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EU EASTERN ENLARGEMENT: THE BENEFITS FROM INTEGRATION AND FREE LABOUR MOVEMENT

TIMO BAAS* AND
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Introduction

Twelve countries with a population of approximately 104 million persons joined the European Union (EU) in the course of its eastern enlargement round. Eight central and eastern European countries¹ plus Cyprus and Malta were admitted on 1 May 2004, while Bulgaria and Romania acceded on 1 January 2007. A number of agreements before accession facilitated the removal of trade barriers and restrictions on capital mobility between the EU and the new member states already before their accession. Today, trade links with the 2004 and 2007 accession countries and the EU-15 countries are particular strong. The share of the incumbent member states of the EU (EU-15) among the trading partners of the eight central and eastern European countries which joined the EU in 2004 (EU-8) is between 35 percent (Lithuania) and 64 percent (Czech Republic) for exports and between 39 percent (Slovakia) and 60 percent (Poland) for imports. As is the case for trade, the rules of the Common Market for free capital mobility have also applied since the accession of the new member states.

In contrast, the free movement of workers was subject to transitional agreements which enabled the EU-15 member states to restrict labour mobility from the central and eastern European countries for

a maximum of up to seven years.² Moreover, the accession treaties granted Austria and Germany the right to suspend the free trade of services also for a transitional period up to seven years. These transitional arrangements were utilised to protect certain “sensitive” branches like construction and cleaning. According to the so-called “2+3+2” formula, restrictions on labour mobility and the service trade could be prolonged after an initial two-year period for another three years. A further prolongation for the last two year period requires that the respective EU member state sees serious imbalances in its labour markets or that introducing the free movement would involve the threat of such imbalances.

However, not all member states applied transitional periods for the free movement of workers. When the eight new member states joined the EU, Sweden and Ireland had already opened their labour markets in 2004, while the UK kept only minor restrictions regarding access to the welfare system. The other countries maintained their restrictions on labour migration in the initial phase after accession, although some bilateral agreements for seasonal workers as well as quotas for a small number of migrants eased labour market access slightly. Step by step most EU member states opened their labour markets during the first five years after accession with the notable exception of Austria and Germany. Both of these countries, which attracted the majority of migrants from the new member states before the EU’s Eastern enlargement, applied the restrictions on the free movement of workers and the service trade until the end of the seven-year period. These restrictions fathered out in May 2011. As for Bulgaria and Romania, which joined in 2007, most EU member states maintained the restrictions on labour migration after their accession. Notable exceptions are Spain and most of the new member states which joined the EU in 2004. Whether the old EU member states will maintain their restrictions on labour migration from Bulgaria and Romania in the final phase of the transitional period starting in 2012 had not yet been decided when this article was written.

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¹ The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic and Slovenia.

² Cyprus and Malta were not affected by the transitional arrangements for the free movement of workers.

The different application of transitional periods resulted in a shift of migration flows from the main recipient countries before the EU's eastern enlargements which kept their migration restrictions in place, i.e., Austria and Germany, towards those which opened their labour markets immediately after accession of the new member states in 2004 like the UK and Ireland. For the whole European Union, eastern enlargement increased labour mobility substantially. Today it is still an open question whether and to which extent the opening of the Austrian and German labour markets will result in a further redistribution of migration flows within the EU. Currently, labour market conditions in Germany are much more favourable than seven years ago, and labour markets in the UK and Ireland have not yet recovered from the economic and financial market crisis. Moreover, Spain, which, together with Italy, is the main recipient of migrants from Bulgaria and Romania, is heavily affected by the consequences of the financial and economic crisis and the emerging euro crisis. This may encourage migrants particularly from the EU-8 countries to move to Germany or Austria rather than to UK or Ireland. Migrant networks, the high share of English language proficiency among the young cohorts in the EU-8 countries and the higher net earnings in the UK and Ireland might otherwise still be strong pull factors and work against a redistribution of migration flows.

This paper analyses the effects of integrating the new member states from Central and Eastern Europe in the goods and factor markets of the EU during the first seven years of the EU's eastern enlargement. We address the effects of trade and migration in a joint framework, since we believe that a separate analysis does not make sense due to the many interactions between goods and labour markets.

