

## **Economic Implications of Turkish Migration in Europe: Lessons Learned from Polish EU Accession**

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The paper aims to predict the economic impact of Turkish EU accession with respect to migration flows. The analysis builds on the empirical evidence of past emigration flows of EU-18 to Germany and Netherlands employing the post EU Enlargement experience of Poland.

Both panel data estimators used on the European migration and empirical analysis of Polish migration behavior to the EU after 2004 suggest that Turkish accession to the EU and its access to the EU labor market would not trigger massive labor migration. The most sober scenario predicts that eventual Turkish accession would lead to the short-term increase in migration which would start to fade away quickly soon reaching pre-shock levels.

### **1. Introduction**

Turkey's efforts to integrate into the European structures dates back to 1963, when the country gained associate membership of European Economic Community (EEC) and submitted its application for the EU membership four years later, however without managing to achieve full membership. Turkey experienced partial success when it entered in the European customs union in 1995. Four years later it applied formally for the EU membership and the negotiation rounds began in 2005. Up to today, Turkey closed only 1 of the 35 chapters of the "Acquis communautaire" (the body of European Union law) and negotiations are still ongoing.

While there are several factors that hinder quick progress of accession rounds, as it will be discussed later on, this paper will discuss one of the economic implications of possible Turkish EU accession, namely

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Turkish migration to the EU. The hypothetical Turkish EU accession raised many questions regarding its advantages and disadvantages in both public and academic debate. Proponents of the EU widening process argue that the inclusion of Turkey would significantly boost energy security, especially with regard to the energy dependence of the EU on Russian sources. For instance, Triantaphyllou and Fotiou (2010) show that Turkey's energy strategy in the 2010s might oscillate between using "pipeline diplomacy" as a means to achieve its energy independence and to enhance its security, or using it as a leverage to increase its power as a regional hegemony. Bagdonas (2012) suggests Turkey might be attractive to the EU New Member States (NMS), such as the Baltic countries or Poland due to its geopolitical role as a transit hub for energy supplies to Europe, and its potential to become a great power, engaging in regional competition with Russia.

Another positive impact of Turkish EU accession might be fueling the European moribund labor market. For example, Krieger and Maître (2006) use the study based on Eurobarometer data from 2002 and point out that migration from Turkey (mostly students and better-educated people in Turkey have a propensity to migrate) may open up important opportunities: e.g. to reduce the gap in labor supply in Europe due to ageing as well as to contribute to an improved financial sustainability of the social security systems of the EU countries. Tarifa and Adams (2007) analyze the situation after the opening of EU official accession talks with Turkey in 2005 and come to the conclusion that Turkey might help Europe in its struggle to define itself as it expands and confronts a series of demographic, social, economic, and bureaucratic challenges. Moreover, Uslu and Polat (2012), analyze the impact of foreign trade on labor market by using the random coefficient panel data analysis and the quarterly data of 17 sectors in manufacturing industry of Turkey between 1994 and 2010 showing that production had positive impact on labor and negative impact on wages, while imports and exports have a significant and positive impact on labor.

Additionally, Turkish EU accession might increase the economic competitiveness of the EU. With regard to that Mihçı and Wigley (2009) examined the effects of the creation of Customs Union between Turkey and the EU in 1996 by performing a direct and indirect tests of the technology-led growth induced by the Custom Union via estimating total factor productivity and labor productivity equations for Turkish

manufacturing industry sectors using the data set of 12 manufacturing industry sub-sectors for the period 1994-2001 and arriving at the conclusions that import volume had a positive and significant effect on output per labour and volume of imports from EU countries which implied that the Customs Union had a positive effect on both economies. Furthermore, Ozturk and Acaravci (2011) empirically prove the causal relationship between economic growth, export and FDI in Turkey (the proxy of the trade with the EU) using the ARDL bounds testing approach and the error-correction based Granger causality test examining the both long-run and short-run causality issues between the variables by using quarterly data from 1994 to 2010. Finally, Ghani (2011) examined the effects of trade liberalization on imports, exports and GDP per capita in the Organization of Islamic Conference (OIC) member countries since the 1970s and concluded that in case of Turkey the liberalization had slightly significant impact on imports than on exports, implying how important Turkey might be for the EU imports in the times of the economic and financial crisis.

Additionally, Ersöz and Karaman (2011) highlight the strategic military advantage of Turkish EU accession by using fourteen innovation indicators from European Innovation 2008 Scorecard Report and employing multidimensional scaling analysis and K-means cluster analysis to derive Turkish defense capability perspective.

All of the arguments above have some valid grounds. The EU faces ageing population prospects and the young migrants could deliver necessary stimulus to its economy. Furthermore, Europe is highly dependent on the foreign energy suppliers, but more importantly it seeks to diversify its sources. The eventual success of Nabucco pipeline project would help the EU to move towards achieving its goals, naturally only in the situation when Turkey is a member of the EU.

On the contrary, there are others who view Turkey as a threat to the EU integration. Accepting a new member of this magnitude and geographical location would make the EU face the possibility of several economic and non-economic system shocks. One of the possible scenarios might represent massive migration inflows of labor from Turkey to the EU. Ozcure and Eryigit (2006) analyze the experience of former EU enlargements and come the conclusion that only the full EU membership option within a foreseeable future of a free movement of

labor regime can balance Turkey's interests in the EU; otherwise Turkey has the option of refusing offers from the EU and will ultimately send more migrant workers to the EU without membership perspective. Erzan et al. (2006) conduct an econometric study of Turkish migration to the EU between 2004-2030 using several scenarios and employing cross-country, time-series and panel regressions, as well as maximum likelihood and SUR to error correction models. Their findings suggest that a successful EU accession period with high growth reduces and gradually eliminates the migration pressures but the lower growth and higher unemployment associated with a suspension in Turkey's accession might result in more immigrants than a successful EU membership and would endanger the job opportunities of EU workers. Moreover, some authors (e.g. Sartori 2005) view Muslim religion and culture as inconsistent with European tradition and democratic values that includes the separation of church and state powers. Last but not least, Turkish accession would make the EU a neighbor with several states of the Middle East towards which the diplomatic relations of the EU cannot be described as accommodating.

### **1.1. Methodology, research question**

The purpose of this paper is to analyze whether the integration of Turkey to the EU and the access of Turkish workers to the European labor market would trigger massive emigration, and thus attempts to answer the question whether the European fears of Turkish accession can be empirically justified.

Our analysis of the literature on pros and cons of Turkish EU accession conducted above sets up the further path for this paper. Overall, one can see that the economic effects of Turkish accession for the EU countries are small but positive. The accession would raise European exports and provide the solution for the ageing population and labor market shortages. It can be seen that Turkey experiences larger economic gains than the EU and its consumption per capita rises as a result of accession to the internal market and free movement of labor with benefits spilling all over the EU.

