

IMPACT OF BREXIT ON THE MIGRATION IN THE UK

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Abstract: The study evaluates the impact of Brexit on the migration in the UK and determines economic implications of immigration now that UK has decided to leave the EU. Based on the available statistical data we calculate gains and losses connected with the immigration of labor force and also with the influx of asylum seekers. As a result, we present a model calculation that covers GDP created by immigrants, expenses and revenues to the state budget stemming from the economic activity of migrants, as well as taking into account the expenses necessary to provide for asylum seekers. This model allows us to evaluate the gains and losses for the UK's economy; the findings which in turn could improve the effectiveness of the receiving country's migration policy.

Keywords: immigration, labor force, GDP, losses and gains

Introduction

As the integration processes within the EU deepened, so did the concerns of the old member states regarding protecting their labor market. When 8 new member states joined EU in 2004 (in the so-called Eastern enlargement), some member states placed temporary restrictions on the access of the citizens from the new member states to their labor markets. However, United Kingdom, Ireland and Sweden did not implement any such restrictions, choosing to implement a liberal migration policy instead. Economic growth, rising wages and positive macroeconomic development created incentives for migration of labor force to UK. The trends in the migration to the UK in the past decade follow along the lines of the migration theory based on the pull and push factors with only slight departures, which can be reasonably explained by the natural societal development (Massey, et al., 1993; Adepou, et al., 2010; Kazlauskienė, Rinkevičius, 2006; Jančíková, 2014; Kraňaková, et al., 2018).

The main goal of this study is to evaluate the impact of Brexit on the migration to the UK and also to determine economic implications of immigration after UK adopted a decision to leave the EU. To do so, we have analyzed the trends on the UK's labor market – employment, unemployment, wages, number of available job vacancies, number of immigrants, etc. We have calculated GDP created by immigrants, its share on the overall GDP, expenses and revenues to the state budget stemming from the economic activity of immigrants, as well as taking into account the expenses necessary to provide for asylum seekers. The statistical data necessary for these calculations were obtained from The Migration Observatory at the University of Oxford, Office for National Statistics GB, ILO 2016 and World Bank. Finally, we have calculated economic losses and gains stemming from the migration of labor force from EU member states.

1 Migration and UK labor market

UK labor market follows the trends in the global economy. In 2009, as a result of the economic crisis, the employment rate fell from 72.6 % from the previous year to 70.9 %. The falling trend continued until 2011, when the global economic crisis went through its second phase. Following years brought moderate recovery with the employment rate exceeding its pre-crisis level in 2017, when it reached 75 %. Year 2018 so far marks historically high employment, with almost 32.5 million people

being employed. Immigrants account for 8.5 % of all employed people in the UK, with this share constantly growing in the past years regardless of economy's fluctuations. Unemployment rate in the UK started to grow already in 2008, and its growth culminated in 2011, when it reached 8.3 %. Since then it was steadily falling, and in 2016 it fell to 4.8 %. The positive trend continues in 2018, with UK government reporting historically lowest unemployment rate of 4.1 %.

Another indicator that we used to illustrate the situation on the UK labor market is the number of job vacancies. In 2008, before the full onset of economic crisis, there were 702 thousand job vacancies in the country. In the next year, this number fell by 257 thousand, and in the following years it grew only moderately. A more robust growth started in 2013, and in 2015 and 2016 the number of job vacancies stabilized around 750 thousand, all while the economic production and employment continued to grow even as Brexit became a reality. The number of available job positions continued to grow in 2017 and in August 2018 it reached 815 thousand (Table 1).

A more detailed analysis of the data regarding the employment among 14 – 64-year-old shows that while the employment of British nationals remains high, it is still lower by roughly 6% than the employment among the European immigrants, including the EU member states from the eastern enlargement and also from Bulgaria and Romania, which joined the EU in 2007. Low employment can however be observed among non-European immigrants; in general, it is lower than the national average by 12 %.

Retirees, disabled, chronically ill and primary caretakers of family members constitute for the most “passive” group on the UK labor market. When taking the migrant status into consideration, the most “passive” on the UK labor market are non-European immigrants (22 %), followed by domestic population (16 %). Afghanistan, Syria, Pakistan and Iraq are predominantly Muslim countries with a low rate of literacy. School attendance is mandatory by law, nevertheless, customs and traditions combined with social (and oftentimes also military) unrest, outdated education systems, and a chronic lack of teachers cause that the illiteracy especially among women remains on a high level (80 % in Afghanistan, 20 % in Iraq and Syria). Employment rate among women in these countries is only around 15 %, with most of them working in a household, thus not having a paid position. Immigrants often bring this way of life to their new host country with them. Cultural factors and traditions can also explain relatively low involvement among the older generation, whose lifestyle is more likely to be shaped by the notions of societal hierarchy and social class.