Trade after the EU's eastern enlargement

The EU already started to integrate the prospective member

states from Central and Eastern Europe in the early 1990s into its markets for goods and capital. Prior to the EU's eastern enlargement, the accession countries signed various agreements to ensure free trade between the EU and the accession countries and among accession countries themselves. As a first step, two free trade areas were founded, the Central European Free Trade Area (CEFTA) consisting of the (former) Czechoslovakia, Hungary and Poland, and the Baltic Free Trade Agreement consisting of Estonia, Latvia and Lithuania. The EU signed trade agreements with these free trade areas which resulted in a substantial removal of tariffs and other trade barriers. In the next step, the European Agreements (EA), which created a free trade area between the EU member countries and the accession countries, were signed in 1997. The trade provisions agreed within these contracts included the removal of tariffs and quantitative restrictions for almost all kinds of traded goods. For agricultural goods, however, numerous restrictions were maintained. Moreover, the new member states did not apply the external

Table 1

Exports to the new EU member states (EU-10) in percent of total exports, 2000–10

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Austria	8	8	8	8	9	9	9	10	11	11	11
Belgium ^{a)}	1	1	2	2	2	2	2	2	3	2	3
Bulgaria	3	3	3	3	3	4	5	6	6	5	6
Cyprus	2	2	3	3	2	1	1	2	2	2	2
Czech Republic ^{b)}	10	10	10	10	10	11	11	11	12	11	11
Denmark	2	3	3	3	3	3	4	4	4	4	4
Estonia	7	7	8	9	11	11	13	14	13	12	12
Finland	6	6	6	6	6	7	7	7	8	7	6
France	2	2	3	3	3	3	3	3	3	3	3
Germany ^{c)}	6	6	7	7	7	7	8	8	9	8	9
Greece	7	8	8	7	7	7	9	10	11	10	11
Hungary	4	4	4	5	5	7	9	10	10	9	10
Ireland	1	1	1	1	1	1	1	1	1	1	1
Italy	4	4	5	5	5	5	6	6	7	6	6
Latvia	10	11	11	11	14	19	21	23	25	26	26
Lithuania	16	16	14	16	16	18	20	21	20	20	19
Luxembourg	1	1	1	1	2	2	3	3	3	2	2
Malta	1	1	1	2	2	2	2	3	2	2	1
Netherlands	1	2	2	2	2	3	3	3	3	3	3
Poland	0	0	0	0	7	8	9	9	9	9	9
Portugal	1	1	1	1	1	1	1	1	1	2	2
Romania	4	4	4	4	5	6	7	8	8	7	8
Slovakia	0	0	0	0	15	16	17	16	17	17	18
Slovenia	5	5	6	6	7	7	8	10	10	10	11
Spain	2	2	2	2	2	2	2	3	3	3	3
Sweden	3	3	4	4	4	4	5	5	5	4	5
United Kingdom	2	2	2	2	2	2	3	3	3	3	3

^{a)} Belgium and Luxembourg before 1998. – ^{b)} Czechoslovakia before 1992. – ^{c)} Before 1991: Without former GDR.

Source: Authors' calculations based on the Eurostat External Trade Database.

tariff vis-à-vis non-EU countries before their accession. The technical standards of the EU have been introduced in the accession countries gradually during the integration process.

The stepwise integration of the new member states into the Common Market of the EU is associated with the restructuring of trade and production patterns. Using a gravity-model framework Antimiani and Constantini (2010) found that economic integration induced by the enlargement process had positive effects on the exports of the EU as well as on its competitiveness. This result holds especially for those countries which joined the EU in 2004 and is more evident for high-tech sectors than for low-tech sectors. As the share of tradable goods produced by high-tech sectors is larger, the integration process resulted in higher international competitiveness of the new member states and therefore stronger exports.

