

# Integration prospects of Turkey into European Structures and Turkish Immigration to Germany

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## Abstract

The objective of the paper was to evaluate Turkey's integration prospects into European structures and relationships between immigration from Turkey and economic indicators in Germany using quantitative methods. Despite Turkey's unclear European integration prospects, it is predicted that Turkish immigration to established member countries of the EU will continue. The strongest waves may flow to Germany, Netherlands or France, where numerous Turkish minorities are already present and where the living standards are high. Results from the statistical analysis of the paper showed a positive correlation between immigration total and the growth of gross domestic product. On the other hand, a negative correlation of immigration total and unemployment was found and a positive relationship between immigration total and income total which is in agreement with the expected dependency direction. With regards to immigration from Turkey it is less correlated to unemployment than immigration total. But there is a correlation between immigration from Turkey and the stock of foreigners in Germany. This is in accordance with the theoretical concept of network theory where an existing community of migrants keeps attracting new migrants because the costs and risks associated with migration are lower, thanks to established linkages to the country of origin. The observed correlation of migration and unemployment points to the fact that immigration to Germany responds to changes in demand in the labour market. Even though a time lag may occur in the case of unemployment and immigration, migration appears to be a relatively effective mechanism to offset existing imbalances in German labour markets.

**Keywords:** immigration; correlation; receiving country; Germany; Turkey.

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## Introduction

Turkey is a country that originates from mixed traditions between Europe and the Near East. All the member states of the European Union have supported the beginning of negotiations with Turkey and that's what European negotiators are doing on behalf of all the countries of the European Union. So the issue with Turkey is not whether to join the European Union but when to do so. International migration is one of the accompanying phenomena of a globalized society and has significant impacts on individual economic subjects, broad ranging economic and non-economic causes and consequences. This paper is aimed at evaluating Turkey's integration prospects into European structures and the relationships between immigration from Turkey and key economic indicators in Germany using quantitative methods. It puts together relevant facts regarding international migration and provides explanations of their linkages to the macro and microeconomic developments. To determine parameters of a regression function methods of regression and correlation analysis were used, including tests of statistical significance.

## TURKEY'S INTEGRATION PROSPECTS INTO EUROPEAN STRUCTURES

Turkey has expressed its willingness to participate in European integration structures for decades. The country became an early member of the Council of Europe (in 1949), was a founding member of the OECD (Organisation for Economic Co-operation and Development) in 1961 and the Organization for Security and Co-operation in Europe (OSCE) in 1973. Turkey has been an associate member the European Economic Community, a predecessor of the European Union, already since 1963 and applied for accession in 1987 (EURACTIV, 2012a). In 1995, the European Union and Turkey signed a customs union agreement. In 1999, Turkey was officially recognised as a candidate for full membership and negotiations with the country started in 2005. The President of the European Commission, José Manuel Barroso said in an interview (2006) regarding the lengthy transition period that *"Turkey's a long term problem. It's a long term issue."* and that *"We cannot expect Turkey to become a member let's say in less than fifteen, twenty years."* (EC, 2006).

In 2007, the Turkish government unveiled an agenda for adopting most EU laws by 2013, even in the areas blocked by the EU (Kubosova, 2007), but European officials have refused to back this reform and re-consider membership. The concerns about Turkey are high because the pace of reforms is rather slow. The pace of negotiations depends on progress in legal and democratic reforms and especially in their implementation. However, there were also complaints from Turkey's side due to the slow EU accession pace. Turkey told the European Union that the slow pace of its accession talks ceased public enthusiasm for membership, but the EU insisted it was up to Ankara to push harder on reforms (NTVMSNBC, 2008). In 2006, the Chapter on Science & Research was opened and closed.

In 2012, the Prime Minister of Turkey, Erdogan confirmed that Turkey still wants to join the European Union mentioning that there are 5 million Turkish people living in Europe. *"We are natural members to the European Union. Only in Germany, that invited the Turkish labourers 50 years ago, there are 3 million Turkish people, however 50 years have passed and we have waited at the European Union's doorstep. No other country has experienced such a thing."* (CNN, 2012) And later that year he expressed his disappointment regarding the length of the EU accession process: *"I have to mention this of course. We are at the EU's doorstep for 50 years, we are still not a member. We are still an EU negotiating candidate. At such a position, I wish EU accession."* (EURACTIV, 2012a).