An important characteristic adding to the picture of the UK labor market is the age structure of employed population. The labor market reflects the trend of ageing population, with people aged 45-49 and 50-54 being the most numerous groups with 13.16 %. The second biggest group consists of people aged 25-29 (11.36 %). The age structure of employed immigrants is considerably more favorable – 30-34 year-olds are the most numerous group (22.45 %) followed by 35-39 year-olds (17.92 %) and 25-29 year-olds (16.95 %).

This also suggests that immigrants belonging to these two age groups arrived to the country after finishing their education and vocational training, and thus the UK gained qualified labor force without costs. The Statistic office published an analysis which compared the skillset of British nationals and immigrants. (The Migration, 2017). It concluded that the qualifications of immigrants are considerably higher when compared to British nationals occupying the same job position. It is also necessary to

Table 1 Trends on the UK labor market in 2007 - 2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Employment (in mil.)	29.4	29.6	29.2	29.2	29.4	29.7	30.1	30.8	31.3	31.7	32.06
Employment rate	72.7	72.6	70.9	70.4	70.3	71	71.6	72.9	73.7	74.4	75
Unemployment (in mil.)	-	1.86	2.49	2.5	2.64	2.51	2.39	1.96	1.71	1.62	1.47
Unemployment rate (in %)	5.2	6	7.9	7.9	8.3	7.8	7.4	6	5.2	4.8	4.4
Number of job vacancies (thousand)	638	702	445	460	490	465	500	600	749	755	774
Average wages (USD/week)	420	440	419	440	450	458	460	469	480	489	503

Source: Office, 2017; The Migration, 2017.

note that human productivity culminates around 30-33 years of age, and, as we have stated earlier, it is precisely this age group of immigrants that constitutes for the largest part of employed immigrants in the UK.

2 Impact of asylum seekers in the UK on public finances

The European refugee crisis (also known as a migrant crisis), which reached its worst point in 2015, had a relatively small impact on the UK, especially when compared with some other EU countries. In 2012, 28,900 people sought asylum in the UK. Even though this number rose to 40,400 in 2015, this increase is incomparable with the influx of asylum seekers that we could observe in Germany, Hungary, Sweden, or Italy.

Asylants in the UK are faced with a myriad of obstructions and a difficult and lengthy process of integration into the UK labor market, which allows for 12 month waiting period for work permit; this being the longest waiting period in the EU. Starting one's own business or to gain a self-employed status is even more difficult. At the same time, there is only a limited list of jobs that asylants can apply for; jobs that often require qualifications and skillset that asylants are lacking. Because of these and also other measures, a successful integration into the UK labor market is almost impossible for a majority of asylum seekers.

A long period of being prevented from entering the labor market is troubling especially when taking into account the psychological effects of prolonged unemployment. A person loses working habits after 12-month long unemployment, thus making it even more difficult for them to find an employment afterwards. A long term lack of activity also negatively impacts social skills, especially in case of older people. According to the German Federal Ministry for Labor and Social Affairs, refugees that are not yet 35 years old have relatively good prospects for requalification, however, those aged 40 and older struggle.

One of the most prominent factors for a successful integration is speaking the language of the host country. A sufficient knowledge of English language is crucial when entering the UK labor market. However, yearly language courses in the UK cost £1,600. While it is possible for asylants to delay the payment, the owed amount still has to be paid within the first 6 months after entering into an employment. The cost of these courses, while not prohibitive as such, adds to the financial pressure put on asylants, who face a multitude of other obstacles and difficulties when trying to integrate into the host country.

Wages are another factor to be considered. The minimum wage in the UK is set differently for different age groups. As of April 2017, employees aged 25 and older should earn at least £7.50/hour, however, a lower minimum wage applies to younger demographics – £7.05/hour for age group 21-24, £5.60/hour for age group 18-20, and £4.05/hour for employees under 18 years of age. Even though the average wage in the UK is at the level of £11.30/hour and thus considerably higher than the minimum wage, the minimum wage is the top level that most of working asylants achieve; their wages growing only minimally even after ten years in employment.

In the UK, asylum seekers are provided with free accommodation (a flat, a house, a hostel room, or even only a single bed) with breakfast, with the exception of London and

Southeast England, where accommodation is not provided. Asylum seekers are offered accommodation in the less populated and less developed areas of the UK, and they cannot refuse offered option. Healthcare is covered by the free National Health Service and includes doctor's visits, hospital stays, free prescriptions for medicine, free dental care, eye tests, and contribution for prescription glasses. Education is free in the public sector schools and school attendance is mandatory for children aged 5-17, regardless of their asylant status. At school, children receive free school lunches.

