows are a function of country wealth, as measured by GDP per capita (GDPPC). Migration flows should decrease with the origin country's GDP per capita and increase with the destination country's GDP per capita. Third, migration flows are a function of unemployment rates (UR). Migration flows should increase with the origin country's unemployment rate and decrease with the destination country's unemployment rate.

Three important control variables are the average years of schooling (HK), an index of political instability (POL), and the existing stock of migrants (STOCK). Skilled migration is expected from countries with high average years of schooling to those with low average years of schooling, and vice-versa for unskilled

migration. Migration would increase with political instability in origin countries and decrease with political instability in destination countries. The stock of migrants represents networking effects with a positive impact on the flows of migrants.

Finally, the length of common borders (BORDER), and dummies for common language (LANG) and world regions (REGION) are included. Common borders are usually porous, and thus are expected to have a positive impact on migration flows. Common languages can also proxy for a common culture and/or former colonial ties that act as an incentive to migration. The dummies for the world regions described in footnote 2 control for region-specific preferences that cannot be explained by the other factors. A negative sign would mean that the CEECs are the preferred region, or that the rest of the world is less preferred. These dummies will also be interacted with time dummies for the 1986-90, 1991-95, and 1996-2000 subperiods, as preferences may have changed over time. The benchmark specification of the gravity model to be estimated for migration flows from country *j* to country *i* in year *t* takes the form:

$$\begin{aligned} M_{ijt} &= \alpha + GDP_{it}\beta_1 + GDP_{jt}\beta_2 + GDPPC_{it}\beta_3 + GDPPC_{jt}\beta_4 + UR_{it}\beta_5 + UR_{jt}\beta_6 + HK_{it}\beta_7 + HK_{jt}\beta_8 + \\ &+ POL_{it}\beta_9 + POL_{jt}\beta_{10} + STOCK_{ijt}\beta_{11} + DIST_{ij}\beta_{12} + BORDER_{ij}\beta_{13} + LANG_{ij}\beta_{14} + REGION_j\beta_{15} + u_{ijt} \end{aligned} \tag{2}$$

Equation (2) is modified by replacing GDP (or population), GDP per capita, unemployment rate, average years of schooling, and the political instability index for each country with the absolute value of the difference between them, respectively DGDP (or DPOP), DGDPPC, DUR, DHK, and DPOL. This is intended to control for the fact that migration flows may depend more on the relative position of countries than on their absolute position. Although there is no prior as to how migration would change with differences in size or in schooling, it can be expected that differences in income, unemployment rates and political instability would increase migration. The modified equation is as follows:

$$\begin{aligned} M_{ijt} &= \alpha + DGDP_{ijt}\beta_1 + DGDPPC_{ijt}\beta_2 + DUR_{ijt}\beta_3 + DHK_{ijt}\beta_4 + DPOL_{ijt}\beta_5 + \\ &+ STOCK_{ijt}\beta_6 + DIST_{ij}\beta_7 + BORDER_{ij}\beta_8 + LANG_{ij}\beta_9 + REGION_j\beta_{10} + u_{ijt} \end{aligned} \tag{3}$$

The regression results for the full 1981-2000 period are provided in Table 3.[3] These results are robust to various model specifications and regression methods.[4] Models 1 and 2 correspond to equation (2), whereas Models 3 and 4 correspond to equation (3), with respectively GDP and population as measures of country size.