There are various approaches to the problem of estimation of Turkish migration that would be possibly initiated by its participation in the EU labor market. This paper combines two approaches to tackle the issue

using both rigorous statistical tools and an unorthodox approach, a comparative study. Utilizing data on migration collected throughout decades from various sources the paper tries to predict the behavior of Turkish migration in a hypothetical situation when Turkey was to join the EU labor market. The main sources of the data we use are the official statistics databases obtained at Destatis, Eurostat, Polish Central Statistical Office, UN, OECD and AMECO.

The paper is divided into two parts. The first part uses the data on migration from the EU-18 countries to Germany and Netherlands. We do not include the migration to the other big EU economies (e.g. France or Spain) because the majority of Turks migrates to Germany and the Netherlands due to the network effects (approximated in our model by the number of specific migrants in a given country). Moreover, the migration policies for the Turkish citizens did not change over the 25 years (which means that Turks could always migrate to Spain but did not do so) and there was no change so it is unlikely that perspective Turkish migrants would suddenly change their migration behavior. Therefore, the value added for additional countries in the model is very limited.

Using econometric modeling, it delivers predictions of future Turkish migration flows to the EU in the case of hypothetical accession. Our results reveal that Turkish EU Accession would only temporarily increase Turkish migration to the EU with migration flows negligible in absolute terms.

The second part analyzes Polish outward migration after the 2004 Enlargement based on the empirical data. Studying the changes in Polish migration with respect to the EU accession and gaining access to labor markets of different EU countries might enable us to predict eventual Turkish migration flows. We analyze the migration flows from Poland and conclude that they were more sensitive to the opening of the new labor markets for Polish citizens. This might be explained by the fact that the propensity to migrate is higher in case of Poles than in the case of Turks.

Finally, the conclusions at the end of the paper compare the results and conclude that migration flows are mostly influenced by employment rates and GDP in the destination country. Massive labor migration does

not represent a threat in case of Turkish EU accession, should it happen sooner or later.

## 1.2. Literature review

In the second half of 20<sup>th</sup> century, Turkey experienced substantial emigration flows. The 1960s and first half of the 1970s presented the period of massive labor migration where Western Europe became the main destination for the Turkish migrants (predominantly represented by the West Germany). However, it was also accompanied by large scale return migration which accounted for about 400 000 people. Nevertheless, the numbers of Turks abroad did not decrease. This period was followed by a different type of migration characterized by the family reunifications, marriages migrations, politically motivated migrations, and migrations of illegal laborers (see e.g. Akgündüz1993).

The Turkish migration resulted in an increase of stocks of Turks in the EU reaching 3 million in 2004 with 70 percent of Turks residing in Germany. The total number of Turks in the EU reached over 5 million (if one added the Greek Turks and ethnic Turks living in Bulgaria, Romania, and Greece) (Ozcure and Eryigit 2006). According to Akkoyunlu and Silverstovs (2009), a large share of the total amount of workers presented an unskilled labor. Chart 1 illustrates the fact that during the first phase majority of the total amount of migrating Turks chose Europe as their destination which is in high contrast to the later periods. Since then, the migration flows from Turkey to Europe plummeted and remained low.

Stalker (2002) estimated that in the short and medium term the EU demand for labor would be met by migration flows from within the EU but later on, in the long run, by greater migration from developing countries, such as Turkey. He did not, however, specify any precise estimates. The number of Turkish citizens residing in the EU decreased to 2.4 million in 2010, which constitutes 7.2 percent of all non-nationals in the EU (Eurostat 2011). If second-generation migrants are also taken into account (those born in Europe to parents born in Turkey), the total rises to close to 4 million (Biffi 2012). Turks in the EU mostly live in Germany (1.5 million), France (230,000), the Netherlands (200,000) and Austria (158,000). The decrease can be explained by return migration and acquisition of new citizenship. In 2009, 51 800 Turks acquired

citizenship of an EU country (5 percent increase in comparison to 2008), which amounted for 7 percent of all EU citizenship acquisitions in 2009 (Eurostat 2011).

The future propensity of Turks to migrate also depends on their motivation. Glazar and Strielkowski (2010) stress the importance of network effects and situation of the target country labor market while at the same time they consider Turkish per capita income as being nearly of no significance. Icdygu et al. (2001) bring to the attention the socio-economic variables such as poverty of the region of origin. They conclude that increasing poverty creates stronger incentives to migrate but only in the bell shaped manner. If poverty reaches extreme values migration decreases as people have no funds to migrate. Age is also an important factor. Not only are younger people more prone to migration but also migration propensity of persons in family phase of life (25-39) seems to decrease with increasing age (Krieger and Maître 2006). Higher generosity of social systems of hosting countries towards the unemployed and migrants appears to be uncorrelated with migration (Giulietti et al. 2011).

## **2. EU-18 Migration to Germany and Netherlands**

### **2.1. Data and methodology**

In order to analyze possible scenarios of Turkish labour migration in Europe, we conduct broad empirical analysis using the data on migrations from EU-18 to Germany and the Netherlands from 1967 until 2011, time series from OECD database (complemented by AMECO database) and Eurostat databases. Migration data were compiled from German central register of foreign nationals, German Statistical Office and Statistics Netherlands. The breaks in migration stock data series are dealt with using the methodology applied in Alvarez-Plata et al. (2003) and Glazar and Strielkowski (2010).

We decided to include these two receiving countries because they have the largest Turkish Diasporas in the EU. They reveal similar patterns in regard to the Turkish migration, such as family reunifications, network effects and return migration, and both have good migration statistics. Other large economies of the EU were not included to the model for the reasons described in section 1.1.

Our dependent variable is normalized with the home countries population representing the difference in migration stocks as a % of the original home population. The difference could be in different population growth rates, i.e. of population in original home country (in our case Turkey) and of appropriate population of foreign citizens in receiving country (in our case Germany and the Netherlands) and also in the rate of naturalization. We proceed with the assumption that population growth rates are equal (and therefore cancel out) and the naturalization rates are zero, which results in that ratio of the stock of foreign residence from country  $h$  in foreign country  $f$  to the original home population is equal to the ratio of actual net migration from country  $h$  into home country  $f$  to the original home population.