In 2015, UK pledged to welcome 20,000 Syrian refugees before 2020, however, it seems probable that UK will not fulfill this commitment as up to this point it resettled less than 2,000 refugees. The government appointed £8,520/year per person to cover the costs for accommodation, interpreters, transportation and other services connected with the life of a refugee during the process of applying for an asylum. The financial support is planned to continue for the whole duration of five years, gradually decreasing year by year to £5,000 in the second year, £3,700 in the third year, £2,500 in the fourth year, and £1,000 in the fifth year. The education for children aged 5-18 is subsidized with £4,500 per person (£2,250 per children aged 3-4). While seemingly generous, according to expert estimates, these benefits cover only 70-80 % of overall costs (How much, 2017).

In 2017, more than 26 547 refugees applied for an asylum in the UK. According to the state of the current funding rules for Syrian refugees, this number of asylum applicants could potentially cost British government 226.18 million pounds in the first year, 132.74 million in the second year, 98.22 million in the third year, 66.37 million in the fourth year, and 26.55 million in the fifth year. Altogether, 26 500 asylants could cost British government more than 600 million pounds over the duration of five years. If we also add the additional funding for child education for 2399 children, who in 2017 arrived in the country unaccompanied, and also for 2944 children aged 5-17 with mandatory school attendance, the costs rise by more than 24.04 million pounds per year. Considering that asylum seekers are not allowed to enter the UK labor market before the asylum process is finished, their integration process is very demanding for public finances.

3 Results and discussion

Based on statistical data, more than 3.5 million immigrants were contributing to the British GDP in the beginning of 2018. In 2007, UK GDP amounted to 3,063 billion USD. After the onset of the global economic crisis it diminished significantly and the falling trend continued until 2011, when it started to grow again until 2014. This positive trend stopped in 2015 and 2015, probable causes being the worsening migration crisis in Europe and Brexit referendum results. Considering that the employment continued to grow even when GDP did not, one can assume that labor productivity decreased during the past few years. This could be explained by a combination of three factors: a growing share of GDP created by immigrants, decreasing number of immigrants from EU and increasing number of immigrants from the third countries often working on a low skilled job positions and thus producing smaller value added.

Table 2 Selected macroeconomic indicators and labor market indicators in the UK in 2007-2017

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
GDP (billion USD)	3063	2875	2367	2430	2609	2646	2720	2999	2861	2619	2622
Chain index GDP	x	0.9386	0.8233	1.0266	1.0737	1.0142	1.0278	1.1028	0.9540	0.9154	1.0011
Basis index GDP	x	x	0.8233	0.8452	0.9075	0.9203	0.9459	1.0431	0.9951	0.9110	0.9120
Per capita GDP (USD)	40892	40317	38281	38710	38988	39226	39709	40621	41184	41603	39720
GDP per person employed (USD)	104262	97037	81184	83139	88814	89100	90514	97513	91452	82551	81784

Source: Office, 2017; World Bank, 2018.

Through a correlation analysis of time series covering the period 2000 - 2017 for both indicators of economy's performance (GDP) and the number of working migrants we determined a strong correlation (0.711095) at a significance level of 0.05. Subsequently, we have conducted a regression analysis in order to verify the assumption that the higher number of working immigrants contributes to the increase in the economy's performance (GDP). While doing so, we worked with the premise that the more skilled and qualified working positions create more added value. The number of working migrants serves as an independent variable and GDP as a dependent one.

Regression function takes the form $y = 1244.459 + 0.096610 \cdot x$, meaning that if the number of working migrants were zero GDP would be 1.244 billion USD (Intercept value – b_0), and the increase of the number of working immigrants by 1 would lead to an increase in GDP by 96 610 USD (value X variable 1). P-value, which expresses the significance, is 0.001072 < 0.05 for intercept and 0.000938 for regression coefficient, therefore confirming the statistical significance of both the intercept and the regression coefficient. The values of 95% confidence interval for b_0 and b_1 suggest that adding one working immigrant to the UK's labor market with 95 % probability leads to the UK's GDP increase by 45 985 USD – 147 236 USD.

Table 3 Regression analysis

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1244.459	312.5293	3.981896	0.001072	581.926791	1906.992	581.9268	1906.992
X Variable 1	0.096610	23.88097	4.045509	0.000938	45.9853003	147.2361	45.9853	147.2361

Source: Author's own calculations

Multiple R (correlation coefficient) being equal to 0.711095 suggests that there is a strong positive correlation between the number of immigrants and GDP. The value of coefficient of determination (R Square) means that our model explains 50.57 % of the dependent variable – GDP, the rest being a residual (unexplained) variance.