Table 3: Regression results for immigration by citizenship in 1981-2000

Model 1		***Model 2***		***Model 3***		***Model 4***	
gdpi	0.181*** (0.052)	***popi***	0.335*** (0.054)	***dgdp***	-0.033** (0.016)	***dpop***	0.100*** (0.015)
gdpj	0.164*** (0.024)	***popj***	0.198*** (0.025)				
gdppci	0.171 (0.261)	***gdppci***	0.326 (0.238)	***dgdppc***	0.051*** (0.017)	***dgdppc***	0.016** (0.008)
gdppcj	-0.151*** (0.021)	***gdppcj***	0.013 (0.008)				
uri	-0.325*** (0.083)	***uri***	-0.351*** (0.083)	***dur***	-0.079 (0.062)	***dur***	-0.086 (0.059)
urj	-0.207*** (0.059)	***urj***	-0.172*** (0.058)				
hki	1.347*** (0.333)	***hki***	1.540*** (0.293)	***dhk***	-0.128 (0.102)	***dhk***	-0.104 (0.100)
hkj	-0.011 (0.110)	***hkj***	0.050 (0.113)				
poli	-0.370*** (0.099)	***poli***	-0.365*** (0.094)	***dpol***	-0.067 (0.083)	***dpol***	-0.024 (0.079)
polj	0.365 (0.256)	***polj***	0.078 (0.241)				
stocks	0.784*** (0.022)	***stocks***	0.725*** (0.026)	***stocks***	0.868*** (0.019)	***stocks***	0.875*** (0.019)
lang	0.546*** (0.060)	***lang***	0.617*** (0.058)	***lang***	-0.132 (0.152)	***lang***	0.113 (0.100)
dist	-0.145* (0.082)	***dist***	-0.158** (0.077)	***dist***	-0.181* (0.103)	***dist***	-0.171 (0.107)
border	0.004 (0.020)	***border***	0.048** (0.020)	***border***	-0.050*** (0.018)	***border***	-0.057*** (0.019)
turkey	-0.689*** (0.137)	***turkey***	-0.578*** (0.141)	***turkey***	-0.688*** (0.129)	***turkey***	-0.748*** (0.124)
exyugo	-0.365 (0.315)	***exyugo***	-0.210 (0.316)	***exyugo***	-0.229 (0.361)	***exyugo***	-0.268 (0.368)
exussr	0.358 (0.238)	***exussr***	0.262 (0.233)	***exussr***	0.742** (0.309)	***exussr***	0.666** (0.312)
tiny	-0.945 (0.766)	***tiny***	-0.799 (0.755)	***tiny***	-0.166 (0.837)	***tiny***	-0.653 (0.878)
noraf	-0.254** (0.121)	***noraf***	-0.228* (0.121)	***noraf***	-0.368*** (0.074)	***noraf***	-0.407*** (0.071)
souaf	-1.002*** (0.175)	***souaf***	-0.971*** (0.177)	***souaf***	-0.296 (0.235)	***souaf***	-0.425* (0.238)
noram	-0.892*** (0.133)	***noram***	-0.865*** (0.141)	***noram***	-0.012 (0.192)	***noram***	-0.062 (0.193)
cenam	-0.948*** (0.153)	***cenam***	-0.986*** (0.153)	***cenam***	-0.513*** (0.172)	***cenam***	-0.662*** (0.182)
souam	-0.601*** (0.155)	***souam***	-0.585*** (0.154)	***souam***	-0.254 (0.207)	***souam***	-0.273 (0.207)
eastas	-0.652*** (0.209)	***eastas***	-0.655*** (0.212)	***eastas***	0.514** (0.238)	***eastas***	0.250 (0.240)
souas	-0.853*** (0.157)	***souas***	-0.809*** (0.155)	***souas***	0.100 (0.188)	***souas***	-0.029 (0.180)
seastas	-0.646*** (0.206)	***seastas***	-0.668*** (0.198)	***seastas***	0.193 (0.267)	***seastas***	0.156 (0.266)
mideast	-0.725*** (0.121)	***mideast***	-0.704*** (0.116)	***mideast***	-0.179 (0.136)	***mideast***	-0.321** (0.130)
oce	-0.476** (0.186)	***oce***	-0.425** (0.185)	***oce***	0.272 (0.279)	***oce***	0.246 (0.282)
Constant	-9.592*** (2.223)	***Constant***	-12.477*** (2.051)	***Constant***	0.628 (0.798)	***Constant***	0.387 (0.836)
Observations	1087	***Observations***	1087	***Observations***	1087	***Observations***	1087
R-squared	0.9029	***R-squared***	0.9070	***R-squared***	0.8809	***R-squared***	0.8821
Chi-squared	901.99***	***Chi-squared***	589.80***	***Chi-squared***	763.76***	***Chi-squared***	1894.94***

NOTE: Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%. CEECS is the excluded dummy.