## 2.2. Empirical model and prediction

The first part of the theoretical model is consistent with those models based on human capital approach (Sjaastad 1962, Harris and Todaro 1970, or Hatton 1995) and deals with investment in human capital and expected future income. The model applies the econometric methods used by Boeri and Brücker (2000) and Alvarez-Plata, Brücker and Siliverstovs (2003) in estimating migration from CEEC into the EU15 and most recently by Glazar and Strielkowski (2010) and Glazar and Strielkowski (2012). According to these models, the decision to migrate can be viewed as an investment in human capital whose returns are determined by the net present value of expected income streams in the future (see Sjaastad 1962; or Glazar and Strielkowski 2012). The costs of migration include not only the pecuniary costs of moving places, but also non-pecuniary costs that includes intangible (social and psychological costs) of moving to the new environment. An individual will migrate if the expected benefits from moving exceed the expected costs (Strielkowski and Turnovec 2011).

Now, migrant's expectations about the income in the target country are pre-conditioned by the opportunity to find a job. Following Harris and Todaro (1970), the average employment rate serves as a proxy for the individual probability to find a job. Similar arguments apply to the expectations on future income in the home countries. On the other hand, uncertainty on future income levels may hamper migration even if potential migrants are risk-neutral. According to Hatton (1995), uncertainty depends on the risk of unemployment rather than on



different wage levels. This implies that one can expect the coefficients for the employment rates to be higher than those on the wage variables.

The majority of the migration literature assumes a static relation between migration rates, the hypothesis is that individuals are homogenous and that the same decision situation is replicated over time. Contrary to that assumption, we consider all individuals to be heterogeneous (i.e. differing in their preferences and the human capital characteristics relevant for migration decisions). As a result, the propensity to migration declines with the increasing share of migrants in the population of the source country. Therefore, for any given income differential, the stock of migrants reaches a steady state where its growth is determined by the natural rate of population growth. However, this does illuminate the possibility that chain and network effects affect migration positively. Nevertheless, in the long run these effects are dominated by declining preferences to migrate in the population. Thence, migration can be viewed as a disequilibrium phenomenon which vanishes when the equilibrium stock of migrants is saturated. This implies that net migration rates may fall to zero even when there exist small differences in wages and employment opportunities between the countries. We assume that people make expectations regarding the future income in the target (host) country and source (home) country. The differences in former incomes influence expectations about the future possible income. A country's GDP per capita serves as a proxy for individuals' incomes both in source and target countries (the selection of GDP per capita can be justified by limited data sources available for other variables). The average employment rate in both target and source countries is taken as a proxy for the labor market conditions. More precisely, the probability of finding a job is rising with higher employment and vice versa. The lagged migration stocks serves as a proxy for network effects. If migration flows are based on expectations about past variables that mean present values are influenced by past values (Hatton 1995), thus it should be first-order autoregressive process (AR (1)). However, in our model, we used AR (2) and assumed that it was general enough to allow us to compare various estimators. We include a further lag of the endogenous variable in our data samples in order to impose fewer restrictions on the adjustment process. Further lags of the dependent variable have turned out to be insignificant based on the Q test. For the purpose of estimation we have constructed the following simple error-correction model:

$$\Delta m_{fht} = \alpha_h + \beta_1 \ln(w_{ft}/w_{ht}) + \beta_2 \ln(w_{ht}) + \beta_3 \ln(e_{ft}) + \beta_4 (m_{fh,t-1}) + \beta_5 (m_{fh,t-2}) + \beta_6 * DummyF + Z_{fh}\gamma + \varepsilon_t$$

where:

**$m_{fht}$**  - the dependent variable representing the share of migrants from source country  $h$  living in target country  $f$  as a % of source country population  $h$ .

**$w_{ht}$**  - country of origin income level

**$w_{ft}/w_{ht}$**  - foreign to home country income difference

**$e_{ft}$**  - employment rate in country  $f$

**$m_{fh,t-1}$**  - lagged migrants stock of home country  $h$  in country  $f$

**$m_{fh,t-2}$**  - lagged migrants stock of home country  $h$  in country  $f$

**$Z_{fh}$**  - vector of time-invariant variables which affect the migration between two countries such as geographical proximity and language.

**DummyF** - Free mobility of labour.

We employ Seemingly Unrelated Regression (SUR), Panel data Least Squares (PLS) and General method of moments (GMM). This choice is based on the different properties of the estimators and the fact that for the panels with rather small time series dimensions and rather large cross-sectional dimensions, the GMM estimator described Arellano and Bover (1995) will be superior to the rest of the other available estimators due to the fact that the traditional estimators would perform rather poorly due to the unresolved simultaneous equation bias. However, when relatively large time series and rather small cross-sectional dimensions of the panel are employed, the motivation for using the GMM estimators is less obvious and the inflation of the moment conditions might somewhat worsen their performance in panels typically considered in macroeconomic studies. On the other hand, either the WITHIN or SUR estimator is expected to have a comparative advantage over the rest of the estimators as the Nickell bias is likely to be of considerably smaller magnitude than in panels with a small time

dimension as described by the Monte Carlo study of Judson and Owen (1999).

The results are shown in Table 1. All 3 models cover the data on migration stocks and economic factor in Germany and the Netherlands from 1967 until 2011.

Income differential has positive and significant impact on migration. Furthermore, the income in the source countries is also significant and has a positive impact on migration. Employment rate in Germany and the Netherlands (used as an indicator of the labor market conditions) is significant and positive. Lagged variables of migration also have significant and positive impact on migration. The dummy variable has a positive sign and it is significant, however its impact is rather small. It might be that migrants with the highest incentives to move have already done so before introduction of free movement of labor. Hence, migration flows appear not to be much influenced by the free movement of labor.

The impact of GDP per capita both in Turkey and the EU on the stocks of Turkish residents living in Europe is rather small in the long run. German GDP strongly influences the migration flows but the same thing cannot be said about Turkish GDP. Employment rate in the EU (taken as a proxy variable for German labor market conditions) seems to have a greater impact on migration stock.

From the obtained results, we are able to construct a scenario of Turkish migration in case of EU accession. Assuming that employment rate remains unchanged and GDP in Germany and Turkey grows annually at rate of 2 % and 4 %, respectively, the prediction can be seen in Figure 1. It shows that the EU accession is associated with roughly 50% increase in migration flows but that constitutes increase by only 10 thousand in real numbers. Therefore, eventual Turkish accession to the EU is not going to increase Turkish labor migration in Europe. It seems like most of the Turks who wanted to migrate have already done so, as can be seen in Chart 2.

### **3. Empirical Study of Polish Migration**

#### **3.1. Similarities of Polish and Turkish economies and migration**

In this section we compare Turkish and Polish economies in order to show their similarities and thus defend the choice of Poland as a reasonable predictor for the Turkish behavior. Surely, there are factors like type of regime or religion that might influence migration and in which the countries differ significantly. However, this paper does not strive to control for all of the influential variables and so its predictive value should be regarded as rather limited.

