# The multistage nature of labour migration from Eastern and Central Europe (experience of Ukraine, Poland, United Kingdom and Germany during the 2002-2011 period)

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#### Abstract

This article examines the consequences of the biggest round of EU Enlargement in 2004 on the labour migration flows from the new accession countries (A8) of the Eastern and Central Europe to Western Europe. The main focus of our research is the unique multistage nature of labour migration in the region. As a case study, we take labour migration from Poland to the United Kingdom and Germany and similar processes taking place in the labour migration from Ukraine to Poland. In particular, a new type of migration structure developed reflecting new features of integration stages of new EU Member States. This allows us to apprehend how this type of labour migration, within the multistage model, includes periods of time that take into account the inertia of labour movement. This article examines not only the character of A8 migration flows but also the potential drivers of this migration such as economic, institutional, etc. All processes are examined in the 2002 - 2011 time frame.

*Keywords*: migration, A-8 countries, multistage nature of migration, labour migration, EU enlargement

## 1. Introduction

Globalisation is currently a dominant trend in international relations and international labour migration is one of its most important aspects. Hence, the movement of human resources caused by socio-economic, military, ethnic and religious factors, becomes increasingly important. Given the fact that it involves a vast amount of labour resources, the significant increase in international migration has required a deeper understanding of international labour migration

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as a form of international political relations as well as of its impact on the world politics. Currently, the European Union is one of the main recipients of labour force migrants, where the total number of foreign workers varies between 4 and 7.5 million every year.

In 2004, the fear of massive flows of immigrants from eight new eastern European countries (with lower wages and higher unemployment than in the EU) was prevalent. This feeling played a crucial role in debates that led to four-fifths of EU-15 restricting access to A-8 workers (the A8 countries were eight of ten countries that joined the European Union in 2004, namely Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia).

Experience since the 2004 enlargement shows that there was no significant increase in the movement of human resources across the continent. However, the volume and impact of migration flows varies from new Member States (NMS) to old Member States and it is not necessarily determined by the degree of imposed restrictions. This paper aims to analyse the character and drivers of labour migration from Poland and Ukraine prior to and after the enlargement period. More specifically, the research questions are the following: What were the main drivers of migration after 2004 in Eastern and Central Europe?, What was the nature of migration flows after the 2004 EU enlargement?, Did the enlargement have an impact only on NMS or also on neighbouring countries?.

The main focus of research is the investigation of the multistage nature of labour migration flows from Poland to the UK and Germany, and of the consequential causation of similar migration processes from Ukraine to Poland. We think that both these migration ways have a similar nature and were caused by the similar internal political and economic situation in Poland and Ukraine. We would like to investigate the nature and reasons for labour migration and to confirm our hypothesis. Thus, the main hypothesis is that the post-enlargement labour migration is of an unprecedented nature, which arises from the interdependence of migration flows from A-8 to EU-15, as well as the migration from the third countries to the new EU member states. The research is mainly based on the institutional, social and economic factors.

Up to now, a large amount of research was conducted on the migration processes from A-8, as well as other countries, to the EU-15 after the EU enlargements of 2004 and 2007. Some of these studies have dealt with area specific, irregular migration to various locations, for example: Poland (Okólski, 2000), Hungary, Poland and Ukraine (Laczko and Thompson, 2000), former Yugoslavia (Mavris, 2002), Turkey (Içduygu and Toktas, 2002) and Ukraine (Uehling, 2004). Another group of scholars have devoted their attention to the ways and means of migration and have focused on the dynamics and organisational structures of migration in Europe generally (Müller-Schneider, 2000; Alt, 2001; Finkenauer, 2001). Others have examined the rude causes for

migration (Boswell, 2002), the role of migrant networks (Crisp, 1999) and the role of irregular labour forces (Lederer and Nickel, 1997). There are also several authors who have provided a more complex study of Eastern Europe labour migration after 2004 (Fihel et al., 2007) and also examined the impact of transitional free movement of workers arrangements on the sending and receiving countries, or have made a assumptions of potential NMS – EU-15 migration (Brücker et al., 2007). And finally, some scholars have paid particular attention to the impact of EU enlargement on the economic sphere of the countries in the region (Dustmann et al., 2003). Despite all of the above, there is a large gap in the academic literature on the interdependence of post-enlargement labour migration in NMS, especially on the movements from neighbouring countries. Our research is based on empirical and theoretical evidence. Hence, in the empirical part of the paper, we use quantitative methods. The statistical analysis provided in the article is based on the annual survey of statistics and other data related to labour migration in Eastern and Western Europe. Specifically, we used data from Germany, UK, Poland and Ukraine. Our data set covers the 2002 -2011 period, which corresponds to 8 time equivalents observation. Our case study includes 4 sample countries, each of them analysed according to the applied time framework. It is important to understand that here we make a clear distinction between EU and non-EU states. The data on migration flows was derived from statistical data of the examined countries. When applicable, we have used the national population statistics, though the national data sources and national concepts of the EU differs significantly from the neighbouring countries; therefore, some measurement errors become unavoidable. Employment indicators and unemployment rates, total labour force and other parameters, which characterise labour force, were taken from the Eurostat Labour Force Survey (LFS) and the statistics taken from the annual reports of Organisation for Economic Co-operation and Development (OECD). However, in order to avoid structural offsets, we rely only on a single data source when analysing our case study countries. Consequently, the above-mentioned data has been applied to calculate the number of migrants to the EU-15.

For the econometric estimations of the dependence of labour migration on the economic indicators we used the GDP per capita at current exchange rates, the purchasing power parities, as well as the GDP per person employed and average annual wages which have been taken from the World Bank's World Development Indicators (2013).

The migration from these countries has a specific structure which reflects the particular features of the new EU Member States' integration stages. This allows us to conclude that this type of labour migration, within the multistage model, includes periods of time that take into account the labour movement inertia. The statistical data on migration flows between Ukraine and Poland during the 2002-2011 period provided in the article are systematised. There is a potential possibility to predict such processes in future. In particular, such models can be applied to predict the outcome of similar processes in the migration route 'Romania-Italy-France', where especially Romanian and Bulgarian citizen were given a permit to work according to their skills and abilities. This article examines the structure and motivation of labour migration from Central and Eastern Europe after the 2004 EU enlargement. Moreover, the nature and consequences of the labour resources movement of the new EU Member States are analysed.

In the first part of the paper, we present and shortly characterise the new realities of migration of the CEE. The main emphasis is put on the observation of the migratory behaviour before and after EU-enlargement. Special attention is paid to the transitional agreements on the free movement of NMS workers.

In the second part, we analyse the interdependence of migration flows from the countries that became immediate neighbours to the EU after its biggest enlargement. The unique multistage nature of labour migration in the region will be expanded. In our case study, we investigate the process of labour migration from Poland to the United Kingdom and Germany, and the similar process of labour migration from Ukraine to Poland.

In the third and final part of the article, we examine the economic drivers of international mobility. Migration in the region is analysed as a consequence of the interplay of economic imbalances in and between the specific countries. By using the statistical regression analysis, in particular the linear least squares, we determine the dependence of migration on economic indicators.