Whether GDP or population are used as measures of size (Models 1 or 2), immigration flows increase with the size of origin and recipient countries. In the population model (Model 2), GDP per capita does not

[3] In all regressions, migration data comes from the Eurostat NewCronos Database. Data for distances and borders was taken from the CEPII website (www.cepii.fr) and www.nationmaster.com respectively. Distance data is measured in km between the partner countries' economic centres. These correspond to the capital city except for Germany (Hamburg is the city used). Countries are considered to share a common border when they share a land border and its length is given in kms. Data for population (given in thousands) and for GDP (given in billions USD at 1995 prices and exchange rates) was taken from the web version of IMF's International Financial Statistics at www.imf.org. Data on average years of schooling comes from the Barro-Lee dataset (www.worldbank.org/research/growth/ddbarle2.htm). The political instability index results from averaging the political rights and civil liberties ratings provided by the Freedom House (www.freedomhouse.org/ratings). Alternatively, an index calculated as the sum of a number of variables taken from the World Bank Social Indicators database (share of military in population, assassinations, general strikes, guerrilla warfare, major government crises, purges, riots, revolutions, party fractionalisation index, type of regime, coups, major constitutional changes, major cabinet changes) was used. The results remain qualitatively unchanged and the quantitative differences in the magnitude of coefficients are negligible.

[4] Only PCSEs (Panel-Corrected Standard Errors) are reported here, but Random Effects GLS and Feasible GLS with heterogeneous panels have also been used. The results remain qualitatively unchanged and the quantitative differences in the magnitude of coefficients are negligible.

seem to have an impact on immigration flows. However, in the GDP model (Model 1), a 1% increase in the income of the origin country would reduce immigration by 0.15%. The effect, although small, is very significant.

When country differences in GDP, population, and GDP per capita are used instead of their absolute values (Models 3 and 4), differences in GDP per capita have a significantly positive impact on immigration flows into the EU-15. As expected, immigration seems to respond positively to differences in income, although the effect is quite small: a 1% increase in income differences leads to a 0.02-0.05% increase in immigration flows. More puzzling, differences in GDP have a negative impact on immigration flows, but differences in population have a positive impact. The magnitude is still quite small, respectively –0.03% and 0.10%.

In addition to income motives, the prospect of finding a job abroad relative to the same prospect back home is traditionally seen as a determinant of migration flows. A higher unemployment rate in the recipient country should reduce immigration and a higher unemployment rate in the origin country should increase emigration. The first effect turns out as expected, but unemployment in the origin country decreases emigration instead (Models 1 and 2). However, the impact of unemployment is higher for the destination country (-0.32% to –0.35%) than for the origin country (–0.17% to –0.21%). Bilateral differences in unemployment rates (Models 3 and 4) seem not to have a significant impact on migration.

The average years of schooling and the degree of political instability are important only for the EU-15 destination countries. Higher schooling levels increase immigration flows more than proportionally, whilst political instability decreases immigration flows less than proportionally. These results imply that immigration into the EU-15 is mostly economic in nature. Those EU-15 countries that are more stable politically, more liberal economically, and on average better educated, are more sought after because they offer more and better employment opportunities. The existing stock of migrants in the destination country does have a positive impact on the flows of migrants: a community 10% larger gives rise to inflows up to almost 9% higher. This result shows the importance of networking effects in migration.

Distance deters migration as would be expected, and doubling the distance from EU-15 decreases immigration flows by up to 18%. Hence countries like the CEECS, and some North African countries, geographically closer to the EU-15, may have a distance advantage. In Models 1 and 2, migration is higher between pairs of countries sharing a border and a common language. In the sample used, these pairs would involve only CEECS and TINY countries. Former colonies in Africa, America, Asia and Oceania share a

(official) language with some EU-15 countries and thus these countries' immigration advantage comes from speaking the same language. In Models 3 and 4, language has no effect and the effect of a common border becomes negative. All in all, this may help explaining why there is no solid evidence of diversion of immigration from other parts of the world in favour of the CEECS. However, the official language variable used here is a crude measure. If there were data available on languages spoken as foreign languages, perhaps the CEECS would show a stronger position.

