

3.2 THE IMPACT OF IMMIGRATION ON THE LABOUR MARKET SITUATION OF THE EMPLOYEES OF RECIPIENT COUNTRIES IN EUROPE – SUMMARY OF EMPIRICAL FINDINGS*

KATALIN BÖRDŐS, MÁRTON CSILLAG & ANNA OROSZ

This Sub-chapter examines the impact of immigration on the labour market situation of the employees of recipient countries in Europe, relying on empirical economic studies published in the past fifteen years.

According to the simplest theoretic model of the labour market, a wave of immigration increases the labour supply of recipient countries, which reduces wage levels and expands employment *in the short run*. This model assumes that the labour force is homogeneous, i.e. immigrants are perfect substitutes for the employees of the recipient country. However, according to economic theory, migration does not lead to reduction in average wages *in the long run*: it may result in the expansion of employment, since the utilisation of cheaper production factors (employees) reduces the production costs and increases the profit of businesses, which in turn encourages more investment, increases the employment rate and wages.¹ Our summary asks the question: does empirical research shed light on whether immigration reduces the wages or employment rate of employees in the recipient country?

The short-term impact of immigration

Bratsberg et al. (2014) examined, using a skills-group approach,² how immigration influenced the wages of local male employees between 1993 and 2006 in *Norway*. The authors estimated the effects of the country of origin of immigrants. Their study concludes that if the share of immigrants increases in a “quasi” labour market defined by educational attainment and age, the wages and employment rate of recipient country employees fall. This is primarily due to migrants from other Scandinavian countries, who probably compete directly with Norwegian employees. Immigrants from other developed countries have a smaller effect, while immigrants from developing countries have no negative effect on wages. The authors found that a one per cent increase in the number of immigrants from other Scandinavian countries reduces the wages of Norwegian men by 0.35 per cent within a year.

Empirical studies on *Germany* point out the peculiarities of the German labour market in the 1980s and 1990s: due to central wage negotiations and strong trade unions, wages in the German economy changed slowly and relatively inflexibly. Thus the labour market primarily adapted to shocks through changes in the employment rate.

* We are thankful to *Ádám Török* and *Balázs Váradi* for providing useful comments on earlier versions of the manuscript; although any errors are our own.

1 For more details on the theoretical background see e.g. *Borjas* (1999).

2 *Skills-group approach* defines the labour market, where employees compete with one another, by the dimensions of skills relevant for the labour market. For more details on the methodology see *Borjas* (2003).

Bonin (2005) examines the impact of immigration on the labour market situation of men from the mid-1970s to 1997, applying a skills-group approach. He defines immigrants as non-German citizens, that is, German nationality individuals arriving from Eastern Europe in the 1990s in great numbers are included among the native population. *Glitz* (2012), on the other hand, investigates the influx of German nationality immigrants from Eastern Europe, combining both a regional³ and a skills-group approach.

Bonin (2005) did not observe adverse impacts on the level of employment, although when only the period from 1990 to 1997 is considered, there is a slight but significant crowding out effect: a 10 per cent rise in the share of immigrants increased the probability of unemployment among the Germans by 1.5 per cent on average. The negative wage effect was also small: a 10 per cent increase in the share of immigrants reduced the wages of the native population by less than 1 per cent on average. The findings of *Glitz* (2012) indicate that the influx of German nationality immigrants did not influence wages but had an adverse impact on the employment rate of the local population: among men, the entry of every 10 immigrants caused the job loss of 3.1 local employees on average, which mainly affected young and older workers.

Ortega-Verdugo (2014) used a skills-group approach to study the impact of (mostly unskilled) immigrants in *France* between 1968 and 1999 on the wages of French male employees. The findings showed that immigration has a *positive correlation with* wages and employment rates. However, this was due to significant changes in the wage structure in the period under study – irrespective of immigration –, which meant that differences between the wages of the low-qualified and highly qualified decreased considerably. The authors also point out that due to increasing immigration, French and immigrant employees of similar age and educational attainment shifted to dissimilar professions and French employees worked increasingly in high-skill positions.