In 2013, negotiations continued but only one chapter out of 15 was closed. In the same year, in the wake of Ankara's crackdown on mass demonstrations on the Taksim square located in the European part of Istanbul, Germany blocked the start to new EU accession talks with Turkey. German officials said that its reservation stems from a technical issue, but German chancellor Merkel, an opponent of Turkish entry into the EU, criticized the use of overwhelming police force against

mostly peaceful demonstrators in Turkey (Dombey, Fontanella-Khan, & Peel, 2013). France is also not willing to waive their veto over unfreezing four accession chapters with Turkey until after elections for the European Parliament in June 2014 (Gültasli, 2011). Hence, it is likely that the process of accession for Turkey (until it respects all the economic and political criteria of the European Union) would take at least one or two decades from now.

In the end of 2013, EU Commissioner for Home Affairs Cecilia Malmström signed the EU-Turkey readmission agreement and launched the visa liberalisation dialogue with Turkey including a process towards the visa-free regime. The main objective of the readmission agreement is to establish, on the basis of reciprocity, procedures for the rapid and orderly readmission, by each side, of the persons having entered or are residing on the territory of the other side in an irregular manner and according to the Commissioner Malmström: *“the cooperation between the European Union and Turkey has made a significant step forward and these two initiatives in parallel which will boost the relations between Turkey and the European Union and bring benefits for their citizens”* (EC, 2013).

### **TURKISH POPULATIONS IN EUROPE**

The Turkish population of 76 mil. people will (based on UN forecasts) exceed Germany’s population (80 mil.) in approximately 5 years (Wulf, 2012). Thus Turkey would in the case of EU accession become the largest EU country. Hoekman, Togan (2005) mention that important economic effects of Turkey’s accession to the EU should be related to its size, per capita income, and dependence on agriculture. For the EU, these three factors combine to create immigration potential if migration is let free and moreover, these factors indicate that Turkey may become the largest recipient of transfers from the EU budget, at least under the present rules and policies.

The apprehensions for the increase in the number of immigrants from countries of Central and Eastern Europe after the big-bang enlargement of the European Union between 2004-2007 were also immense but not entirely fulfilled. Similar opinions keep appearing with the discussion on the potential accession of Turkey to the European Union in the future. Although the process of negotiations with the European Union is likely to take at least a decade or two to complete, this enlargement and prospective impacts for European labour markets has already become a very controversial topic in the European Union. Table 1 shows Turkish populations in the countries of the European Union.

Table 1. Turkish populations in European countries

<b>Country</b>	<b>Turkish population est.</b>	<b>Country</b>	<b>Turkish population est.</b>
Austria	350 000–500 000	Ireland	3 000
Belgium	200 000–250 000	Italy	21 000
Bulgaria	800 000–1 200 000	Netherlands	400 000–600 000
Czech Republic	1 700	Poland	2500
Denmark	70 000–80 000	Romania	30 000–80 000
Finland	10 000	Spain	4000
France	500 000–1 000 000	Sweden	100 000–150 000
Germany	3 500 000–4 000,000	Switzerland	100 000–120 000
Greece	80 000–130 000	United Kingdom	250 000

Source: Author's own estimations based on various sources

The most numerous Turkish populations in the European Union can be found in Germany and is estimated to be between 3.5 and 4 million people. The estimates for the Turkish population in France and Bulgaria are of a wide range between 800 000–1 200 000 and 500 000–1 000 000 respectively. The number of Turks in Austria and the Netherlands seem to be lower but the popula-

tion of Turkish migrants makes up a higher share in the total population of these countries than for instance in Germany. Possible incidence of Turkish EU accession on the emigration from Turkey to the European Union has been evaluated by Glazar and Strielkowski (2010). Their results reveal that both the network effect and target country labour market conditions represent the strongest determinants for migration, whilst the effect of per capita income is relatively low.