# 2. New geopolitical realities and the new migration policy

Political transformations in the former socialist countries after 1989 led to unprecedented movement of labour force in the region, which was primarily caused by the social and economic conditions, by the rapid industrial restructuring of the formerly centrally-planned economies, coupled with low incomes and high unemployment as well as the escalation of political and armed conflicts. After the USSR collapse, CEE countries began their way towards market economy and democracy. The majority of these changes had a drastic influence on the migration attitude. Prior to 1990, the international labour migration was principally contained within the CEE states, and thus tightly controlled by governments. Moreover, the limited-scale settlement migration, mainly connected with family reunion or "repatriation" of ethnic minorities and movement of workers (which were strictly controlled), were allowed.

Since the early 1990s, the situation has changed dramatically. The volume of migration increased significantly, especially from Eastern to Western Europe. The region witnessed a huge increase in migration forms – from labour migration through transit migration to forced migration of asylum seekers and refugees. In many countries of the region, immigrants became an unprecedented

phenomenon witnessed for the first time in the post-war history of Europe. Poland and Ukraine were the two source countries of the largest number of migrant workers, Indeed, in the late 1990s around 300,000 Polish people were employed abroad annually, of whom 230,000 as seasonal workers in Germany. The second important labour migrant donor was Ukraine (around 150,000 Ukrainians employed abroad in 2000). Ukraine is also a major foreign labour supplier for most highly developed countries in the region: the Czech Republic (37,200 workers), Hungary (3,700) and Poland (3,200) (Okólski, 2004). It is also worth mentioning that the numbers given in parentheses only reflect regular migration flows. According to different estimates, the overall number of workers from Ukraine employed in the above mentioned countries was much higher.

The second phenomenon in the modern history of European migration flows became the fifth round of EU-Enlargement in 2004. It was the largest accession of ten new Member States, eight of which were Central and Eastern Europe countries. These eight countries were involved in a stabilisation process of their cooperation with the EU through special partnership programmes, such as the EU Stabilisation and Association Agreements with states in South-Eastern Europe, or the new European Neighbourhood Policy.

Expectedly, due to the uncertainties as to the volume and the effects of labour migration, there have been increasing doubts regarding EU's Eastern enlargement, as free movement of workers may produce several unacceptable effects on labour markets. Some of the governments of the EU-15 countries have been deeply concerned with a possible increase in the unemployment rate provoked by the large amount of new labour migrants from NMS which, in fact, differ largely in their incomes and factor endowments. Moreover, the benefits and costs of migration are not evenly distributed among sending and receiving countries, especially in terms of production factors (Fihel et al., 2007).

Many of A-8 migrants to the UK and Germany have arrived on temporary or permanent work permits (nearly 900,000 during the first year in Germany), but proofs of migration through less formal routes appear in the recent analyses and some of the transitional arrangements, including a 2006 report of the European Commission. One of the notable observations of the 2004 enlargement is related to the effect that restrictive policies have had on diverting the largerthan-predicted A-8 migrant flows to the unrestricted labour markets of the UK and Ireland. For example, between May 2004 and September 2006, around 487,000 A-8 nationals registered to work in the UK; some of those who registered had been there illegally and thus, were able to receive a legal status in acceding to new EU countries. In total, the European population increased by almost 26% due to this new accession (Boeri and Brücker, 2001; Desiderio, 2012, p. 46).

The long-run migration stock from A-8 to EU-15 has been estimated by most econometric studies at about three to five per cent of the population of the new member states, while the net volume has been set at about 200-300 thousand people per annum (Alvarez-Plata et al., 2003; Bauer and Zimmermann, 1999; Boeri and Brücker, 2001; Bruder, 2004). These estimates have been confirmed by some recent studies carried out after the enlargement and were based on current data (European Integration Consortium, 2009; Pytlikova, 2007; Zaiceva, 2006). Nevertheless, some studies showed significantly lower (Fertig, 2001; Fertig and Schmidt, 2001; Dushmann et al., 2003) or higher estimates of the long- and short-run migration potential (Sinn et al., 2001).

All these forecasts rely on the counterfactual assumption that all EU member states simultaneously open their labour market. Under this assumption, most studies forecast a higher migration potential for Poland and Ukraine and a substantially lower one for Germany and the UK compared to the actual development after EU enlargement (Dustmann et. al., 2003). However, since the rules of free movement of workers have not been simultaneously applied in the whole of the EU, we cannot falsify the existing studies. It should be noted that it was not possible to forecast the migration potential from NMS under transitional arrangement before EU enlargement since the selective application of transitional arrangements for the free movement of labour has no historical precedent.

Because of fear of uncontrolled migration flows from CEE, border control standards have been improved throughout the region over the last years. Border management agencies have gone through complex processes to improve their efficiency.

In addition, there are some statistical factors that influence the recorded number of border worries. For example, since 2002, nationals from Romania and Bulgaria have been visa-exempt in the Schengen area countries as well as in many countries of the region under survey, removing the need for most nationals of these states to cross borders illegally. On the other hand, in order to submit to EU and Schengen Standards, several countries of the region have introduced new visa requirements. In 2003, for example, Poland introduced visa obligations for citizens of Belarus, Russia, and Ukraine; and Hungary has introduced visa requirements for citizens of Serbia, Montenegro and Ukraine (Jandl, 2007).

## 2.1. Institutional background

The increase in migration from the NMS towards EU-15 is related to the changes in migration flows to Austria and Germany - the most appealing countries for migrants received about 60 per cent of immigration inflows before EU enlargement; they were replaced by Ireland and the UK (in case of immigration from A-8) and by Spain and Italy (in case of immigration from Bulgaria and Romania) as the main immigration destinations for the citizens of NMS. This can be explained by different socio-political preconditions: firstly, the selective implementation of transitional arrangements for the free movement of labour by the EU member states, secondly, attractive labour market conditions

and flexible labour market institutions in the new destination countries, as well as other causes such as language, culture and climate. Altogether, this has affected the regional distribution of migrants across the destinations in EU-15.

Table 1. Inflows of permanent immigrants into EU15 countries, 2003-2009

	2003	2004	2005	2006	2007	2008	2009
Ireland	43 200	24 700	66 000	88 900	89 600	67 600	38 900
Italy	120 100	153 100	193 500	171 300	537 200	489 100	369 000
Spain		:	:		691 900	409 600	334 000
Denmark		21 000	21 600	23 900	30 300	45 600	38 400
Belgium		:	35 000	35 600	40 300	43 900	37 700
Germany	231 300	230 500	196 600	165 200	232 800	228 300	197 500
Norway	22 500	24 900	25 800	28 300	43 700	48 900	43 100
Finland	9 400	11 500	12 700	13 900	17 500	19 900	18 100
Portugal	11 000	13 100	11 500	25 100	42 900	65 900	59 900
Austria	51 900	57 100	56 800	30 800	47 100	49 500	45 700
France	170 200	198 600	190 000	195 300	184 500	192 200	178 700
Sweden	47 900	49 300	53 800	78 500	74 400	71 000	71 300
Netherlands	65 200	64 800	69 400	73 000	80 600	89 600	90 500
United							
Kingdom	260 200	322 900	369 400	354 200	364 400	347 600	397 900

Source: CSO, 2012

The opening of the labour market for NMS is broadly discussed by EU-15 governments, the media and the population of the EU member states. Their ultimate outcome was a compromise reached to appease the public opinion on both sides of the fence. Otherwise, the support for enlargement was in danger (Duszczyk, 2002, p. 95). Hence, it is useful to take a closer look at the main arguments for and against the opening of labour markets of the old EU members. The most common arguments for the establishment of restrictions on access to the labour market were associated with the popular fear of inflows of cheap labour force from the poorer countries. Yet, the experience of Southern European countries' accession (Greece, Spain and Portugal) showed that similar fears have not been confirmed. Despite this, the predictions on migration growth after the Eastern Enlargement highlighted that the big gap in terms of economic development between member states would grow even bigger after this enlargement, and thus, it would become a motivation to look for work abroad.