A customs union affects not only the production sectors of the economy but also the direction of trade. According to economic theory, establishing a customs union may lead to three different kinds of effects. A reduction of tariffs and other transaction costs results in a reduction of foreign good prices and may therefore increase the demand for these goods. This effect increases trade and is recognised as mutually beneficial. A second effect, the trade diversion effect, is connected with differences in the reduction of trade costs among trading partners. The removal of tariffs and a reduction of transaction costs for a single group of trading partners only might result in a trade diversion from former trading partners that do not benefit from a cost and tariff reduction towards the customs union. This effect is not necessarily mutually beneficial and might harm some of the trading partners. The third effect, trade displacement, is related to a more efficient use of resources in shifting production and trade from one member state to another.

With exception of the year 2009, where trade declined sharply in the aftermath of the financial and economic crisis, we saw an increase in intra- and extra-EU trade of the EU member countries for the whole decade up to 2010. In this time the share of the countries that joined the EU in 2004 (EU-10) in the total trade of EU countries increased with respect to both imports and exports (Tables 1 and 2). Whether this fact indicates trade diversion from trading partners outside the EU to trading partners inside the enlarged Union is still an open question. In an early study on EU-enlargement Wilhelmsson (2006) found that the integration process has resulted in trade creation and, to a smaller extent, trade diversion but not in trade displacement. The trade creation effect can be observed between the group of EU member countries which joined in 2004 and 2007 and the incumbent EU member states as well as within the group of the new member states. However, most of the trade creation effect can be traced back to exports from the old to the new member states.

Table 2
Imports from the new EU member states (EU-10) in percent of total imports, 2000–10

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Austria	11	12	13	13	11	10	10	10	11	11	12
Belgium ^{a)}	2	2	2	2	2	2	2	2	2	3	3
Bulgaria	5	5	5	6	6	7	7	9	9	11	10
Cyprus	1	1	1	1	1	2	1	2	4	3	3
Czech Republic ^{b)}	12	12	12	12	13	15	16	16	17	17	16
Denmark	4	4	4	4	4	5	5	6	7	6	7
Estonia	8	10	11	11	15	17	18	21	25	29	27
Finland	5	6	5	5	6	7	5	6	7	7	7
France	2	2	2	2	2	3	3	4	4	5	5
Germany ^{c)}	8	9	10	11	10	9	10	11	11	11	12
Greece	2	2	2	2	2	2	3	3	3	4	3
Hungary	7	7	7	8	9	10	11	12	12	13	13
Ireland	1	1	1	1	1	1	2	2	2	2	2
Italy	3	3	3	4	4	4	5	5	5	6	6
Latvia	22	23	24	24	28	31	32	33	34	36	35
Lithuania	11	10	11	12	18	18	20	23	21	23	21
Luxembourg	1	2	2	1	1	1	1	1	2	1	2
Malta	1	1	1	1	1	1	1	1	1	2	1
Netherlands	2	2	2	2	2	2	2	3	3	4	4
Poland	-	-	-	-	9	9	9	9	9	10	10
Portugal	1	2	2	2	2	2	2	2	2	2	2
Romania	8	9	9	10	10	10	10	15	16	17	17
Slovakia	-	-	-	-	28	30	30	30	31	33	33
Slovenia	8	8	8	8	9	9	9	8	9	9	9
Spain	1	1	2	2	2	2	3	3	3	3	4
Sweden	4	4	5	6	6	6	7	7	7	8	8
United Kingdom	2	2	2	2	3	3	3	4	4	4	5

^{a)} Belgium and Luxembourg before 1998. – ^{b)} Czechoslovakia before 1992. – ^{c)} Before 1991: Without former GDR.

Source: Authors' calculations based on the Eurostat External Trade Database.

Migration after EU eastern enlargement

The scale and direction of migration from the new member states

The EU eastern enlargement is associated with a substantial increase in migration from the new member states. The number of nationals from EU-8 countries residing in EU-15 countries increased from 900,000 in 2004 to 2.4 million in 2010. The net inflow of migrants from the EU-8 amounted to 210,000 people p.a. on average since 2004, with most migrants heading to the UK and Ireland, which opened their labour markets immediately after EU enlargement (Table 3).