## **IMPACTS OF IMMIGRATION ON THE ECONOMY OF A RECEIVING COUNTRY**

Are the apprehensions for the increase in the number of immigrants from Turkey reasonable? An illustration regarding the impacts of immigration on the economy of a receiving country can be analysed by a supply and demand analysis on the labour market. The inflow of new labour force from abroad will increase the labour supply and thus, the price of labour (wage) will decline. The critics of free movement of labour from abroad point that immigrants are in most cases willing to accept lower wage than domestic workers and this will increase unemployment rates in the local population. However, this conclusion is overly simplistic, because one of the factors that needs to be taken into consideration is the substitution or the complementarity of immigrant labour in the labour market of a receiving country. Empirical findings concerning international migration between European countries imply that the complementarity is more spread out than the substitution, (see Baldwin & Wyplosz, 2004).

To avoid broad generalizations, the present study looked at the specific case between Turkey and Germany. Since the early sixties Turkish “gastarbeiter” (guest workers) have come as cheap manual labour, in order to fill in labour shortages in the booming German economy. Therefore, these immigrants complemented skilled German workers. This resulted in an increase in wages for skilled workers in Germany, but might have had negative impacts on wages for manual workers of both German and Turkish nationality. Hoekman & Togan (2005) argued for instance that wages were reduced for manual workers.

Due to stiff competition among less skilled workers, lower wages and language barriers for immigrants lead to problems of unemployment. Thus, there might be a risk of frequent utilization of social benefits, which ultimately might become a loss for the country if the average immigrant would draw more from the social system than he would pay (Arikan, 2006). However, past and recent research carried out in Germany refutes this hypothesis. *"It confirms the positive impact of the average immigrant on the state treasury, since immigrants are often coming into the country at the beginning of their working life and contribute to paying off the national debt."* (Arikan, 2006, 161). A very low importance of opening the German labour market for Turkish migrants was found in recent research studies (see Glazar, Strielkowski, 2010).

After the accession of Spain, Italy, Portugal and Greece to the European Union, a return migration to the country of origin has emerged. And this might be the case for Turkey too, because according to the public opinion survey among Turks in France and Germany more than 30 percent of them considered returning to their home country (Baldwin & Wyplosz, 2004). The opening of labour markets of particular member countries would in the case of Turkey probably take place with a substantial delay after the country's accession to the European Union. In a similar manner to transitional periods introduced by most of the established member countries towards new member states during the big-bang enlargement of the EU in 2004. The United Kingdom ranks along with Ireland and Sweden as the first countries that opened their labour markets for job-seekers from the new member states in 2004. Germany, Austria and France have used the option to restrict the influx of new workers from enlargements of 2004 and 2007. Even though new workers in Britain and Ireland helped the growth and competitiveness of both national economies, Bulgarians and Romanians have already experienced the introduction of the transitional period from the British and Irish governments. This, however, was a media panic of uncontrolled immigration that has spread among the public after the media and politicians relatively often argued with migration numbers that were torn out of context. Therefore it appeared to represent the political capital of voter-

pleasing populist anti-immigration policies, as opposed to an evaluation of real economic consequences, compare Cihodariu & Dumitrescu (2013).

The transitional period of France ended in 2008, when it became clear that the concerns of the influx of cheap labour from Eastern Europe were exaggerated. Germany, along with Austria decided to extend the transitional period to the maximum (until 2011). Different approaches of these three countries in the pace of opening labour markets are related to differences in labour law and employment policies. The higher the price for dismissal of non-efficient employees (set by laws and agreements with the unions), the less likely it will be that employers hire new workers (Arikan, 2006). In other words, the legal specification of the notice period is an important factor in hiring decisions as it states on what legal grounds the employer can dismiss an employee and their probationary period, etc. British law in this regard, particularly through labour market reforms by Margaret Thatcher, is very flexible, unlike France or Germany.