After controlling for all the factors described above, only the former Yugoslavia and USSR republics, as well as the Tiny European countries, do not show negative country-specific factors with respect to the CEECS. However, the 1981-2000 estimation period saw many changes around the world and in Europe in particular. Hence the results may be sensitive to the use of different sub-periods. Table 4 reports the world region dummy coefficients for the 1986-90, 1991-95, and 1996-2000 subperiods obtained for the same models as in Table 3. In 1986-90, only Southern Africa, Central America and East Asia were less preferred with respect to the CEECS. In the 1990s, the dummies are mostly negative, and more so in 1996-2000. However, in 1991-95 the former USSR countries were the only world region showing positive specific migration factors with respect to the CEECS. Hence the results seem to indicate that the opening of the EU-15 borders to CEECS had potentially a stronger diversion effect on non-European countries, rather than on other European countries that were not part of the CEECS group. Turkey is however an exception, showing the most negative coefficients throughout the 1990s. Interestingly, it is in Germany that immigration from both Turkey and CEECS is strongest, hence where the potential for diversion is greatest.

Table 4: Regression results for immigration by citizenship and sub periods

	1986-90				***1991-95***				***1996-2000***			
	Model 1	***Model 2***	***Model 3***	***Model 4***	***Model 1***	***Model 2***	***Model 3***	***Model 4***	***Model 1***	***Model 2***	***Model 3***	***Model 4***
turkey	-0.079 (0.204)	0.004 (0.183)	-0.371* (0.206)	-0.417** (0.203)	-0.482*** (0.172)	-0.372** (0.161)	-0.722*** (0.176)	-0.770*** (0.173)	-1.065*** (0.162)	-0.965*** (0.160)	-1.052*** (0.162)	-1.087*** (0.160)
exyugo					0.186 (0.497)	0.308 (0.494)	0.176 (0.484)	0.205 (0.484)	-0.738* (0.435)	-0.566 (0.433)	-0.705* (0.423)	-0.682 (0.422)
exussr					0.833*** (0.284)	0.749*** (0.265)	1.273*** (0.266)	1.222*** (0.269)	-0.208 (0.249)	-0.293 (0.233)	0.185 (0.225)	0.150 (0.228)
tiny									-0.955 (0.884)	-0.812 (0.883)	-0.363 (0.850)	-0.614 (0.850)
noraf	0.030 (0.191)	0.067 (0.181)	-0.128 (0.194)	-0.129 (0.195)	-0.176 (0.166)	-0.159 (0.160)	-0.576*** (0.156)	-0.569*** (0.154)	-0.502*** (0.193)	-0.496*** (0.188)	-0.608*** (0.177)	-0.593*** (0.177)
souaf	-0.440* (0.252)	-0.461* (0.251)	-0.203 (0.258)	-0.221 (0.260)	-0.968*** (0.243)	-0.909*** (0.247)	-0.626*** (0.240)	-0.673*** (0.240)	-1.159*** (0.291)	-1.093*** (0.294)	-0.443 (0.294)	-0.475 (0.298)
noram	-0.560*** (0.162)	-0.568*** (0.163)	0.035 (0.154)	0.032 (0.152)	-0.897*** (0.162)	-0.877*** (0.165)	-0.454*** (0.172)	-0.448*** (0.168)	-0.994*** (0.176)	-0.945*** (0.180)	-0.230 (0.178)	-0.224 (0.174)
cenam	-0.668*** (0.189)	-0.742*** (0.188)	-0.350* (0.189)	-0.406** (0.190)	-0.820*** (0.180)	-0.832*** (0.176)	-0.789*** (0.210)	-0.824*** (0.211)	-0.876*** (0.162)	-0.922*** (0.158)	-0.593*** (0.163)	-0.653*** (0.158)
souam	0.038 (0.158)	0.002 (0.156)	0.213 (0.173)	0.208 (0.169)	-0.441*** (0.145)	-0.408*** (0.144)	-0.460*** (0.155)	-0.444*** (0.154)	-0.692*** (0.149)	-0.686*** (0.148)	-0.463*** (0.157)	-0.449*** (0.155)
eastas	-0.386 (0.236)	-0.447* (0.237)	0.274 (0.220)	0.097 (0.228)	-0.473** (0.206)	-0.448** (0.207)	0.384** (0.189)	0.218 (0.202)	-0.532** (0.227)	-0.525** (0.228)	0.502** (0.211)	0.338 (0.222)
souas	0.089 (0.205)	0.114 (0.203)	0.722*** (0.198)	0.614*** (0.189)	-0.457** (0.203)	-0.432** (0.203)	-0.017 (0.208)	-0.118 (0.204)	-0.756*** (0.203)	-0.725*** (0.202)	-0.120 (0.206)	-0.191 (0.204)
seastas	0.229 (0.270)	0.125 (0.271)	0.943*** (0.246)	0.916*** (0.243)	-0.222 (0.214)	-0.230 (0.214)	0.295 (0.211)	0.302 (0.211)	-1.069*** (0.217)	-1.078*** (0.216)	-0.478** (0.228)	-0.463** (0.227)
mideast	0.011 (0.249)	-0.007 (0.240)	0.153 (0.217)	0.100 (0.208)	-0.932*** (0.251)	-0.874*** (0.247)	-0.507** (0.249)	-0.541** (0.243)	-1.403*** (0.275)	-1.363*** (0.267)	-0.728*** (0.250)	-0.760*** (0.241)
oce	-0.032 (0.209)	-0.008 (0.209)	0.412* (0.215)	0.430** (0.213)	-0.405* (0.207)	-0.363* (0.208)	-0.112 (0.216)	-0.082 (0.215)	-0.610*** (0.218)	-0.542** (0.220)	-0.037 (0.233)	-0.008 (0.231)