The propensity to migrate varies largely across the sending countries from the EU-8 and Bulgaria and Romania (EU-2). 5.4 percent of the population of Lithuania, 4.3 percent of the population of Poland and 4.0 percent of the population of Estonia resided in EU-15 countries, while only 1.1 percent of the population of the Czech Republic and 1.7 percent of the Hungarian population lived in the EU-15 in 2010. In sum, people from a country with a high GDP per capita are less willing to move to an EU-15 country than people from countries with a low GDP per capita. However, other factors like the similarity of the language, geographical distance, labour market conditions, networks of migrants and hospitality play also an important role for the migration pro-

pensity and the choice of destinations. In some EU-8 member countries' ethnic minorities, particularly ethnic Russians, are especially likely to move to EU-15 countries which results in a high share of people from those countries living in EU-15 countries.

The economic rationale behind the free movement of workers is a better allocation of human resources within the Common Market. Prior to the financial market crisis most migrants moved to Ireland and the UK, increasing production there and reducing unemployment in their home countries. Since the begin of the EU's eastern enlargement and the Great Recession the GDP of the UK grew by 2–3 percent on average, while the Polish unemployment rate declined from more than 19 percent to 7 percent. A similar decline was reported for Lithuania (7 percentage points) and Estonia (4 percentage points), but due to the economic and financial market crisis the unemployment rate went up again in both countries by 14 and 10 percentage points.

The financial market crisis affected the labour markets heavily in Ireland and the UK. As a consequence, we observe a decline in the number of residents from the EU-8 in Ireland and a drop in the net immigration rate in the United Kingdom from this country group. According to recent studies (e.g., Baas and Brücker 2010; 2011) differences in economic and labour market conditions may result in a further redistribution of migration from the UK and

Table 3

Nationals from the EU-8 in the EU-15, 2000 – 2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
AT	52,786	54,947	57,301	59,622	67,675	75,143	80,706	86,911	94,084	98,317	103,755
BE	9,667	12,102	14,106	16,151	19,524	25,638	32,199	42,918	40,400	40,200	52,900
DK	8,763	9,470	9,664	9,963	10,762	12,770	16,203	21,807	30,033	33,179	36,590
FIN	12,804	13,860	14,712	15,825	16,459	18,266	20,801	23,957	27,464	30,877	35,068
FRA	40,852	48,480	48,984	34,451	48,584	36,783	50,418	43,227	41,573	48,145	64,800
DE	434,593	453,100	466,382	480,690	438,828	481,672	525,078	554,372	567,466	576,432	612,310
GRE	13,832	13,042	14,887	16,413	15,194	19,513	18,357	20,257	35,100	31,100	24,300
IRL	1,182	4,775	15,036	27,229	42,988	93,243	135,800	194,400	215,700	191,800	184,100
ITA	40,433	40,108	41,431	55,593	67,755	79,819	94,215	117,042	128,813	137,306	132,200
LX	1,063	1,100	1,136	1,518	2,164	3,252	3,940	4,561	5,362	6,232	6,666
NL	10,063	11,152	12,147	13,048	17,814	23,155	28,344	36,317	48,131	58,201	65,276
PT	437	492	587	662	842	1,061	1,373	2,477	2,502	2,843	2,800
ESP	16,396	23,672	34,076	42,672	55,735	70,576	103,190	126,971	137,068	139,558	141,465
SWE	23,884	22,868	21,376	21,147	23,257	26,877	33,757	42,312	50,575	57,669	62,440
UK	59,153	67,174	71,035	100,958	161,693	290,730	488,895	656,594	747,100	752,100	864,600
EU-15	725,908	776,341	822,860	895,942	989,274	1,258,498	1,633,277	1,974,123	2,171,371	2,203,958	2,389,271

Notes: Labour Force Survey Data for France, UK and Ireland, Belgium and Luxembourg; national population statistics extrapolated with Labour Force Survey data. All other countries: national population statistics.-- In some countries the 2010 figures are based on extrapolations from previous years.

Source: Author's calculations based on the Eurostat Labour Force Survey, British Labour Force Survey and the national population statistics from Austria, Belgium, Denmark, Finland, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain and Sweden.