Based on individual longitudinal data, *Ortega-Verdugo* (2015) examined the impact of unskilled migration during the period from 1976 to 2007 on the labour market situation of male French manual workers. The authors observe that in the micro-regions and occupations where the share of immigrants grew, the wages of French workers decreased, notably in the service and especially in the construction sector. Accordingly, if the share of immigrants within manual workers increased by 10 percentage point in a micro-region, the (median) wage of French employees fell by 1.3 per cent in the service sector and by 3.6 per cent in the construction sector, while the decrease was not significant in the processing industry. However, this negative effect was mitigated by two tendencies. Firstly, high ability French workers (especially in the processing industry) moved to other positions. Secondly, less competent French workers moved from micro-regions with a high influx of immigrants.

³ The *area-based approach* is based on comparing the labour market of regions of a country characterised by a high influx of immigrants with regions with low immigration levels. The method can only be applied if the influx is not dependent on the labour market prospects of the regions concerned. If this prerequisite is not fulfilled, researchers usually use the methods of the ‘difference in differences’ or instrumental variables. For more details on the methodology see *Grossman* (1982).

In *Spain*, the number of African and South American immigrants, typically lower qualified than the Spanish workforce, increased to nearly 11-fold between 1991 and 2005. *Carrasco et al.* (2008) used a skills-group approach to estimate the impact of immigration on the wages and employment rate of the native population between 1991 and 2011. The analysis only revealed a negligible significant effect on wages: a ten per cent increase in the number of immigrants resulted in a 0.2 per cent fall in the wage levels of the native population.

In the 1990s, more than three million immigrants arrived in *Israel*, which increased the population of the country by 12 per cent in a decade (*Friedberg*, 2001). More than one-third of immigrants arrived from former Soviet Union Republics. Applying a skills-group approach, both *Friedberg* (2001) and *Cohen-Goldner-Paserman* (2006) reached the conclusion that immigration did not have a negative impact on the labour market situation of the Israeli population.

According to *Friedberg* (2001), immigration had a positive impact on Israeli wages: a 10 per cent rise in the share of immigrants in a given profession raised the wages of the local employees by 7.4 per cent on average. *Cohen-Goldner-Paserman* (2006) found that the increased share of immigrants had no or negligible impact on the probability of losing jobs among men (a 10 per cent increase only raised the probability by 0.49 per cent maximum), while in the case of women – especially in the public sector – it led to decrease in the likelihood of job-loss. Both studies point out the phenomenon that immigrants typically obtained lower-wage and/or higher-turnover jobs despite possessing higher qualifications and several years of work experience in their country of origin. Consequently, not even immigrants and locals with a similar educational attainment and work experience are close substitutes – they rather complement one another.

Turkey is the country most affected by the present wave of refugees. Immigration is uneven among Turkish regions: the majority of Syrian refugees are concentrated in regions near the Turkish-Syrian border. The impacts of the wave of refugees are investigated by several studies, all of them relying on the *regional approach*. As for their educational attainment, Syrian refugees do not differ much from the population of the southern, typically underdeveloped, Turkish regions, therefore it is possible to start from the simplifying assumption that Syrian refugees may become direct competitors of Turkish employees (*Ceritoglu et al.*, 2015).

Del Carpio-Wagner (2015) reports that the *crowding out effect* of Syrian workers is significant: the entry of ten Syrian refugees to the local labour market causes the job loss of about three Turkish workers, which affects primarily the employment of women and low-qualified employees as well as of non-registered workers. However, this strong crowding out effect is tempered by

a significant internal out-migration effect. Average wages remained unchanged but, because of changes in the composition of employees, wages decreased in some segments (e.g. informal sector, low-qualified, women). The findings of the study are consistent with the conclusions of *Akgündüz et al.* (2015) and *Ceritoglu et al.* (2015).

The medium- and long-term impact of immigration

Cattaneo et al. (2013) analysed what happens to local employees in two to four years following the point when the proportion of immigrants in their profession increases substantially, based on individual longitudinal data from the period of 1995–2001 from 11 countries of the European Union. The authors conclude that neither domestic migration nor the loss of jobs of local employees increased as a result of immigration. Moreover, the (monthly) wages of local employees slightly (though statistically not significantly) improved with immigration. What is the cause of this favourable tendency? According to the authors' findings, if the proportion of immigrant employees rises by ten percentage point in a profession, the probability of local employees being promoted grows by 16 per cent within two years and by 20 per cent within four years. Although the probability of promotion also increased in manual and simple non-manual professions, the impact was more pronounced in (non-management) professions requiring higher education qualifications.