The flexibility in the labour market is also affected by the minimum wage and unemployment benefits. The minimum wage isn't set by law in Germany (should be introduced from 2015), so it is possible to compare the amount only in France and Britain. France has one of the highest minimum wages in the European Union (48 percent of the average gross monthly wage received in sectors of industry and services), while in Britain it is around ten percentage points less. This is the lowest minimum wage among the established member states of the European Union. Conversely, French unemployment benefits are more generous than the German and British benefits (Baldwin & Wyplosz, 2004). These few examples show that the less rigid labour market in the UK is better prepared for an influx of new workers from abroad.

Hoekman, Togan (2005) state that Turkey's membership in the EU is not expected to have significant economic effects on the present EU members, with the possible exception of immigration and EU budget transfers. They argue that Turkey has a large population, a low level of income, and a large agricultural sector and these facts could stimulate substantial migration from Turkey to Germany and other West European countries and make Turkey a recipient of large transfers from the richer EU members.

## **CORRELATIONS FOR IMMIGRATION FROM TURKEY TO GERMANY**

The objective of the paper was also to evaluate the relationships between immigration from Turkey and key economic indicators in Germany using adequate quantitative methods. Statistical techniques were adopted based on research by Mason and Lind (2000) and Hindls et al. (2007). The author assessed possible correlation patterns between immigration and other economic indicators such as gross domestic product growth, unemployment rate, total income and stock of foreigners. The data sources were based on EUROSTAT (2013). The reference period has been set for the years 2001–2011. A calculated correlation matrix for all analysed indicators, including statistical significance of correlation coefficients is shown in Table 2.

Table 2: Correlation matrix for immigration and selected economic indicators in Germany

	<b>IM</b>	<b>ITR</b>	<b>G</b>	<b>U</b>	<b>TE</b>	<b>FOR</b>
<b>IM</b>	X	0.6267 <sup>+</sup>	0.0233	-0.5958 <sup>+</sup>	0.3353	0.2526
<b>ITR</b>		X	0.0773	-0.0602	0.8767 <sup>++</sup>	0.3722
<b>G</b>			X	-0.0733	0.2209	0.0232
<b>U</b>				X	-0.5418	0.1730
<b>TE</b>					X	- 0.6646 <sup>++</sup>
<b>FOR</b>						X

Source: own calculations

Note 1: IM – immigration total, ITR – immigration from Turkey, G – gross domestic product, U – unemployment, TE – total earnings, FOR – stock of foreigners

Note 2: Correlation index:  $I_{yt}$  Significance level: <sup>+</sup>  $\alpha = 0.05$ ; <sup>++</sup>  $\alpha = 0.01$

The correlation matrix in Germany consists of indicators of immigration (immigration total, immigration from Turkey) and of indicators of gross domestic product growth, unemployment rate, total income and stock of foreigners. The results demonstrated a positive correlation between immigration total and the growth of gross domestic product, while immigration total and unemployment was negatively correlated. Furthermore, a positive relationship was found between immigration total and income total. These correlations are in agreement with the expected dependency direction. High immigration is very important for German economy. During the past five years, Germany overtook Britain and became the most favourite immigration destination. In regard of gross domestic product growth it is also notable that Germany experienced an increase in high-skilled immigration. According to DB (2014) 29% of all immigrants in Germany aged 20 to 65 who arrived in the last decade held a graduate degree while among the total population the respective figure was only 19%. Among the immigrants more than 10% had a degree in science, IT, mathematics or engineering compared to 6% among the rest of the population aged 25 to 65. The STEM-skilled workers are of key importance for further increase of German competitiveness in a challenging international economic environment.

With regards to immigration from Turkey it was less correlated to unemployment than immigration total. But a strong correlation was found between immigration from Turkey and total earnings. Thus, Turkish immigration seemed to be less sensitive to macro indicators as gross domestic product and unemployment but was much more linked directly to the development of total earnings in Germany. During the economic downturn, Turkish immigration continued because of competitive earnings in Germany. The unemployment rate in Germany has been decreasing in last few years. Current unemployment in Germany is (together with Austria) the lowest in the EU (4.7 %) and makes less than half of the EU28 average of 9.8 percent (July 2014). Germany would be therefore able to absorb even more migrants and the shortage of labour might increase costs for SMEs in Germany, calculated by E&Y (2014) as a yearly loss of 31 billion €. According to OECD (2014) 34 percent of new immigrants in Germany were high-skilled workers and the employment rate of immigrants in 2012 was 69 percent (and was growing over the time). From these and other facts we can assume that immigrants don't take jobs away from the local workers. But despite foregoing indicators, also other economic and non-economic variables might be taken into consideration. For instance, Lewer et al (2009) state that variables as the stock of immigrants from the source country already living in the destination country, population size, relative incomes, and geographic factors