Ireland back to the former main receiving countries, i.e., Germany and Austria. However, the economic conditions remain unstable in the aftermath of the Great Recession and the emerging euro crisis. The scale and the direction of future migration flows from the EU-8 as well as from Bulgaria and Romania are therefore highly uncertain.

The skills composition of the labour force from the new member states

In recent years the EU-8 countries have been able to improve qualifications of their young population. The number of high school drop-outs decreased while the number of people with a university degree increased sharply. In 2010 the formal structure of qualifications of people within the age group of 25 to 35 years matched the formal qualification levels in the EU-15 countries. More than 30 percent of people in this age group hold a university degree, while 33.5 percent of people in the EU-15 countries hold similar qualifications. With higher secondary education EU-8 countries outpace EU-15 countries. More than 61 percent of the people between 25 and 35 years of age hold an upper secondary education degree; in EU-15 countries only slightly more than 44 percent hold a similar degree. As a consequence, the share of individuals with less than upper secondary education in the EU-8 is well below that of the EU-15.

However, there seem to be substantial problems in the approval and acknowledgement of occupational qualifications. Nearly 54 percent of EU-8 migrants from Poland in the UK report that they hold an occupational qualification which is not recognised in the host country. Similar figures are reported for other EU countries like Germany (36 percent). A substantial number of migrants from the new member states are therefore occupied well below their educational levels.

The labour market performance of migrants from the new member states

Even after the economic and financial market crisis, the employment rate of EU-8 migrants is higher than that of natives. In 2010, the employment rate of the native labour force in the UK was about 49 percent and that of EU-8 labour force 70 percent. A similar figure is reported for Ireland, the employment rate of EU-8 labour force is 69 percent there, while that of the native labour force is 45 percent.

The high employment rate of migrants corresponds with their low age. Nearly 83 percent of migrants staying in the UK in 2009 are below the age of 35. The share of the population active in labour markets is especially high in this age group. However, during the years of crisis we saw a sharp decrease of the employment rate in Ireland, corresponding to a rise in the unemployment rate of EU-8 migrants up to 19.3 percent. In the UK, the unemployment rates of EU-8 migrants remained at 5.5 percent well below the unemployment rate of natives (7.8 percent) in the course of the crisis. One reason might be that migrants in the UK with a working duration of up to twelve months only have restricted access to the welfare system.

A macroeconomic analysis of EU enlargement and migration

The previous sections have described the structure of trade and employment during the period of the transitional arrangements. In this section, we extend the analysis by employing a multi-sectoral computable general equilibrium (CGE) model to quantify the effects of EU enlargement for the German economy. A multi-sectoral CGE framework not only has the advantage of enabling us to identify the impact of immigration on different sectors of the economy but also to consider the interaction between migration and trade. Note that the interaction between migration and trade may mitigate the potential labour market effects of immigration. Moreover, migration related factors such as remittances have a substantial impact on trade and other capital movements.

The model we employ here comprises 16 commodities, 16 domestic industries and reflects trade of intermediary and final goods as well as the movement of capital. It is assumed that labour markets are imperfect and that wages adjust to changes in the unemployment rate by a wage-setting curve. The same elasticities of the wage-setting curves as in Brücker and Jahn (2011) are used. We also assume that physical capital adjusts to changes in labour supply and trade. The speed of adjustment is based on empirical estimates. A more detailed description of the model is presented in Baas and Melzer (2011).

We restrict our analysis to Germany, which opened their labour markets in May 2011, utilising the whole time-span of the transitional periods. Please note that Germany was the main destination for migra-

tion from the EU-8 countries in absolute terms before 2004. Baas and Brücker (2011) expect that Germany will again receive a large share of future migration flows from the EU-8 considering its favourable labour market conditions in Germany and the ongoing crisis in Ireland and the UK.