Due to this, during the Goteborg European Council summit, EU-15 countries decided to determine transitional periods for the free movement of workers from the NMS. The so-called "2+3+2" formula allows member states to suspend the free movement of labour for a period of up to seven years (Table 2). Moreover, it requires Member States to indicate their intentions regarding labour mobility in 2006 and 2009, and then, by 2011, to lift all restrictions. However, with the accession of Bulgaria and Romania in 2007, the two countries were also to be covered by the "2+3+2"rule.

Table 2. Transitional Arrangements for the free movement of workers from the NMS-8 to the EU-15 and other EEA member states

	1st phase (May 1, 2004 – April 30,	2 <sup>nd</sup> phase (May 1, 2006 – April			
	2006)	30, 2009)			
	EU-15 countries				
Austria	labour market access restricted;	labour market access restricted; skilled			
	immigration contingents;	workers admitted in case of favourable			
	provision of services restricted	labour market conditions since January 1,			
		2008; provision of services in certain			
		sectors restricted			
Germany	labour market access restricted;	as in the first phase, although there is no			
	limited number of work permits for	labour market test for certain engineers			
	seasonal workers and project-tied	from 15 October 2007			
	workers granted; provision of				
	services restricted in specific sectors				
	(construction, cleaning, etc.,)				
the United	access to labour market granted, but	as in the first phase			
Kingdom	obligation to register for work and				
	residence permits; work permits				
	issued for limited time; safeguard				
	clause applies				

Source: Fihel et al. 2007

Only few EU-15 countries, including Ireland and Great Britain, did not take the advantage of the possibility to limit EU-8 citizens' access to their national labour markets. Other countries, at the time of accession, kept their restrictions. In response, Poland introduced limitations on the citizens of those countries (they were abolished in January 2007).

Over time, the positive impact of migration on the economy and labour market in countries such as Great Britain, or Ireland convinced other states to open their labour markets as well. Gradually, the three countries mentioned above were joined by others: Finland, Spain, Portugal and Greece abolished restrictions after two years in May 2006, Italy in June 2006, and the Netherlands in May 2007. Luxembourg is also opening up its labour market to Poles and citizens of other states which joined the EU on May 1, 2004 (Rzeczpospolita, October 6, 2007).

The above-mentioned countries repeatedly stressed the advantages arising from the opening of labour markets, filling its gaps, particularly. However, for such countries as Austria, Belgium, Denmark, France and Germany, there were not sufficient arguments to cancel their limitations on the A-8 labour force, mainly because of their geographical proximity to poorer countries in which emigration was cheaper and therefore, simplified the decision to emigrate.

Evidence in support of this thesis was provided in statistics, showing that 80% of Central and East European migrants would specifically come, after the fall of the Iron Curtain, to Austria and Germany, According to some German observers, the opening of the local labour market would cause a flood of unskilled Eastern Europeans as those who were better-skilled had already gone to countries such as Great Britain or Ireland (Gazeta Wyborcza, August 6, 2007). An important role in the debate was also played by the trade unions which opposed the liberalisation of immigration regulations.

In September 2007, the German government decided to loosen access restrictions for highly skilled immigrants, as well as for the foreign graduates from German universities (Gazeta Wyborcza, September 19, 2007). At the same time, national politics (or in other words the wish to please the voters) caused politicians in some countries (particularly Austria and Germany) to extend the transitional period as long as possible under the Accession Treaty, i.e. to 2011 (Niklewicz, 2006).

However, Great Britain and Ireland decided to introduce a registration requirement for EU-8 workers. In Great Britain, the system was called the Workers' Registration Scheme (WRS) and was established shortly after the government was criticised for not having effective instruments to monitor and control migration (Home Office, 2004).

Moreover, as a result of public pressure, and in view of Germany's decision to impose temporary labour market protection measures, Great Britain introduced restrictions on immigrants' access to the national social security system. Immigrants were able to apply for the selected social security benefits (such as unemployment benefits) only after having worked for at least 12 months and provided that they could confirm their resident status) (Institute for Public Policy Research IPPR, 2006, p. 6).

It was also one of the central priorities of the 2007-2010 Action Plan and the new phase of the Lisbon Strategy (2008-2010) which aimed to make the European Union the most competitive economy in the world and to achieve full employment by 2010. These include numerous provisions aimed at facilitating and structuring worker mobility by providing more guarantees for both employers and employees.

The selective enforcement of limitations on migration during the transitional periods had two effects. Firstly, the existing limits have hindered migration in such a way that the total migration into the EU was much lower than in the case of a EU-wide enforcement of the Community Law for the free movement of labour. Secondly, migration flows have been distracted from the preferred destinations towards countries which opened their labour markets immediately after the EU Eastern enlargement.

Other reasons which might have influenced the regional allocation of migration flows from A-8 after the EU enlargement are socially-related. Those are, for instance, the English language, geographical proximity, historical, cultural and ethical similarities etc. The social and psychological costs of moving to an unfamiliar environment play an important role. Moreover, they affect the structure of migration. In the past, geography played an important role in explaining the dimensional distribution of migrants across the EU member states (Hille and Straubhaar, 2002). However, the role of geographical distance in migration costs tends to decline with the appearance of low-cost flights. Low-budget air transport has two important effects on migration especially in the European context; firstly, the role of fixed costs in transport increases while the role of variable costs declines. As a result, the impact of geographical distance decreases. Secondly, due to high fixed costs, transport costs tend to decline with an increasing migrant community. Consequently, transport costs become dependent: the more migrants settle in a certain location, the lower the migration costs.

# 2.2. Multistage migration model

In this chapter, we would like to investigate the interdependence of migration flows from the countries that have become the immediate neighbours of the EU after the enlargement as well as to highlight the character of migration from those countries.