A similar conclusion has been reached by *D'Amuri–Peri* (2014), by analysing data from 15 Western European countries relating to the period from 1996 to 2010, using a skills-group approach. The authors examined the job quality of local employees and quantified whether they have monotonous/manual or complex/intellectual tasks. The findings indicate that the employees of the 15 countries are not driven out from work by immigrants; on the contrary, they are promoted to positions with more complex tasks. According to the authors, this confirms that immigrants – since they are not proficient in the language of the recipient country – can mainly take up monotonous/manual jobs and in this way labour supply expands in these occupations. This raises the value of complex/intellectual occupations which are complementary to manual jobs, and local employees shift to those. The authors also checked whether labour market institutions (e.g. the stringency of labour regulations) influences the extent to which local employees are promoted to higher positions as a result of immigration. It seems that stringent legal frameworks slowed down this adaptation process. Such an institutional system especially reduced the promotion prospects of low-skilled employees and it primarily had adverse effects in the years of the recent economic crisis.

Foged–Peri (2013) examined the impact of the influx of refugees that intensified in the 1990s in *Denmark* – the country with one of the most flexible labour markets of Europe – following the outcomes of local employees

until 2008. Since the educational attainment of refugees was low, only the career of local employees with a maximum of an upper secondary school leaving qualification was mapped. The findings clearly showed that the influx of refugees had a positive impact, which spread gradually and fully materialized some five-six years after the settlement of the refugees. In micro-regions with a high proportion of refugees, a larger share of native employees were promoted, their wages increased and their employment rates did not fall even when compared local employees with a similar background living in micro-regions with a small share of refugees. The influx of refugees particularly favourably affected the career of younger employees and those with a versatile skill-set. In practice, in five years following the influx of refugees, the wages of young workers were four per cent higher in micro-regions where the share of refugees increased by one per cent.

Ruist (2013) focused on the effect of the influx of refugees from regions hit by (civil) war, using data from the period from 1998 to 2007 and an area-based approach, in Sweden. The findings suggest that the influx of refugees did not have an impact on the employment rates of the Swedes or earlier immigrants from high-income countries; however, it significantly increased the probabilities of job loss for earlier immigrants from medium- and low-income countries: every ten new refugees forced eight earlier immigrants out of the labour market.

The number of immigrants grew significantly in the *United Kingdom* between 1975 and 2005; however, as opposed to many European countries, a large proportion of immigrants were relatively highly qualified, especially in the period from 1995 to 2005. Two studies found that immigration had no significant impact on the *average wage* of local employees; it only influenced the distribution of wages (*Manacorda et al.*, 2012 and *Dustmann et al.*, 2013). Both papers point out that immigrants of similar age and educational attainment are not close substitutes of local employees – but rather complement them, which is supported by the fact that they work in different industries and positions. *Manacorda et al.* (2012) show that the newly arriving immigrants only had a negative impact on the wages of earlier immigrants but their influx increased the wages of native employees. *Dustmann et al.* (2013) estimated directly how immigration affected the distribution of wages in the regions of the United Kingdom between 1997 and 2005. Their results revealed that only the wages of low-wage earners decreased as a result of immigration, that of mid- and high-earners increased. Thus a one per cent rise in the share of immigrants increased the average wage of local employees by 0.2 per cent.

The study of *Ortega-Verdugo* (2014) on *Spanish* immigration offers a possible explanation for why many papers find only negligible wage effects even in the case of large-scale immigration. The study applies the area-based approach and examines the period 2000–2006. The findings reveal that total employ-

ment grew considerably in the regions concerned. The authors found that neither the employment rate nor the wages of Spanish employees decreased as a result of immigration. The reason for this is that businesses utilise the abundant production factor (unskilled labour) more intensively: 45–75 per cent of the surplus workforce became employed through this channel. The study also describes another form of adaptation: a 10 per cent increase in the number of female immigrants increased the employment rate of Spanish women with higher education qualifications by 2.2 percentage points, that is, female immigrants typically replaced local female workers in the field of household services. Due to the increased employment of highly qualified women, demand for workforce in household services grew and in this way the pressure on the wages of the low-qualified eased.