The evolution of trade and migration in Germany since EU enlargement

In this simulation exercise we quantify the effects of trade and migration after the EU accession of the ten new member states in May 2004. Germany is one of the European countries which was most affected by the reduced transaction costs and, as a result, benefited substantially in terms of increasing trade with the new member states. The transaction costs for trade between the EU-15 and the EU-8 were already substantially reduced after the signature of the Europe Agreements. During the 2004–10 period considered here, Germany increased its exports to the new member states (EU-8) by 7 percent, while exports to non-EU member states increased only by 4 percent during the same period of time. Imports from EU-8 countries increased less dramatically – by 3.3 percent – leaving Germany with a considerable trade surplus.

During the first seven years since accession, Germany kept its labour markets closed for EU-8 migrants. The increase in migration was therefore moderate, the stock of people in Germany from EU-8 countries increased by 174,000 during the seven year period after the EU's eastern enlargement in 2004. Even considering the higher employment rate of EU-8 migrants compared to the native labour force, employment in Germany increased after EU enlargement by no more than the tiny amount of 0.25 percent. However, recent migration projections expect an increase in migration from the EU-8 countries during the next decade. For a simulation of these effects see Baas and Brücker (2010; 2011).

Simulation results

Our simulation results are largely driven by the increasing trade with

the new member states. In our model, intermediate goods are treated as inputs like capital and labour. Trade can affect wages and the rents for capital by different channels. In our case, German workers and capital owners benefit from both the higher export demand and decreasing prices for intermediate goods. The wages of German workers increased by 0.8 percent as a consequence of EU enlargement. As outlined above, we consider imperfect labour markets here. Thus, EU enlargement results not only in increasing wages, but also in decreasing unemployment. The social security system benefits from the decreasing unemployment rate as well. The expenses for transfers to unemployed households are reduced and national insurance contributions rise. In our model we don't distinguish between the social security system and the state sector. As a consequence, governmental expenses and tax revenues increase.

Secondary to the trade effects, the German economy experienced a slight increase in migration. Immigration from the EU-8 into Germany has increased by a mere 147,000 person through eastern enlargement compared to the pre-enlargement status. Hence, the effects of migration are tiny in Germany while trade effects are relatively strong. If the participation rates of recent arrivals resemble those of their counterparts with a longer immigration history, EU eastern enlargement has increased the labour force by 93,000 persons in Germany. This figure takes into account an employment rate of migrants

Table 4
Macroeconomic effects of EU enlargement and migration in Germany

	Base year (2004)	EU enlargement effects change in %
GDP (million €)	2,211,200	1.17
GDP per capita (€)	26,791	0.93
Private consumption (million €)	1,239,350	1.00
Investment (million €)	377,050	0.76
Government consumption (million €)	453,240	0.37
Taxes (million €)	231,490	0.88
Exports intra EU (million €)	514,790	4.54
Exports extra EU (million €)	311,461	2.61
Imports intra-EU (million €)	-405,720	4.17
Imports extra EU (million €)	-278,971	2.04
Wages (hourly, €)	32	0.68
Employed labour (1,000 persons)	39,361	0.25
		change in percentage points
Unemployment rate in percent	9.20	-0.48

Source: Authors' calculations.

Table 5
Sectoral effects of EU enlargement and migration in Germany

	Base year (2004)	EU enlarge- ment effects
	Value added in million €	Change in %
Agriculture, hunting and forestry	47,730	0.00
Fishing	420	0.20
Mining and quarrying	12,590	0.20
Manufacturing	1,357,440	1.30
Electricity, gas and water supply	91,220	0.10
Construction	189,440	0.50
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and house- hold goods	343,810	0.00
Hotels and restaurants	62,070	0.30
Transport, storage and communication	261,690	0.00
Financial intermediation	221,390	0.00
Real estate, renting and business activities	676,450	0.10
Public administration and defence; compulsory social security	175,940	0.40
Education	114,210	0.40
Health and social work	204,850	0.40
Other community, social and personal service activities	153,330	0.20
Activities of households	6,620	0.70
TOTAL	3,919,200	0.60

Source: Authors' calculations.

from the EU-8 in Germany of 63 percent, which is slightly higher than the employment rate of natives.

Overall, we see that the reduction of transaction costs in the course of EU enlargement and the modest immigration has increased the German GDP by 1.2 percent and the GDP per capita by 0.9 percent. Workers have benefited by higher wages (+0.7 percent) and reduced unemployment (-0.5 percentage points) (Table 4).