Estimates from simulations (Boeri and Brücker, 2001) prior to the EU enlargement in 2004 suggested that the foreign population originating in Eastern Europe countries, particularly in Ukraine, residing in the NMS rose by 18% after the enlargement. The net migration inflows in the EU would start to increase immediately and reach their highest levels in 30 years after the opening of the market. The scale of the outflow from this simulation turned out to be rather unrealistic, given that about 2 million Poles alone had migrated by 2007 (shortterm movement) calculated per year. Transitional limitations on free mobility were imposed, as a result, in a leading role in the reception of NMS migrants which was taken up by the countries opening their labour markets immediately. As to the share of labour migrants, the simulations were too pessimistic, as more than 80% of Polish migrants turned out to be labour migrants. Although concerns about a burden that will fall on the state welfare of receiving countries dominated the public debate, a strong demand for labour during prosperous years created a very important arrowing factor for NMS workers. Gradually, all EU members lifted their restrictive measures. The greater dispersion of NMS across EU15 countries was to become an unexpected outcome; however, this 'natural experiment' was interrupted by the 2008 economic crisis.

The migration flows in Poland are still largely outward; moreover, they have increased steadily during the last decade, especially since the country's accession to the EU in May 2004. It is difficult to obtain precise figures on emigration as most people do not declare their emigration. The national Labour

Force Survey provides a lower-bound estimate of about 537000 Poles who had been abroad for more than two months in the second quarter of 2007, which demonstrates growth by 38% compared to the same quarter of 2006.

180.0 160.0 140.0 120.0 Poland 100.0 Romania 80.0 Bulgaria 60.0 Hungary 40.0 Slovak Republic 20.0 0.0 

Figure 1. Inflows of foreign population by nationality - Germany

Source: International Migration Outlook 2013 - OECD 2013

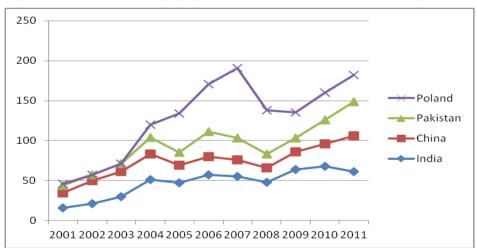


Figure 2. Inflows of foreign population by nationality - United Kingdom

Source: International Migration Outlook 2013 – OECD 2013

About half of these Poles were abroad for more than 12 months. Thus, the post-accession labour emigration has been disproportionately female, younger and better educated. The main destinations are the UK and Ireland, although migration to Germany, Norway and Sweden has also been high. With the ongoing growth of the Polish economy, together with the improving exchange rate and rising wages, there are some signs of a slowdown of emigration in the second half of 2007.

Compared to other OECD countries, migration movements are of a rather limited importance in Hungary. This appears to be the case for both in- and outflows, although the current registration system is not designed for monitoring long-term emigration. Immigrants account for less than 2% of the population, and the vast majority of these are Hungarian speaking. After the numbers reached their highest in 2005 with an inflow of almost 25 600 foreign nationals, immigration to Hungary decreased by 14% to about 19 400 in 2006. In spite of a strong decline in recent years, Romanians remain the main nationality concerned (about 6 800, compared to more than 12 100 in 2004), followed by the Ukrainians. The Chinese are now the third most important nationality among the inflows, following a strong increase (almost 1 500 in 2006, compared to about 550 in 2005). As we can see, the EU-enlargement in 2004 did not have any significant influence on the immigration flows from neighbouring countries. Consequently, in this case, there is no interdependence of migration after the EU enlargement, both from Hungary to Western Europe and to Hungary from the neighbouring countries, in particular Ukraine.

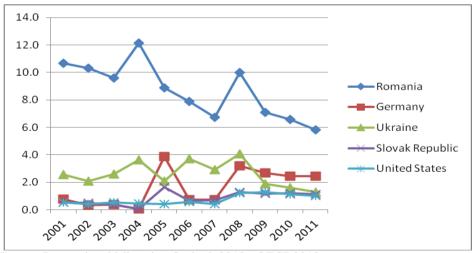


Figure 3. Inflows of foreign population by nationality - Hungary

Source: International Migration Outlook 2013 - OECD2013

As we can see from Figure 4, the biggest amount of international migrants in Poland is represented by Ukrainians. The time period from 2001 until 2004 marked the significant increase in the number of immigrants from Ukraine. After the 2004 Enlargement, we have witnessed migration from neighbouring

countries at its peak. However there are no noticeable changes in the number of immigrants from other neighbouring countries of Poland, for instance, from Belarus. The migration processes which took place in Germany at the beginning of 2005, as well as in 2007, should also be taken into account. The explanation for the first increase in migration can be found in the historical precedent of migration from Poland to Germany in the 90's as it has already been mentioned above, when more than 200 thousand workers from Poland were annually employed in Germany. Almost 20% of these workers remained in the country on a long-term basis and, eventually received German citizenship. After Poland ioined the EU, a number of them returned.

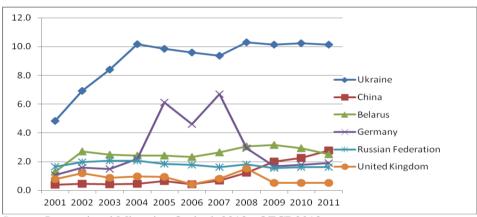


Figure 4. Inflows of foreign population by nationality - Poland

Source: International Migration Outlook 2013 - OECD2013

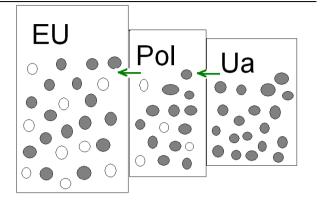
Consequently, we can conclude that the EU enlargement, together with the establishment of free movement of labour and the increased migration flows from Poland, provoked labour migration from Ukraine as a neighbouring country. This means that migration had a multistage character and that there is interdependence of labour force movement from Poland to the UK and Germany, and from Ukraine to Poland.

The multistage nature of migration flows can be divided into 3 stages. The first stage distinguishes among the migration flows before 2004. The main tendency of this stage is the latency of migration flows, i.e., invisibility, which means gradualism: there were no significant economic and institutional changes that could lead to mass migration from the case study countries.

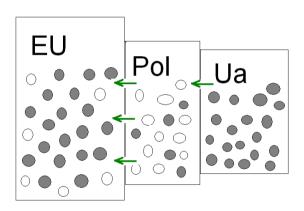
Figure 5 shows the filled and empty circles denoting occupied and vacant spaces which attract migrant workers from one country to another.

Figure 5. Multistage of labour migration after EU-enlargement

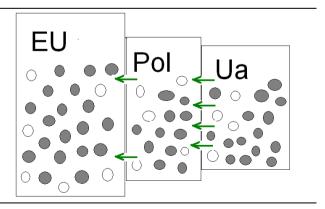
a) First stage (up to 2004): latent labour migration



b) Second stage (after 2004): sharp Polish and latent Ukrainian labour migration



c) Third stage (after 2006): permanent Polish and sharp Ukrainian labour migration



Source: own representation

The second stage covers the period after accession. It is characterised by a sharp increase in the migration of the nationals from the new EU member states

to the EU-15 and a continuing latency migration from third countries. Such conclusions can be drawn from our research, including regression estimations of economic factors which have been conducted by Least Squares Method (NLS and ARMA). As mentioned above, the driving force for migration flows lies in both economic and institutional factors. Considering regression estimates, we concluded that the migration from Poland to Germany mostly depended on such economic factors as GDP per capita in Germany, as well as unemployment rate in Poland, unlike the situation with the UK, where the economic performance had no direct significant impact on migration from Poland. In this case, the EU enlargement to the East, together with the adoption of relevant documents on the free movement of workers from new EU countries, has played a major role in the migration pattern even though this process was only completed in 2011.