Chosen economic indicators of Poland and Turkey in 2010 are shown in Table 2 (OECD, 2012). The amount of incoming FDI is similar, so are the GDP per capita rates and the rates of unemployment. With respect to population, Turkey is nearly twice as large. Additionally, both countries have lower GDP per capita than is the average in the EU 27 (Poland reaches a bit more than 60 percent and Turkey about 50 percent). Nevertheless, the material conditions in sending countries are usually deemed insignificant by most of the used literature. On the contrary, the occupation status of migrants seems to be influential as well as level of education (Krieger and Maître 2006).

Both countries also share similarities in migration flows. Historically, until 2004 Germany presented by far the most favorite destination for both Polish and Turkish migrants. Therefore, both countries accumulated a significant number of migrants in Germany over time, which established positive network effects for additional migration. The difference, however, lies in the preferred destinations. Most of the Turkish migrants lost their interest in Europe after the first wave of migration (from the 1960s until the mid-1970s) and since then the migration flow to Europe is basically inferior. On the contrary, Poles always migrated predominantly within the European borders. As Chart 2 reports, for the last 20 years, three quarters of total Polish migration targeted European countries (Polish Central Statistical Office 2012).

Finally, both Poland and Turkey have extensive pools of young labor force which reveals significant propensity to migrate. In Poland, in the age group between 15 to 24 years 12 percent are willing to migrate,

while in Turkey it was 8 percent (Krieger and Maître 2006). According to their results, age had the strongest influence on migration decisions.

### **3.2. Polish migration flows after the EU 2004 Enlargement**

Similar to Turkey, Poland has a long tradition of international migration which dates back to the Divisions of Poland in the 18<sup>th</sup> century and numerous uprisings in the 19<sup>th</sup> century. Despite of reign of Communism from 1945 until 1989, Polish workers were active in other Communist states and there were several waves of outward migrations from Poland in the 1950s, the 1960s, the 1970s and especially in the beginning of the 1980s when the Solidarity movement became active and the Martial Law was introduced. Since the 1990s, Polish citizens began to enjoy the benefits of open borders and free travel . Chart 2 shows the total amount of Polish emigrants and respective share of those heading to other European destinations (Polish Central Statistical Office 2012). Three quarters of the migrants settled in Europe while one fourth headed to North and South America. There is a noticeable increase after 2004 which corresponds to the Polish EU accession. However, the Polish Central Statistical Office's data is underestimated because only those who stayed abroad for at least one year are counted which excludes seasonal workers. Nevertheless, it still offers general insights and a basis for comparisons.

The two charts that follow offer the breakdown of most preferred destinations of Polish migrants in Europe. The source data are taken again from the Polish Central Statistical Office's database so they should be taken only as approximate values. Chart 3 shows that while emigration to Germany was quite high and stable in the long run, the United Kingdom experienced a considerable increase of Polish migrants after Poland joined the EU in 2004 (the UK did not use its right to postpone the opening of its labor market to Poland and so Polish citizens were able to work in the UK immediately without any restrictions). Chart 3 shows the number of Poles who stayed outside Poland for more than a year (the amount of people who migrated for work is much higher). Polish labor immigration to the UK was highest in 2007 when it exceeded 96 000 citizens, while in 2009 it was only 39 000 (ONS 2012). In 2010, the net Polish immigration increased again by 43 000 (Workpermit.com 2011). *“In the second quarter of 2011 the number of Polish-born people aged 16 plus working in the UK was 449,888, an*

*increase of around 60,000 on the previous quarter”* (ONS 2012). However, it is not true that all of the migrants stayed. Many used the UK only as a transit destination and also many returned home.

Chart 4 (Polish Central Statistical Office 2012) depicts increase of Polish emigration to other countries of the EU after 2004. All of the countries experienced slight increases in immigration of Polish citizens, namely Ireland, where the value of 2007 was 28 times the value of 2004 (these numbers are again rather underestimated and track only deregistered citizens). Another way how to look at the distribution of migration flows is to track the changes in destinations. It can be seen from Chart 5 that free labor market gave incentives to many to choose unprecedented destinations for work. Typically, the UK and Ireland offered jobs in construction sector in times of booming economy prior to the crisis. Polish citizens took advantage of no labor restrictions on the expense of Germany which still had restricted access (until 2011).

Finally, Chart 6 (UN 2011; Federal Statistical Office (Destatis 2011) draws immigration rates to Germany from Poland and Turkey between 1970 and 2011. Germany was a long-term leader in attracting Polish migrants. Additionally, there is visible decline in Turkish immigration to Germany at the brink of the 1980s. Since then, the Turkish migration remained low and stable. The Polish case proved to be more interesting.

Since the mid-1990s to 2004 the migration flows from Poland were rather stable and constant. When Poland gained the EU membership the number of migrants increased and in 2005 the value was 50 percent above the value in 2003. Furthermore, as the latest preliminary data from German Federal Statistical Office suggests, there is another significant increase in migration going on related to the collapse of 7-year transition period, which Germany used to protect its labor market from new member states that acceded in 2004. The German labor market restrictions broke down in May 2011 and it immediately led to the increase in Polish migration. The overall immigration to Germany experienced a 15% increase in the first half of 2012 in comparison to the first half of 2011. The number of Polish migrants alone increased from 114 thousand in 2010, to 163 thousand in 2011. In the first half of 2012 89 thousand Poles have migrated which could lead to figures around 180 thousand for the whole year, assuming no change in trend in the second

part of 2012. There were 10.7 million migrants living in Germany in 2012 out of which 1.5 million originated from Turkey and 1.1 million from Poland (Destatis 2012).

Unfortunately, there is not sufficiently long time period yet to determine the true impact and duration of the effect. Additionally, it is not possible to wholly attribute the change of migration to the closure of labor market restrictions because the migration flows could also be influenced by the financial crisis.

The EU had quite a linear approach towards migration. In 1999 European Council declared in Tampere (Finland) the direction in which it wanted steer migration policy. The two steps consisted of establishing basic common legal framework and gradual convergence of legislation of member states. The EU decided to dedicate its resources in the long-term to tackle illegal immigration by providing economic assistance to developing countries and preventing conflicts. (European Commission 2002) This approach seems to be valid and in line with up to date migration research even today because the development of economies yields creation of new jobs and conflict prevention makes them more secure. By doing this, the EU alleviates the effects of one of the strongest push factors driving international migration – unemployment.

During AENEAS program that run from 2004 to 2006, the EU incorporated migration policy directly into the relationships with third countries. Migration and asylum thematic program (2007-2013) with the total budget of €384 million continues to prioritize well managed migration tied with economic development and stresses the need to combat illegal migration. More importantly, the EU always viewed legal migration as beneficial (European Commission 2002). Nevertheless, facing further enlargements, the EU came up with transitional agreements which reflected fears of particular EU countries of excessive migration flows. If Turkey is to accede EU in the future, it is likely to sign transitional agreements with some of the EU countries, regardless of the tangibility of migration threat.