Trade and migration also have some impact on the sectoral structure of the economy. The manufacturing sector producing tradable goods is affected by the additional labour supply and a reduction in transaction costs. On average, sectors producing non-tradable goods, like hotels and restaurants, public services, education and administration gain from the enhanced labour force but less than proportionally from trade integration. However, the migration effects of EU enlargement are relatively small, even on a sectoral base, and outpaced by the effects of a reduction in transaction costs (Table 5).

Conclusions

Seven years after the EU's eastern enlargement, trade and migration between the old and the new

member states have increased substantially. Since the 1990s, the Europe Agreements and the forming of regional free trade areas resulted in a process of continuous integration of goods and service markets. This process has not yet come to a halt. In the last seven years nearly all EU-15 countries experienced an increased in trade shares with the EU-8 countries.

The formation of a customs union between EU-8 and EU-15 countries has fanned fears that this process could result in a trade diversion which would negatively affect the trade links of the new and the old member states of the EU with non-EU countries in Eastern Europe. The share of non-EU countries in the trade of the new member states has indeed declined considerably in the course of the eastern enlargement process, but we do not see a decline in absolute trade figures.

Germany, the main trading partner among the EU-15 countries of the new member states, has benefited substantially from the new trade links. As our simulation has demonstrated, both intra-EU and extra-EU trade has increased as a consequence of the EU enlargement, albeit the growth rate of intra-EU trade is about twice as high as that of extra-EU trade.

However, migration from the new member states was very moderate in Germany after the EU's eastern enlargement. The domestic workforce grew only by 0.25 percent through the influx of workers from the EU-8. Other countries which had already opened their labour markets in 2004 benefited from much higher shares of EU-8 migrants. In the UK, the labour force increased by 560,000 workers, while that of Ireland increased by 130,000 workers. This indicates that the transitional arrangements for the free movement of workers from the EU-8 resulted in a strong diversion of the pre-enlargement migration structure. Germany and Austria, which absorbed 60 percent of EU-8 migrants before enlargement, received only 17 percent of the net inflows thereafter, while the UK and Ireland attracted 70 percent of migrants.

As a consequence, the economic effects of the EU's eastern enlargement in Germany are largely driven by the increasing trade with the new member states. Labour migration has so far played only a secondary role, if at all. Our simulation results indicate that the seven years of EU enlargement resulted in a substantial gain in GDP (almost 1.2 percent), while the gain in GDP per capita is slightly less than one percent. The tradable sectors of the economy received the lion-share of the increases in production, while production in most non-tradable sectors increased less than proportionally, if at all. Workers benefited by a substantial increase in wages (almost 0.6 percent) and a reduced unemployment rate (minus 0.5 percentage points).

In May 2011, Germany and Austria finally opened their labour markets for migrants from the new member states. Given the favourable development of the German economy and the deteriorating situation in alternative destinations such as the Ireland and the United Kingdom, it is likely that Germany will receive a much larger share of the migrants from the new member states than in the past. Nevertheless, the number of EU-8 nationals who will migrate to Germany or Austria is hard to predict at present. If the net migration from the new member states once again achieves the scale it had before the financial and economic crisis, i.e., an annual figure of about 230,000 persons p.a., and if Germany attracts the same share as before EU enlargement (60 percent), then annual net migration will be about 140,000 persons. At a high share of 45 percent Germany would experience an annual net immigration from the EU-8 of about 100,000 persons p.a. As the simulations by Baas and Brücker (2011) show, the non-tradable sectors would benefit most from the opening of the labour markets, but the manufacturing sector would also see considerable growth in terms of employment and production. The GDP and the GDP per capita would grow even more than shown in the simulations presented here, while the wages would decline modestly and the unemployment rate increase slightly compared to a scenario without free labour mobility. Overall, the effects of trade and migration, the GDP per capita and wages will increase as a consequence of the EU's eastern enlargement, while the unemployment rate will tend to decline in a setting with imperfect labour markets.

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