LM 1 stage 2 stage 3 stage 2004 t 2007 Poland Ukraine LM - Labour market t-time

Figure 6. Multistage labour force migration

Source: own representation

Regarding the migration flows from Ukraine, Figure 2 shows that migration continued to be more latent. According to some data, we can observe a 30-40% increase in migration from Ukraine to Poland after EU enlargement. But as a result of regression estimation, we can conclude that the labour migration from Ukraine was only affected by economic performance both at home and in Poland. Migration growth can be clearly observed, but it is still questioned whether this migration began immediately after the enlargement or after a while, namely in the  $2^{nd}$  or  $3^{rd}$  stage. The problem with appreciating this issue is based on the lack and unreliability of data on Ukraine: there is a high probability of illegal migration which can distort the results of evaluation, as well as seasonal migration, due to the proximity of Polish borders.

In the third stage, we can see the gradual and permanent nature of migration from Poland and sharp labour migration from Ukraine which was caused by a drastic increase in job vacancies in Poland, formed as a result of mass emigration in previous years.

## 2.3. Estimation of economic migration drivers

The amount of literature which analyses the international labour migration (ILM) is rather sizable. It demonstrates that the theory of international migration flows has different definitions for the key factors which influence workers' decision to migrate. However, most of them focus on the difference in the expected income between the donor country and the recipient country, as well as on the labour market situation. However, these theories cannot fully describe the patterns of ILM. The comparative analysis of a number of theories and the results of empirical tests give us reasons to believe that the ILM is a complex phenomenon which has not only economic, but also political and social dimensions.

The income gap between EU-15 and the new member states from Central and Eastern Europe is significantly larger than in the past accession rounds. Applying the purchasing power parity standards (PPS), Eurostat (2008) estimates the GNI per capita in the ten new CEE member states (NMS-10) at 48 per cent of that in the EU-15 in 2007. The GNI per capita of the eight new member states (NMS-8) which joined the EU in 2004 amounted to 53 per cent at PPS in 2007, and that of Bulgaria and Romania to about 34 per cent of that in the EU-15 at the same time. The PPS estimate of the per capita GNI of candidate and potential candidate countries by Eurostat amounted to 38 per cent of the respective level in EU-15, so that the income gap between EU-15 and NMS-2 resembles roughly that between EU-15 and candidate countries.

These flows have boosted the UK and Ireland's economies. Studies from academia, government, and business have shown that employment is rising; skill shortages are being filled and inflation is kept low.

The experience of the first phase of the transitional arrangement which was provided for the liberalisation of the labour markets of the EU-15 countries has shown that the waves of fear of migration flows from A-8 were but an overstatement. Therefore, we can say that by 2011, (the end of the transitional period) all EU-15 countries have completely abolished all restrictions on the movement of workers from A-8 countries. This process has also finished for such new EU countries as Bulgaria and Romania at the beginning of 2014.

Before the EU enlargement, a series of assessments have determined the potential of migration between EU-15 and EU accession candidate countries. It was found that, in case of a complete removal of barriers of the international labour migration, about 1-2.5 million workers from the new EU member states could be employed in EU-15. However, the impact of the EU enlargement on the general dynamics of migration flows (including third countries) and on EU-25 has not yet been researched.

Table 3. Inflows of permanent immigrants into the A-8 countries, 2003-2009 (in thousands)

	2003	2004	2005	2006	2007	2008	2009
Czech Republic	57 100	49 700	55 900	63 000	98 800	71 800	39 000
Hungary	19 370	22 160	25 580	23 570	22 610	35 550	25 580
Slovak Republic	4 560	7 920	7 670	11 310	14 850	16 470	14 440
Slovenia	8 010	8 600	13 290	18 250	27 500	28 060	27 390
Poland	30 330	36 850	38 510	34 210	40 640	41 830	41 280
Estonia		760	980	1 490	1 950	1 930	2 230

Source: International Migration Outlook 2013 - OECD 2013

Currently, every country in the EU retains its own system of regulation of labour immigration from third countries. However, this could become a premise for EU countries to harmonise their immigration rules for third countries workers. Since measures are still used to develop common principles of migration policy, in the period of the EU enlargement certain formal and informal factors could contribute to the convergence of the EU migration policy.

The theory on how people make decisions whether to migrate or not often derives from a rational choice perspective, as for example, a cost-benefit calculation (Massey, 1999; Massey, 2012). Whereas the neoclassical models describe the migration decision on an individual level, the new economics of labour migration assigns it to the household strategy of risk diversification when by sending household members abroad one secures their household income (Stark and Bloom, 1985). An income equation based on expected earnings at home is compared to the expected earnings if a person moves abroad. In neoclassical economics, migration is seen as an investment in human capital, or 'investment in the productive use of human resources" (Brücker et al., 2007; Massey, 1999). According to this idea, a person will decide to migrate if the discounted return on investment (in human capital) is greater abroad than at home, in order to maximise the life-time utility function (Borjas, 2013). Income expectations, in turn, are based on wage levels and employment opportunities.

In order to study the impact of economic factors on the multistage nature of labour migration from the new EU member states, in particular, from Poland to Germany and the UK, the following equation was used:

 $ln(FLOWSplge,pluk) = c_1 + c_2 * ln(AVEWAGESge,uk) + c_3 * ln(EMPPOPULge,uk) + c_4 * ln(GDPPCge,uk) + c_5 * ln(GDPPEPge,uk) + c_6 * ln(LFRATEge,uk) + c_7 * ln(UERATESge,uk) + c_8 * ln(AVEWAGESpl) + c_9 * ln(EMPPOPULpl) + c_{10} * ln(GDPPCpl) + c_{11} * ln(GDPPEPpl) + c_{12} * ln(LFRATEpl) + c_{13} * ln(UERATESpl)$ 

where *FLOWS* denotes the dependence of migration flows from economic indicators, namely: *AVEWAGES* - average annual wages, *EMPPOPUL* - employment to population ratio, *GDPPC* - GDP per capita, *GDPPEP* - GDP per person employed, *LFRATE* - labour force participation rate, *UERATES* - unemployment rate, of sample countries - Poland (*pl*), Germany (*ge*), United Kingdom (*uk*) in destination from Poland to Germany (*plge*) and from Poland to UK (*pluk*). The equation covers the period from 2002 to 2012. In the estimation logarithms of these indicators were used.

The estimation results have shown that some variables of equations are insignificant and do not affect the results, i.e. the dependence of migration flows. Consequently, here is the next calculation of the regression equation for migration flows from Poland to Germany:

ln(FLOWSplge) = 0.16675 + 0.601489\*ln(GDPPCge) - 0.156944\*ln(UERATESpl)

The results of the regression equation are displayed in Table 3. According to estimates, the labour migration from Poland to Germany depends on such economic factors as GDP per capita in Germany and the unemployment rate in Poland. One can assume that the main reason for migration is the difference of economic development of both countries. An additional factor of Polish labour migration is the attractiveness of Germany as the receiving country because of the relative proximity that confirms the constant migration flows from Poland since 1992. Poland was one of the main sending countries of migrants in Europe, in particular to Germany (around 250 000 workers per year). In time, a single market was created, composed of a free trade area (for goods) with some common policies on product regulation, and freedom of movement of the factors of production (capital and labour) and of enterprise and services.