also significantly drive the flow of immigration. Therefore I decided to choose one of these indicators and evaluated it. So the last indicator which has been linked to immigration is the total number of foreigners in the receiving country. The reason why this indicator has been included stems from migration theories, which argue that an already existing community of foreigners in the country attracts other migrants through established linkages to the countries of origin (see Brettell & Hollifield (2000)). This analysis demonstrates a positive correlation between immigration and the stock of foreigners, however not statistically significant. So also the existing community of Turkish migrants in Germany may facilitate further influx of immigrants from Turkey to Germany.

## CONCLUSION

Political factors play an essential role in the accession process of Turkey into the European Union but besides them, there are also important economic challenges linked to the readiness of Turkey for the EU Single Market, the Maastricht criteria, compliance with EU's economic regulations and directives, the *Acquis Communautaire* etc. The prospective membership of Turkey in the European Union is expected to have economic effects especially in the area of EU budget transfers and potentially in international migration. According to population forecasts, Turkish population will exceed Germany's population in approximately 5 years and in case of Turkey's EU accession, it would become the largest EU country with all political and economic consequences and a large immigration potential related to its growing population. Despite Turkey's unclear European integration prospects, it is likely that Turkish immigration to established member countries of the EU will continue. The strongest waves may flow to Germany, Netherlands or France, where numerous Turkish minorities are already present and where the living standards are high.

Correlations between immigration from Turkey and key economic indicators in Germany were calculated and evaluated in the statistical part of the paper. The results show the positive correlation between immigration total and the growth of gross domestic product. A negative correlation of immigration total and unemployment was also found followed by a positive relationship between immigration total and income total which is in agreement with the expected dependency direction. Germany became the most favourite immigration destination in the European Union. With regards to skills structure Germany experienced an increase in high-skilled immigration. STEM-skilled workers are very important for German competitiveness and a high influx of immigrants boosts German economy. The observed correlation of migration and unemployment points to the fact that immigration to Germany responds to changes in demand in the labour market. Even though a time lag may occur in the case of unemployment and immigration, migration appears to be a relatively effective mechanism to offset existing imbalances in German labour market. Regarding immigration from Turkey, it is less sensitive to macro indicators as gross domestic product and unemployment but is more linked directly to total earnings in Germany. The unemployment rate in Germany is currently the lowest in the EU (together with Austria). So Germany would be therefore able to absorb even more migrants and a shortage of labour might increase costs for German entrepreneurs. The share of high-skilled workers and employment rate of immigrants was also growing over the time. From these facts we can assume that immigrants don't take jobs away from the local workers and are furthermore complements for domestic workers in the labour market. But despite foregoing indicators, also other economic and non-economic variables might be taken into consideration, e.g. the stock of immigrants from the source country already living in the destination country, population size, relative incomes, and geographic factors. The correlation between immigration and the total number of foreigners in Germany is in accordance with the theoretical concept of network theory where an existing community of migrants keeps attracting new migrants because costs and risks associated with migration are lower, thanks to established linkages to the country of origin. This correlation was positive, however not statistically significant. A high stock of foreigners in the country facilitates at least in some extent various kinds of barriers for new immigrants from Turkey to Germany. The role of changes in economic indicators for immigration in Germany

is important but shouldn't be overestimated as there are also many other aspects as family reunification, quality-of-life factors, etc., that might also play a significant role in explaining immigration.