Economically speaking, the EU is working hard to promote Turkish economy. Turkey is a member of the WTO and Euromed since 1998 and has a free trade area (FTA) with the EU since 1996. The EU is also Turkey's number one trade partner for both import and export

(European Commission 2013). Furthermore, Turkey has established several bilateral trade agreements in the Mediterranean region, has FTA with EFTA countries and Macedonia, Bosnia-Herzegovina, and Georgia. Combined with its geographic location it is becoming a trade hub in the Euromed region. This is likely to stabilize, or even diminish, the strength of push factors which should ultimately transmit into lesser incentives to migrate.

Therefore, the most likely scenario, based on Polish past experience with respect to collapse of other countries labor market restrictions, is that the Turkish entry into the EU free labor market would cause short-term increase of migration of low-medium magnitude, although the change expressed in percentage points could be high. This short-term increase would, however, begin to fall again at a rather fast pace. Availability of free labor market stimulates immediate and short-term increase in migration with short-term duration but it does not lead migration spikes. The positive effects of free labor market on illegal migration should also not be disregarded.

### **3.3. Migration flows of selected countries after the accession to the EU**

In this section we would like to provide additional pieces of evidence in support of our findings by reviewing the emigration flows of several EU countries at the time when they joined the Union. We focus on the populous countries of the 2004 and 2007 accessions.

Looking at Romania and Bulgaria that joined the EU in 2007 one can discover similar patterns to that of Poland. Chart 7 displays largely decreasing trend in total Romanian emigration but it does not really corresponds to the real numbers. More reliable data is provided by national authorities of receiving countries. Population statistics and data from the EU Labour Force Survey show that at the end of 2010, around 2.9 million Bulgarians and Romanians reside in the rest of the EU, more than twice as many as before the EU accession. This represents an average inflow of 360 000 migrants per year but most importantly the growth began before the accession itself, being of around 220 000 per year between 2003 and 2006 (European Commission 2011). Unlike the case of Poland, the migrants tend to favour Spain and Italy rather than other destinations. The report to from the EU Commission (2011) further shows that the migration flows peaked in 2007 and from then on



decreased significantly. In 2010, Italy reported only 88 000 Romanian immigrants, while Spain only 33 000. Chart 8 demonstrates generally steady levels of migration in the number of destination countries and significant steep decrease can be seen for Italy and Spain. (OECD 2012) The migration seems to be heavily influenced by economic conditions – in this case both by financial crisis and unfavourable conditions on the Spanish labour market. Even though the migration flows have lowered, Spain still requested and received the full 7 year transitional period.

Apart from Poland, countries that joined the EU in 2004 did not constitute any larger potential for migration due to their limited populations. Therefore, there were no fears within the Union that their workers would cause any serious disturbances on national labor markets. Chart 9 depicts the data for these 9 countries. Estonia, Malta and Cyprus did not face any transitional agreements as their migration potential was minimal. The emigration flows of Czech Republic, Slovakia, Latvia, Slovenia and Hungary remained largely unchanged during the 2000s, were low, and did not present any serious deviations with regard to the accession.

The only country of the selection that experienced significant spike in the post-accession period was Lithuania. In 2010, Lithuanian emigration high-rocketed and nearly quadrupled with respect to 2009 reaching about 83 000 migrants. However, Lithuanian entry into the free labor market is not to the main factor blame. The migration wave was a product of severe austerity measures introduced by the Lithuanian government that cut public spending by 30% including wage cuts between 20-30% and reduced the pensions by as much as 11% (Pidd 2013). Unemployment rate began to rise rapidly and wage differentials climbed as well. In 2010, about 50% of all migrants moved to the UK and 15% to Ireland. Unemployment and wage differentials were the main push and pull factors (IOM 2011).

The empirical evidence gathered in this chapter supports our hypothesis that free labor market does not invoke unprecedented increase in migration. Although the effects are not marginal, they are rather low and short-term.

#### 4. Conclusions and Discussions

Based on the both econometric and empirical analysis performed in the paper we demonstrated that eventual Turkish EU Accession would only increase Turkish migration to the EU in the short term horizon. Based on the evidence of behavior of EU-18 labor migration, the various migration scenarios in the case of Turkey could be quite high when expressed in percentage points but negligible in absolute terms. The migration shock would not last long and the level of migration would head back towards its previous values after the people with strongest incentives to migrate would do so.

On the other hand, Polish migrants appeared to be quite susceptible to the collapses of labor market restrictions in the EU Member states. Generally high stable trend of Polish migration to Germany was replaced by migration to the UK and Ireland when they removed labor market restrictions. Most recently, preliminary data shows that the same thing happened again in Germany where the 7-year period of labor market protectionism ended in middle of 2011. Nowadays, Germany is facing one of the highest immigration in the last 20 years.

The results of our study should be comprehended with great care as their predicative capability is limited. The second part of the paper relies on simplified assumptions that Poland and Turkey are similar countries to the point that their migration flows would react similarly. While they are both nations with long history proving propensity to migrate, migrants from both countries have established networks in Germany, and there were historically economic incentives for migration (such as low unemployment rate in Germany), the countries are not exactly the same.

The data that this paper was based on also demonstrate some controversies. Questionable precision and unavailability of data complicate rigorous research. The predictions are further bound to current institutional, economic, and many other conditions. Significant change of institutional design in Turkey might severely distort any predictions counting on supremacy of current regime.

To sum it all up, the this research suggesst that migration flows are mostly influenced by employment rates and GDP in the destination country, while the same does not hold for the variables of the country of

origin. Even though there would be increase in migration if Turkey was to accede it would not fulfill the fears of critics that fear the possibility of Turkish massive immigration wave in case of hypothetical EU accession.