Table 4 Correlation coefficient, coefficient of determination

Regression Statistics	
Multiple R	0.711095
R Square	0.505656
Adjusted R Square	0.47476
Standard Error	316.8669
Observations	18

Source: Author's own calculations

Table 5 ANOVA

	df	SS	MS	F	Significance F
Regression	1	1643236.6	1643237	16.36615	0.000938
Residual	16	1606473.9	100404.6		
Total	17	3249710.5			

Source: Author's own calculations

Table 5 contains the values of explained (regression) variance, residual (unexplained) variance and total variance. SS is sum of squares, df degrees of freedom, and MS is mean square. F-test is used to evaluate the analysis of the total deviation. Since significance $F < \alpha$ (0.000938), the null hypothesis is rejected. Based on the F-test results, the model is statistically significant and was selected correctly.

A more detailed statistical data show that 7 %, i.e. almost 2.2 million immigrants living in the UK came from other EU member state. More than 860 thousand of them has a highly qualified job position or they arrived to the country with financial capital for research and development (Kazlauskienė, Rinkevičius, 2006; Daugėlienė, 2007; Kordos, Krajnakova, 2018). The biggest share of immigrants from the EU work in expert and technical jobs (45 %) and as part of the management (11%). When looking into the occupations of immigrants from the new EU member states, the biggest share (20 %) works in engineering, 13 % of them works in expert and technical jobs, followed by qualified sales positions (15 %). (Divinský, 2007; Rosenow, 2009; Schaeffer, 2010; Krajnaková, Strunz, 2014; Srovnalíkova, Karbach, 2016). That means that, contrary to the often publicized belief, immigrants from the EU do not occupy mostly low-skilled jobs, which are uninteresting for domestic workers.

It is true that almost one third of immigrants from the EU work in lower-skilled jobs, however, those are mostly perceived as a stepping stone and immigrants often choose then after entering the country to improve their language skills and subsequently find other employment, one with a better salary or better work conditions or one connected with a higher social status.

According to the UK statistical data on migration, the Brexit referendum was followed by decrease in immigration from EU14 and stagnation of immigration from EU8 (Czech Republic, Estonia, Hungary, Slovakia, Slovenia, Poland, Lithuania and Latvia). Considering the fact that in 2017 74 % of immigrants from the above mentioned countries came to UK to work and that the employment rate among the EU immigrants was more than 80 %, one can state that with a growing number of unoccupied job positions UK labor market is dependent on labor activity of immigrants. Our correlation and regression analysis came to the same conclusion. Table 6 demonstrates the decrease in immigration in 2016, which could very well be connected with the uncertainty following the referendum. Even though immigration picked up the pace again in 2017, this increase was accompanied by a growth in emigration as well, suggesting that Brexit led to increased remigration of EU citizens, especially from the EU8 countries.

Table 6 Net migration in UK 2007 - 2017

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Immigration	574	590	567	591	566	498	526	632	631	588	644
Emigration	341	427	368	339	351	321	317	319	299	339	360
Net migration	+233	+163	+199	+252	+215	+177	+209	+313	+332	+249	+284

Source: The Migration, 2017.

Immigrants coming from EU14 usually work on either qualified or highly qualified positions, which require higher expert education. Then leaving the country would mean a considerable loss of added value which they produce through their work. Immigrants from EU8 countries, even though usually well educated, occupy in most cases position requiring somewhat lower, but to a certain extent still vocational, qualifications. The results of our analyses suggest that Brexit's impact in the migration and the economic development of the country will be a negative one, with Britain losing part of its economic potential, especially during the period of global economic expansion. Nevertheless, an adequate evaluation of changed migration flows' impact will only be possible in the next few years.

4 Conclusion

Our analysis suggests that migration as such has in general a positive impact on British economy, especially in case of immigrants from the other EU member states (both new and old ones). Immigrants from EU member states often work in high qualified positions that bring higher added value, and their salaries are above national average. At the same time, such immigrants constitute an advantage in the global economy. Immigrants working other technical and manufacturing jobs are also beneficial for the economy. If 3.4 million of immigrants employed in the UK left the country and returned home, the daily life in the UK would struggle to continue to go on without a hitch. Sectors that would be affected especially hard include hospitality and food industry, services, social care, healthcare, etc. The asylum policy implemented in the UK also leaves a room for improvement. UK should accordingly adjust its migration policy in order to maximize the gains and minimize the losses stemming from the migration.

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