## References

- Arikan, H. (2006). Turkey and the EU: an awkward candidate for EU membership? Aldershot : Ashgate Publishing Limited.
- Baldwin, R. E. & Wyplosz, Ch. (2004). The Economics of European Integration. Berkshire : McGraw-Hill.
- Brettel, C. B. & Hollifield, J. F. (2000). Migration Theory: Talking Across Disciplines. London : Routledge.
- Cihodariu, M. & Dumitrescu L.S. (2013). The motives and rationalizations of the European right-wing discourse on immigrants. Shifts in multiculturalism, 4(2). 51-70.
- CNN (2012). Exclusive Interview with Recap Tayyip Erdogan. Available from: <<http://transcripts.cnn.com/TRANSCRIPTS/1209/07/ampr.01.html>>.
- DB (2014). Focus Europe: Migration dynamics. Available from: <<http://www.etf.db.com/GBR/ENG/Download/Research-Europe/ac691518-5c73-49d2-9667-2f4b5911760c/Focus-Europe.pdf>>.
- Dombey, D., Fontanella-Khan, J. & Peel, Q. (2013). Germany blocks Turkey's bid to join EU. Available from: <<http://www.ft.com/cms/s/0/2432cc2c-d9c0-11e2-bab1-00144feab7de.html#axzz2ptx1ia00>>.
- EURACTIV (2012a). EU-Turkey relations. Available from: <<http://www.euractiv.com/enlargement/eu-turkey-relations/article-129678>>.
- EURACTIV (2012b). Erdogan and EU. Available from: <<http://www.euractiv.com.tr/ab-ve-turkiye/article/erdoan-abnin-gucsuz-dusmesi-genis-bir-cografyayi-olumsuz-etkiler-026085>>.
- EC (2006). Interview with European Commission President. Available from: <[https://web.archive.org/web/20070614030216/http://ec.europa.eu/commission\\_barroso/president/pdf/interview\\_20061015\\_en.pdf](https://web.archive.org/web/20070614030216/http://ec.europa.eu/commission_barroso/president/pdf/interview_20061015_en.pdf)>.
- EC (2013). Cecilia Malmström signs the Readmission Agreement and launches the Visa Liberalisation Dialogue with Turkey. Available from: <[http://europa.eu/rapid/press-release\\_IP-13-1259\\_en.htm](http://europa.eu/rapid/press-release_IP-13-1259_en.htm)>.
- EUROSTAT (2013). European Statistics. Available from: <<http://epp.eurostat.ec.europa.eu>>.
- E&Y (2014). Ernst & Young Report. Available from: <[http://www.ey.com/Publication/vw/2014/\\$FILE/EY-2014ENG.pdf](http://www.ey.com/Publication/vw/2014/$FILE/EY-2014ENG.pdf)>.
- Glazar, O. & Strielkowski, W. (2010). Turkey and the European Union: possible incidence of the EU Accession on migration flows, Prague Economic Papers, 3, 218-235.
- Gültasli, S. (2011). Turkey welcomes new chapter in EU talks, wants more progress. Available from: <<http://www.todayszaman.com/news-330679-turkey-welcomes-new-chapter-in-eu-talks-wants-more-progress.html>>.
- Hoekman, B. M. & Togan, S. (2005). Turkey : economic reform and accession to the European Union. Washington, D.C. : The World Bank.
- Hindls, R. et al. (2007). Statistics for Economists. Praha: Professional publishing.
- Kubosova, L. (2007). Turkey targets 2013 for EU legal compliance. Available from: <<http://euobserver.com/enlargement/23813>>.
- Lewer et al. (2009). Do Non-Economic Quality of Life Factors Drive Immigration? Available from: <<http://ftp.iza.org/dp4385.pdf>>.
- Mason, R. & Lind, D. (2000). Statistical Techniques in Business and Economics. Boston: Irwin.
- NTVMSNBC (2008). Turkey complains at slow EU accession pace. Available from: <<http://arsiv.ntvmsnbc.com/news/448011.asp>>.
- OECD (2014). Migration Policy Debates. Available from: <<http://www.oecdlibrary.org/docserver/download/8113101e.pdf?expires=1412781950&id=id&acname=ocid72027156&checksum=24FDD83629EECEA0938A321F4B75FCA9>>.



Wulf, M. (2012). World Population Prospects: The 2012 Revision. Available from: <<http://populationpyramid.net/germany/2020/>>.