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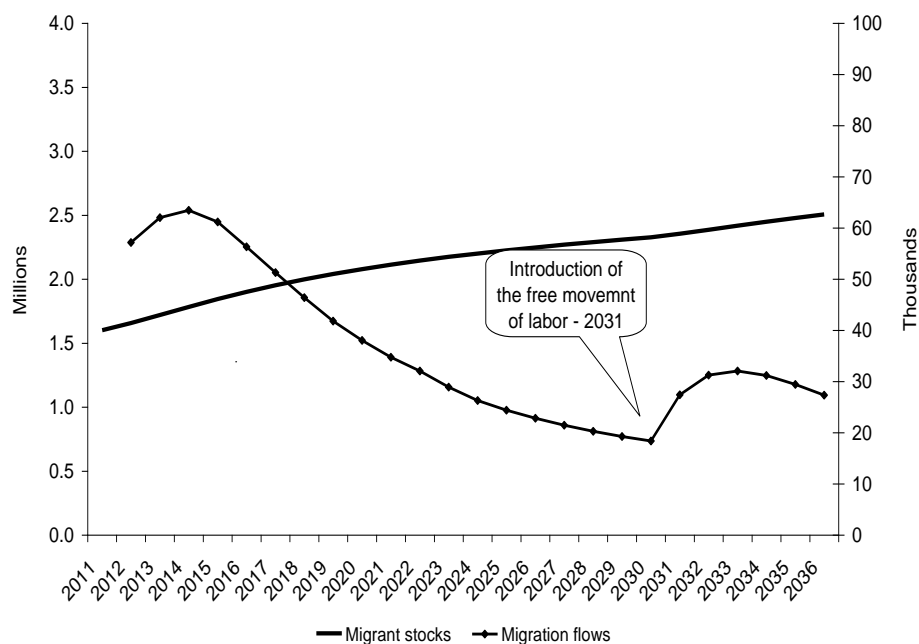
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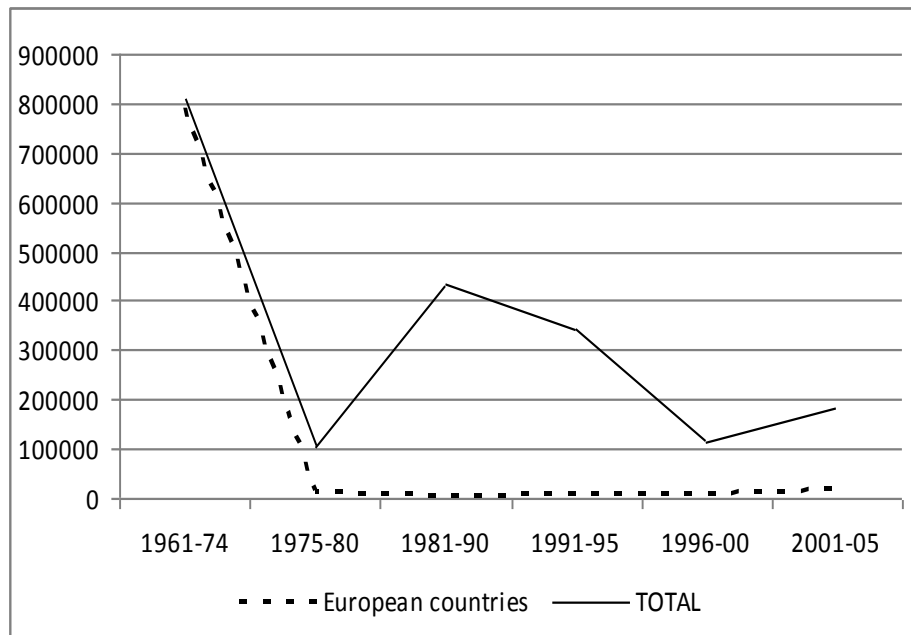
**Appendix: Tables, Figures and Charts****Table 1:** Panel data estimation results, Turkish migration in Germany and the Netherlands (1967-2011)

	PLS	GMM	SUR
C	-2.7144**		-2.3420**
$w_{ht}$	0.0320**	0.0166**	0.0155**
$w_{ft}/w_{ht}$	0.0445**	0.1140**	0.0240*
$e_{ft}$	0.4206**	0.3552**	0.4188**
$m_{fh,t-1}$	1.4452**	1.1693**	1.4491**
$m_{fh,t-2}$	-0.5347**	-0.5587**	-0.5228**
Dummy	0.0128**	0.0305**	0.0110**
**,* coefficients are significant at 1 and 5% level, respectively			
Cross section fixed effects (Turkey)			0.1355

Source: Own calculations

**Figure 1:** Scenario of Turkish migration in the EU (2011-2036)

Source: Own calculations

**Chart 1:** Migration from Turkey to Europe compared to the total emigration

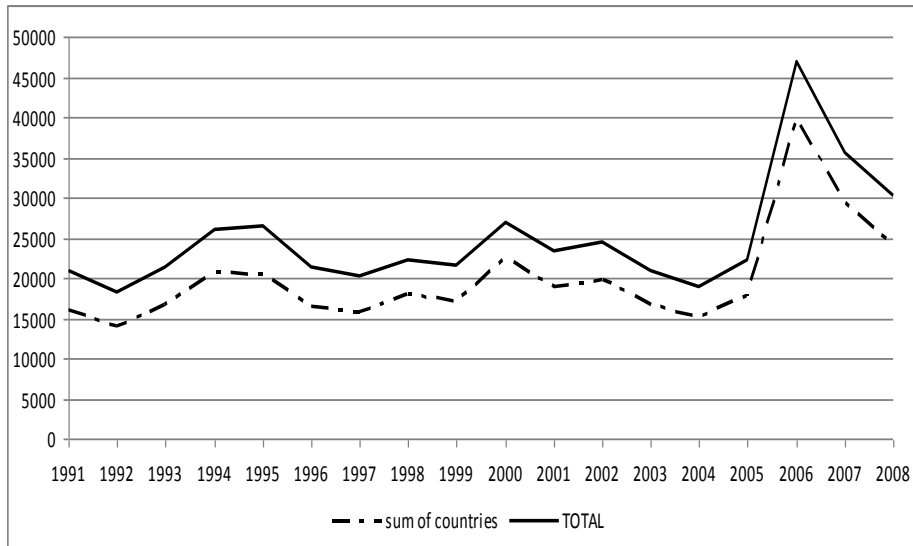
Source: Turkey Country and Research Areas Report (2010)

**Table 2:** Chosen Economic Indicators of Poland and Turkey (2010)

	Poland	Turkey
<b>Population</b>	38 million	73 million
<b>GDP per capita (USD current PPPs)</b>	19 747	15 320
<b>Inward FDI</b>	201 million USD	186 million USD
<b>Unemployment rate (total civilian labor force)</b>	9.6%	10.6%
<b>Government deficit</b>	-7.9% of GDP	-4.6% of GDP
<b>Inflation</b>	2.6%	8.6%