**Table 4. Estimation results** 

	Coefficient	t-Statistic
C	0.166750	0.039243
ln(GDPPCge)	0.601489	1.596072
ln(UERATESpl)	-0.156944	-1.081463
_		
R-squared	0.751215	

*Source*: own representation (own calculations in the programme EViews 8.0., based on data from World Development Indicators of the World Bank)

Another element which explains the East-West migration from an economic point of view stems from the dual labour market theory by Michael Piore (1986). The latter explains how the countries with developed economies have an inherent demand for both low-end and specifically skilled labour, which cannot be met by the internal workforce. Therefore, foreign labour is 'demanded' or 'attracted' to work in highly developed economies, like those in Western Europe. As a consequence, migrants often end up in jobs below their skill level, resulting in a brain waste. To conclude this model, a simple demand and supply framework for labour shows that demand for labour in destination countries, on the one hand, and the oversupply of labour in source countries on the other, provide a likely explanation for migration incentives (Massey, 1999; Massey, 2012; Piore, 1986).

One of the components of migration costs which generally increases costs for most people is the risk of aversion and uncertainty. Assuming that, in general, people are risk averse – the uncertainty and risk of migration increase its cost. Risk is often focused on the employment opportunities in the expected earnings equation. Again, this cost of risk is substantially lowered by the EU market opening to the CEE countries (Brücker et al., 2007).

According to the results of the regression equation on the labour migration flows from Poland to the UK, these do not depend on the economic factors. Unlike Germany, the flow of migrants from Poland to the UK depends on the institutional factor and thus, it is directly dependent on the availability of transitional arrangements for the new EU countries between 2004 and 2007, as well as on the free movement.

According to the literature on migration theory, institutional factors, allowing or hindering people to migrate, are of very high importance in actual migration flows (Brücker et al., 2007; Martin, 2009; Martin and Taylor, 1996; Massey, 1999). A partial explanation for the rapid rise in post-accession migration resides in the regularisation of mobility to the EU15, where it was previously illegal (Budnik, 2007; Kaczmarczyk, 2010).

The immediate opening of some labour markets is only partially reflected in the number of Polish migrants and does not simply explain the scale of postaccession migration (Kahanec, Zaiceva and Zimmerman, 2009). In fact, all European destinations received more Poles since the European enlargement.

The next stage of the study is the estimation of the nature of labour migration from Ukraine to the new EU countries, in particular to Poland. The key factors which have led Ukrainians to seek employment abroad since the early 90's were the sharp increases in unemployment, falling incomes, hyperinflation, liberalisation of entry, as well as the facilitation of access to information about employment opportunities abroad. The international labour migration significantly softened the shock on the labour market of Ukraine. In late 2004 - early 2005, out of ten most attractive countries for Ukrainian emigrants, seven were EU countries.

Cooperation between Ukraine and EU member states in labour migration is at its lowest stage of development compared to the relationship in the movement of goods, services and capital. The labour migration from Ukraine to the EU operates under the general rules established for the third countries.

As we can see from Figure 7, the inflows of Ukrainians to Poland in the last decades are more numerous than from the other CEE, non-EU countries. Also, it should be noted that as a result of the 2004 EU-enlargement, when Poland became a part of the EU, we observed an increase in the migration flows from Ukraine by 30-40%, compared to the years prior to the EU enlargement.

12.0

10.0

8.0

4.0

2.0

And Russian Federation

Turkey

Turkey

Figure 7. Inflows of foreign population by nationality. Poland 2002-2011 (in thousands)

Source: International Migration Outlook 2013 - OECD 2013

The impact of the 2004 EU enlargement on the intensity and structure of migration flows from Ukraine to the EU is estimated using econometric methods for the period 2002 - 2012.

 $ln(FLOWSuapl) = c_1 - c_2 * ln(EMPPOPULua) + c_3 * ln(GDPPCua) + c_4 * ln(GDPPEPua) + c_5 * ln(LFRATEua) + c_6 * ln(UERATESua) + c_7 * ln(EMPPOPULpl) + c_8 * ln(GDPPCpl) + c_9 * ln(GDPPEPpl) + c_{10} * ln(LFRATEpl) + c_{11} * ln(UERATESpl)$ 

where *FLOWS* denotes the dependence of migration flows from economic indicators, namely: *EMPPOPUL* – employment to population ratio, *GDPPC* – GDP per capita, *GDPPEP* – GDP per person employed, *LFRATE* – labour force participation rate, *UERATES* – unemployment rate, of sample countries – Poland (*pl*), Ukraine (*ua*), in destination from Ukraine to Poland (*uapl*). In the estimation, logarithms of these indicators were used.

As in the previous cases of study, the migration flows from Poland to Germany and to the UK, the estimation results have shown that some variables of equations are insignificant and therefore, do not affect the results, (i.e. the dependence of labour migration flows). Consequently, the next calculation of the regression equation for migration flows from Ukraine to Poland is as following:

ln(FLOWSuapl) = -0.096 - 0.25781 \* ln(EMPPOPULua) + 0.29679 \*ln(GDPPEPpl)

The results of the regression equation are displayed in Table 4. Consequently, we can draw the conclusion that labour migration from Ukraine to Poland depends on 2 economic factors: the employment to population ratio in Ukraine, and the GDP per person employed in Poland. This means that the growth of GDP per person employed in Poland encourages Ukrainians to migrate to neighbouring Poland whilst, at the same period of time, the indicators of employment are decreasing in Ukraine.

Table 5. Estimation results

	Coefficient	t-Statistic
C	-0.096002	-0.066140
ln(EMPPOPULua)	-0.257810	-1.181563
ln(GDPPEPpl)	0.296785	2.331323
R-squared	0.552924	

Source: own representation (own calculations in the programme EViews 8.0., based on data from World Development Indicators of the World Bank)

Several caveats are worth mentioning in these estimates: first, the estimates under current economic conditions are based only on few annual observations, which might be insufficient to identify the parameters of labour migration dependence on economic indicators; secondly, the migration data used for the estimates are subject to measurement error, which may bias the results in one way or another.

## 3. Conclusions

The EU enlargement that took place in May 2004 has been a major event in the European migration. Ten new countries, with a total population of 72 million and much lower income levels joined the European Union. The combination of these two factors has established a significant debate in the academic and policy-making communities about the size of migration potential and the appropriate measures to be taken in order to avoid the negative effects of uncontrolled migration.