NOTE: Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%. (1) Random effects with common AR(1); (2) FGLS with heterogeneous panels and panel-specific AR(1); (3) PCSEs with panel-specific AR(1). CEECS and 1981-85 are the excluded dummies.

4 Conclusions

This paper has used the Eurostat NewCronos migration database to investigate whether in the EU-15 there is any evidence of crowding-out of non-EU immigrants by immigrants from the CEECS. As East-West integration proceeded and the 2004 enlargement took place, there could have been migration creation towards the integrating CEECS, but also migration diversion from the rest of the world towards the CEECS. The paper's findings reveal that, after controlling for a range of factors, the inflows of CEECS citizens during the 1990s into mostly Austria, Germany, and to a lesser extent Greece, may have negatively affected inflows of non-European citizens. Although the effect of opening up the EU-15 to the CEECS seems weaker for citizens of the former Yugoslavia and USSR, Turkey seems to have been negatively affected.

The gravity estimation shows that the most important factors explaining the geographical distribution of immigration in the EU-15 are the schooling level of the destination country, the size of the immigrant community already existent in the destination country, and a common (official) language. These three variables explain respectively why some EU-15 countries are more sought after than others, why the distribution of migration stocks is remarkably stable and self-reinforcing, and why immigration from non-European countries may suffer less diversion towards CEECs immigrants. The common (official) language is largely the product of former colonial relationships. These took precedence over East-West integration and were already firmly established when the CEECS started integrating with the EU-15. Language alone is more important than sharing a border with, or being at a short distance from, the EU-15. Only when the (official) language factor is removed, which happens within Europe, sharing a border and being closer to the EU-15 really matters.

Hence, when all the restrictions to the free movement of workers from the new member countries are removed – by 2011 at most – non-European countries may not be greatly affected, but the European outsiders may suffer a negative impact on their participation in the European labour market. As a consequence, the paper's findings reinforce the importance and point to a potential impact of building up the enlargement of the EU towards the East and the Southeast, so that the current European outsiders can become insiders to the European labour market.

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