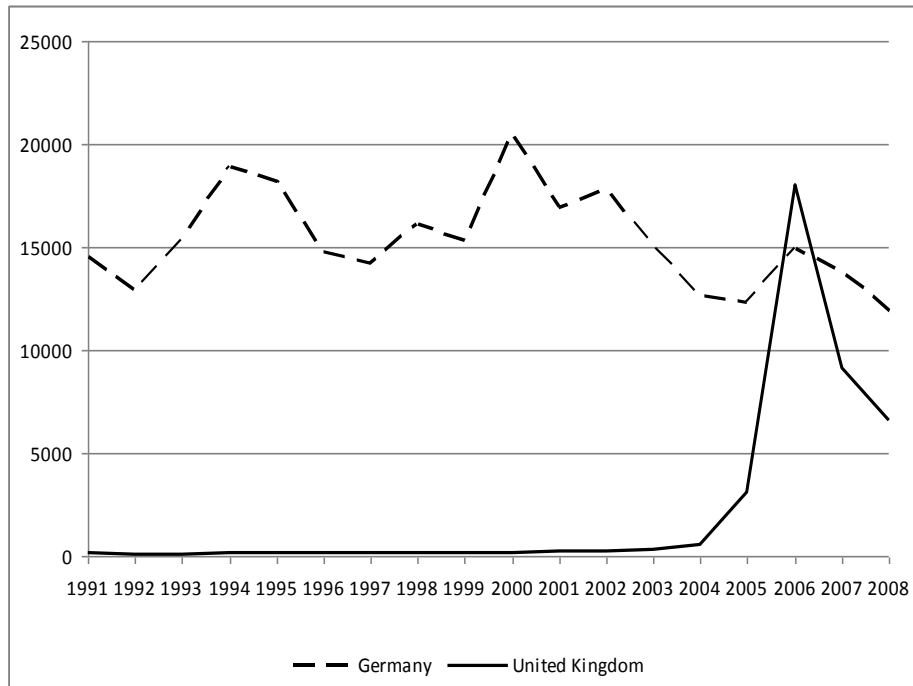
Source: Own compilation

**Chart 2: Polish migration 1991-2008**



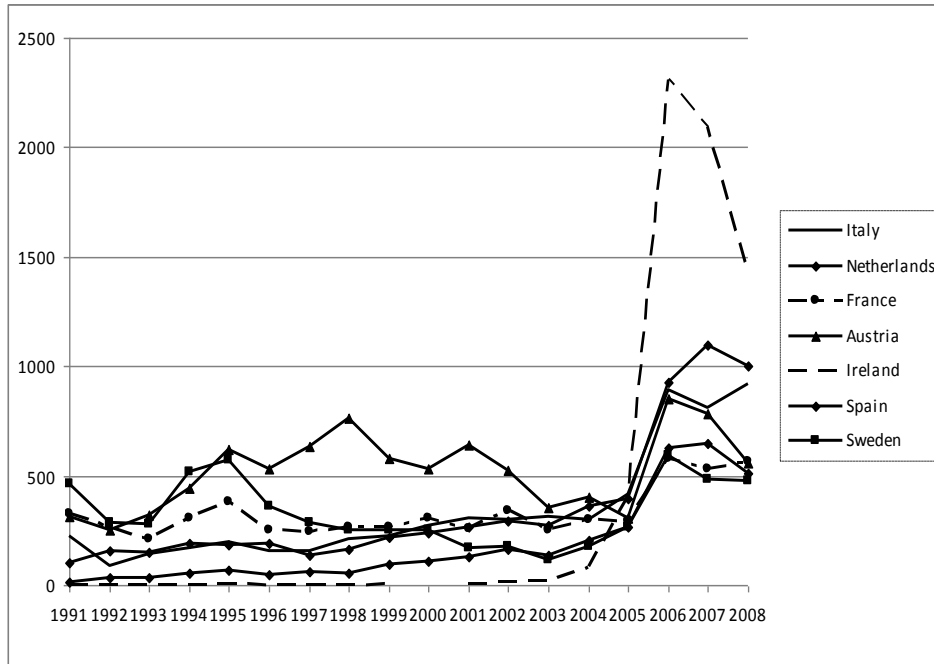
Source: Polish Central Statistical Office (2012)

**Chart 3: Polish emigration to Germany and UK**



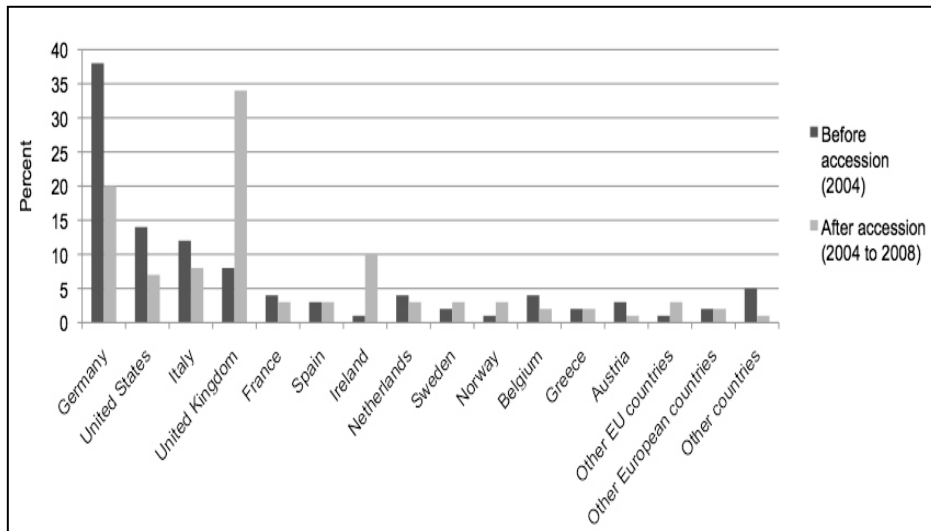
Source: Polish Central Statistical Office (2012)

**Chart 4:** Polish emigration to other countries



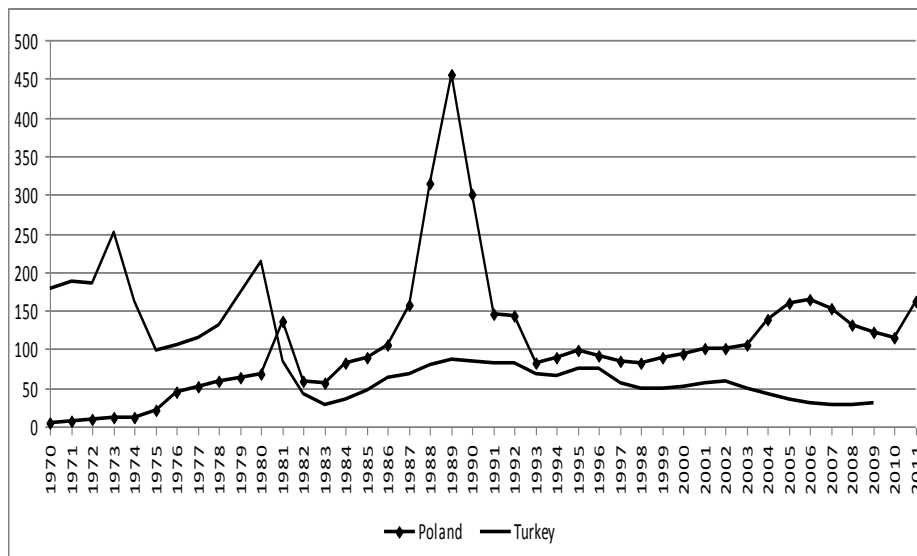
Source: Polish Central Statistical Office (2012)