Having examined the multistage nature of migration after the 2004 EU enlargement, from both theoretical and empirical perspectives, we noticed a difference between the corresponding measures which have been adopted to prevent uncontrolled migration from the theoretical level. Having analysed the historical preconditions of previous migration in incumbent members, we have found that the implementation of restrictions on access to the national labour market had two main reasons: first, negative migration experiences, what happened after the collapse of the Soviet Union, secondly, the increase in unemployment rates and the economic recession. Consequently, most of the EU-15 decided to impose transitional periods for the free movement of workers from the NMS. Only few EU-15 countries, including Ireland and Great Britain, did not take advantage of the possibility to limit EU-8 citizens' access to their national labour markets. Obviously, the liberal policies in some countries triggered changes of migration flows: Austria and Germany being the most attractive countries for migrants were replaced by Ireland and the UK (in case of immigration from A-8), as well as by Spain and Italy (in case of immigration from Bulgaria and Romania) as the main destinations of immigrants from the NMS. Thus, we can conclude that the institutional measure was one of the key impulses for migration after 2004 from Eastern and Central Europe.

In the empirical part of the article, the economic determinants of postenlargement migration have been analysed by using the statistical regression analysis, the linear least squares, in particular. Hence, our findings have some important policy consequences. The labour migration from Poland to Germany highly depends on economic factors, such as the GDP per capita in Germany and the unemployment rate in Poland, thus being less dependent on the sociopolitical factors. This assumes that the main reason for migration is the difference in terms of economic development in both countries. Unlike Germany, the flow of migrants from Poland to the UK depends on the institutional factor and, thus, is directly dependent on the availability of transitional arrangements for the new EU member states between 2004 and 2007, as well as the free movement. Labour migration from Ukraine to Poland depends on 2 economic factors: (1) the employment to population ratio in Ukraine, and (2) the GDP per person employed in Poland. This means that the growth of GDP per person employed in Poland encourages Ukrainians to migrate to neighbouring Poland, whilst at the same period of time, employment indicators are decreasing in Ukraine.

Based on the study carried out, we can assume that there is an interdependence of migration flows from new to old EU countries and the third countries, particularly those which are in the close EU neighbourhood. Consequently, we can conclude that the EU enlargement, the establishment of the free movement of labour and the increased migration flows from Poland provoked the labour migration from Ukraine as a neighbouring country. This

clearly shows that this migration had a multistage character and that there is an interdependency of labour force movement from Poland to the UK and Germany, and from Ukraine to Poland. According to our statement, the multistage nature of migration flows can be outlined in 3 stages: a) First stage (until 2004): latent labour migration, b) Second stage (after 2004): sharp Polish and latent Ukrainian labour migration, c) Third stage (after 2006): permanent Polish and sharp Ukrainian labour migration. However, any change of economic or social conditions in one of the destination countries may affect the scale of migration in others. The impact of third countries in the case of Ukraine is particularly relevant in the context of the EU Eastern enlargement, since the institutional conditions for immigration have changed dramatically in some destinations but not in others.

#### References

- Alt, J. (2001), Motive und Mechanismen illegaler Migration Gemeinsamkeit und Unterschiede in den Erkenntnissen empirischer Feldforschung bzw. der Polizei – und Sicherheitsdienste, Lecture given at the Expert Conference "Illegal in Germany", Erfurt, 16-17 May 2001.
- Alvarez-Plata, P., H. Brücker, and B. Siliverstovs (2003), Potential Migration from Central and Eastern Europe into the EU-15 - An Update, Report for the European Commission, DG Employment, Social Affairs and Equal Opportunities, Brussels.
- Arnhold, N., Kapil, N., Piatkowski, M. and Rutkowski, J. (2011), Europe 2020 Poland Fueling Growth and Competitiveness in Poland Through Employment, Skills, and Innovation, Working Paper, retrieved from http://www.webcitation.org/ 6e8L1Q86k.
- Bauer, T. and Zimmermann, K.F. (1999), Assessment of Possible Migration Pressure and ist Labour Market Impact Following EU Enlargement to Central and Eastern Europe, Research Report, No. 3, IZA, Bonn.
- Boeri, T., and Brücker, H. (2001), Eastern Enlargement and EU-Labour-Markets: Perceptions, Challenges and Opportunities, IZA Discussion Paper, No. 256.
- Borjas, G. J. (2013), Labor Economics, Sixth edition, McGraw-Hill.
- Boswell, Ch. (2002), Addressing the causes of migratory and refugee movements: the role of the European Union, Working Paper: New Issues in Refugee Research, No. 73, Office of the United Nations High Commissioner for Refugees.
- Brücker, H. and Damelang, A. (2007), Analysis of the scale, direction and structure of labour mobility, retrieved from http://doku.iab.de/grauepap/2009/lm deliverable\_2.pdf
- Brücker, H., Damelang, A. and Wolf, K. (2007), Forecasting potential migration from the New Member States into the EU-15: Review of Literature, Evaluation of

- Forecasting Methods and Forecast Results, retrieved from http://doku.iab.de/grauepap/2009/LM\_Deliverable\_3.pdf
- Bruder, J. (2004), Are Trade and Migration Substitutes or Complements? The Case of Germany 1970-1998, University of Rostock.
- Budnik, B. K. (2007), Migration Flows and labour market in Poland, *National Bank of Poland Working Paper*, No. 44, p. 28.
- Central Statistical Office (2011), *Demographic Yearbook of Poland*, Warsaw: Central Statistical Office.
- Crisp, J. (1999), Policy Challenges of the new Diasporas: Migrant Networks and their Impact on Asylum Flows and Regimes, *Working Paper*, No. 5, Transnational Communities Programme, retrieved from http://www.transcomm.ox.ac.uk/working%20papers/riia3.pdf.
- Desiderio, M.V. (2012), Free labour mobility areas across OECD countries: an overview, in: OECD, *Free Movement of Workers and Labour Market Adjustment*, OECD Publishing, pp. 35-70.
- Dustmann, C., Casanova, M., Fertig, M., Preston, I. and Schmidt, C.M. (2003), *The impact of EU enlargement on migration flows Home Office Online Report*, Vol. 25/3, London: Research Development and Statistics Directorate, Home Office.
- Duszczyk, M. (2002), Swobodny przepływ pracowników w negocjacjach o członkostwo Polski w Unii Europejskiej [Free flow of workers in the negotiations on the membership of Poland in the European Union], Instytut Polityki Społecznej, Warszawa.
- European Commission (2007), Regulation (EC) No 862/2007: on Community statistics on migration and international protection and repealing Council Regulation, (EEC) No 311/76 on the compilation of statistics on foreign workers, retrieved from http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\_.2007. 199.01.0023.01.ENG.
- European Commission (2013), *Enlargement transitional provisions*, retrieved from http://ec.europa.eu/social/main.jsp?catId=466&langId=en.
- European Commission (2013), *Europe 2020 targets: Poland*, retrieved from http://ec.europa.eu/europe2020/europe-2020-in-your-country/polska/progress-towards-2020-targets/index en.htm.
- European Integration Consortium (2009), *Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements* (Final Report), retrieved from http://doku.iab.de/grauepap/2009/LM\_finalreport.pdf.
- Eurostat (2008), Migration metadata and quality questionnaire: Data collection for the reference year 2008.
- Eurostat (2011), Migrants in Europe: A statistical portrait of the first and second generation.

- growth Eurostat (2013).Real GDPrate volume. retrieved from http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcod e=tec00115&plugin=1.
- Fassmann, H., Reeger, U. and Sievers, W. (eds.) (2009), Statistics and Reality: Concepts and Measurements of Migration in Europe, IMISCOE.
- Fertig, M. (2001), The economic impact of EU enlargement: assessing the migration potential, Empirical Economics, No.26, pp.707-720.
- Fertig, M. and Schmidt, C.M. (2001), Aggregate-Level Migration Studies As a Tool for Forecasting Future Migration Streams, in: Djajic, S. (ed.), International Migration: Trends, Policy and Economic Impact, London/New York.
- Fihel, A., Anacka, M., Kaczmarczyk, P. and Stefanska, R. (2011), Recent Trends in International Migration: The 2011 SOPEMI report for Poland, CMR Working Papers, 52/110 (89).
- Fihel, A., Kaczmarczyk, P. and Zylicz, A. (2007), Brain drain, brain gain and brain waste, in: I. f. E. R. (IAB) (ed.), European Integration Consortium (IAB, CMR, fRDB, GEP, WIFO, wiiw).
- Fihel, A., Kaczmarczyk, P., Mackiewicz-Łyziak, J. and Okólski, M. (2007), Labour mobility within the EU in the context of enlargement and the functioning of the transitional arrangements, Country report: Poland, in: I. f. E. R. (IAB) (eds.), European Integration Consortium (IAB, CMR, fRDB, GEP, WIFO, wiiw).
- Finkenhauer, J. (2001), Russian Transnational Organized Crime and Human Trafficking, in: Kyle, D. and R. Koslowski (eds.), Global Human Smuggling: comparative perspectives, pp. 166-186, Baltimore and London: The Johns Hopkins University Press.
- Home Office (2004), Control of Immigration: Statistics United Kingdom, retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/27 2196/6690.pdf.
- Içduygu, A. and Toktas, S. (2002), How do Smuggling and Trafficking Operate via Irregular Border Crossings in the Middle East? Evidence from Fieldwork in Turkey, International Migration, Vol. 40, Issue 6, pp. 25–54, doi: 10.1111/1468-2435.00222.
- Institute for Public Policy Research (2006), Irregular Migration in the UK, London: Institute for Public Policy Research.
- Jandl, M. (2007), Irregular Migration, Human Smuggling, and the Eastern Enlargement of the European Union, International Migration Review, Vol. 41, Issue 2, pp. 291–315, doi: 10.1111/j.1747-7379.2007.00069.x.
- Kaczmarczyk, P. (2010), Brains on the move? Recent migration of the highly skilled from Poland and its consequences, in: Black et al. (eds), A Continent Moving West? EU Enlargement and Labour Migration from Central and Eastern Europe, Amsterdam: Amsterdam University Press, pp. 165-187.
- Kahanec, M. and Zimmerman, K.F. (eds.) (2010), EU Labour Markets After Post-Enlargement Migration, Bonn: IZA.

- Kahanec, M., Zaiceva, A. and Zimmermann, K.F. (2009), Lessons from Migration after EU Enlargement, in: M. Kahanec M. and Zimmermann, K.F. (eds.), EU Labor Markets after Post-Enlargement Migration, Berlin: Springer, pp. 3-45.
- Laczko, F. and Thompson, D. (eds) (2000), *Migrant Trafficking and Human Smuggling in Europe*, Geneva: International Organisation for Migration.
- Lederer, H.W. and Nickel, A. (1997), *Illegale Ausländerbeschäftigung in der Bundesrepublik Deutschland*, Bonn: Friedrich-Ebert Stiftung.
- Lejla Mavris, L. (2002), Human smugglers and social networks: transit migration through the states of former Yugoslavia, *Working Paper: New issues in refugee research*, No. 72, Office of the United Nations High Commissioner for Refugees.
- Martin, P. (2009), Recession and Migration: A New Era for Labour Migration? *International Migration Review*, Vol. 43, No. 3, pp. 671-691.
- Martin, P. and Taylor, J. E. (1996), The Anatomy of a Migration Hump, in: Taylor, J.E. (ed.), *Development strategy, employment and migration: insights from models*, OECD Development Centre.
- Massey, S.D. (1999), International Migration at the Dawn of the Twenty-First Century: The Role of the State, *Population and Development Review*, No. 25, pp. 303-23.
- Massey, D. (2012), Towards an integrated model of international migration, *Eastern Journal of European Studies*, Vol. 3, Issue 2, pp. 9-35
- Müller-Schneider, Th. (2000), Zuwanderung in westliche Gesellschaften, Opladen: Leske + Budrich.
- Niklewicz, K. (2006), Francja zaostrza prawo imigracyjne, *Gazeta Wyborcza*, 6.05.2006.
- OECD (2012), Free Movement of Workers and Labour Market Adjustment, Recent Experiences from OECD Countries and the European Union, OECD Publishing.
- Okólski, M. (2000), Illegality of International Population Movements in Poland, *International Migration*, Vol. 38, Issue 3, pp. 57-89, doi: 10.1111/1468-2435.00115.
- Okólski, M. (2004), Migration trends in Central and Eastern Europe on the eve of the European Union enlargement: an overview, in: Gorny, A. and Ruspini, P. (eds.), *Migration in the New Europe: East-West Revisited*, Houndmills/ Basingstoke/Hampshire: Palgrave Macmillan, pp. 23-48.
- Piore, M.J. (1986), Can International Migration be Controlled?, in: Pozo, S. (ed.), *Essays on Legal and Illegal Immigration*, Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 21-42.
- Pytlikova, M. (2007), *EU Enlargement: Migration from the New Member States*, Mimeo, Aarhus School of Business, CIM and Department of Economics.
- Sinn, H.W., Flaig, G., Werding, M., Munz, S., Düll, N. and Hofmann, H. (2001), EU-Erweiterung und Arbeitskräftemigration. Wege zu einer schrittweisen Annäherung der Arbeitsmärkte', *Ifo Beiträge zur Wirtschaftsforschung*, No. 2.

- Stark, O. and Bloom, D. E. (1985), The New Economics of Labour Migration, The American Economic Review, Vol. 75, No. 2, pp. 173-178.
- Uehling, G. (2004), Unwanted migration: Combating and unwittingly creating irregular migration in Ukraine, Working Paper: New Issues in Refugee Research, No. 109, Office of the United Nations High Commissioner for Refugees.
- World Bank (2007), Labour Markets in EU8+2: From the shortage of jobs to the shortage of skilled workers: labour markets in the EU new member states, retrieved from http://siteresources.worldbank.org/INTECA/Resources/RER ST FINAL\_26-09-2007.pdf
- World Bank (2010), Migration and Remittances Factbook 2011 (second edition), retrieved from http://siteresources.worldbank.org/INTLAC/Resources/Factbook 2011-Ebook.pdf.
- Zaiceva, A. (2006), Reconciling the Estimates of Potential Migration into the Enlarged European Union, IZA Discussion Paper, No. 2519, Institute for the Study of Labor, Bonn, Germany.