**Chart 5:** Destinations of Polish migrants before and after the EU Accession



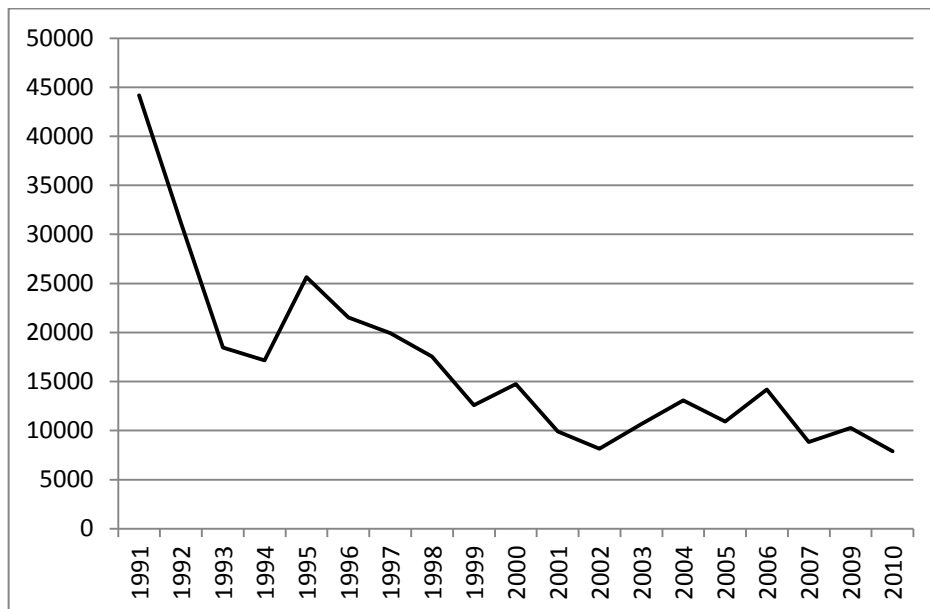
Source: migrationinformation.org (2010)

**Chart 6:** Labor migration to Germany from Poland and Turkey, 1970-2011 (thousands)



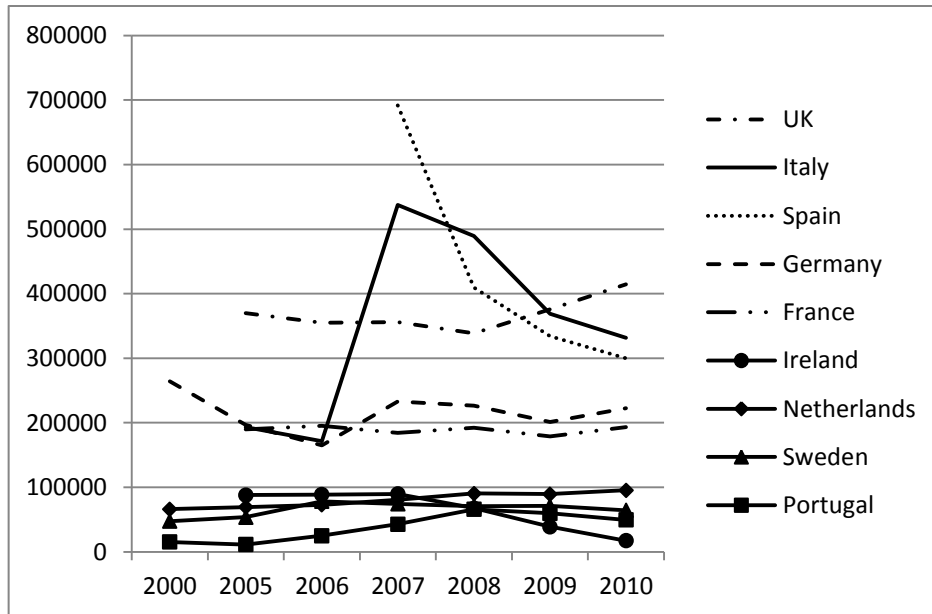
Source: United Nations (2012); Destatis (2012).

**Chart 7:** Emigration from Romania, 1991-2010



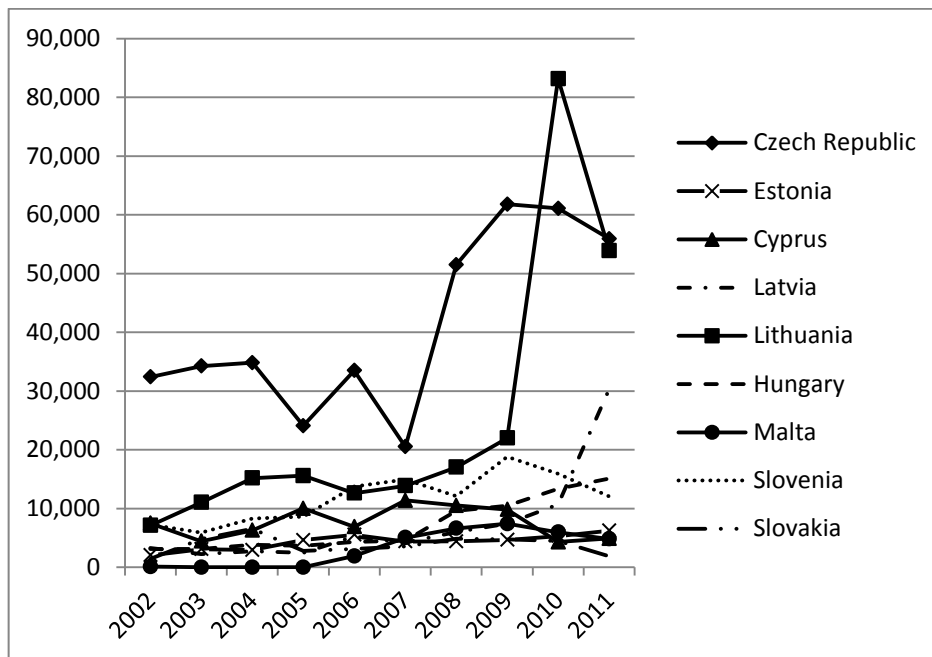
Source: CRCE (2010); OECD (2012).

**Chart 8:** Permanent immigration to selected European countries, 2000-2010



Source: OECD (2012).

**Chart 9:** Emigration from selected European countries, 2002-2011



Source: Eurostat (2013).