Table 3.2.1. below summarises the empirical findings reviewed. It is clear that while the short-term effects of immigration on the labour market situation of the native population are mixed, there are typically positive effects in the long run.

Table 3.2.1.: Summary of empirical findings

Country	Employment effect		Wage effect	
	negative	neutral or positive	negative	neutral or positive
Short-term effects				
Germany	<i>Bonin (2005) – only men</i>			
Spain		<i>Carrasco et al. (2008)</i>	<i>Carrasco et al. (2008)</i>	
France	<i>Ortega-Verdugo (2015) only men*</i>	<i>Ortega-Verdugo (2014)</i>	<i>Ortega-Verdugo (2015) – only men*</i>	<i>Ortega-Verdugo (2014)</i>
Israel	<i>Cohen-Goldner-Paserman (2006) men</i>	<i>Cohen-Goldner-Paserman (2006) women</i>		<i>Friedberg (2001)</i>
Norway			<i>Bratsberg et al. (2014) men</i>	
Turkey	<i>Wagner et al. (2015), Ceritoglu et al. (2015) Akgündüz et al. (2015)</i>		<i>Wagner et al. (2015)</i>	
Mid- and long-term effects				
Denmark		<i>Foged-Peri (2013)**</i>	<i>Foged-Peri (2013)**men</i>	
Spain		<i>González-Ortega (2014)</i>	<i>González-Ortega (2014)</i>	
Sweden	<i>Ruist (2013)</i>			
United Kingdom			<i>Manacorda et al. (2012) men, Dustmann et al. I (2013)</i>	
EU		<i>Cattaneo et al. (2013)</i>	<i>Cattaneo et al. (2013)</i>	

* The findings of *Ortega-Verdugo (2015)* only apply to male employees having an upper secondary school leaving qualification at most.

** The findings of *Foged-Peri (2013)* only apply to male employees having an upper secondary school leaving qualification at most

Conclusion

According to the literature we reviewed, immigration has a negligible short-term impact on the labour market situation of local employees. How and to what extent it impacts various groups depends on the competences of immigrants: their school attainment and foreign language skills. In the past 25 years, immigrants to Europe usually did not substitute native employees because of their relatively low level of these competences – and this is especially true for refugees. In this respect, researchers *generally* found a significant negative impact only in contexts where immigrants arrived from groups that are culturally similar to local employees. Immigration significantly affected industries and professions adversely in the short run which are characterised by simple manual work (such as construction or agriculture).

Immigration in the medium term already exerts positive or no effects on the labour market situation of local employees. This is due to two tendencies. On the one hand, businesses dynamically adapt to the increased supply caused by immigration and switch to technologies relying to a larger extent on unskilled labour. On the other hand, the relative value of complex/intellectual professions – which are in a complementary relationship with the relatively simple manual work undertaken by immigrants – increases and local employees shift to them. Consequently, immigration leads to a more efficient division of labour; local employees transfer to higher grade positions and thus their earnings increase. The extent of the latter tendency and how fast the positive effect of immigration is exerted greatly depends on the institutional framework and the flexibility of the labour market.

References

- AKGÜNDÜZ, Y. E.–VAN DEN BERG, M.–WOLTER, H. (2015): [The Impact of Refugee Crises on Host Labor Markets: The Case of the Syrian Refugee Crisis in Turkey](#). IZA Discussion Paper No. 8841, Institute for the Study of Labor (IZA).
- BONIN, H. (2005): [Wage and Employment Effects of Immigration to Germany: Evidence from a Skill Group Approach](#). Institute for the Study of Labor, Discussion Paper, No. 1875.
- BORJAS, G. J. (1999): The Economic Analysis of Immigration. In: *Ashenfelter, O. C.–Card, D.* (eds.): *Handbook of Labor Economics*, North Holland, Amsterdam, pp. 1697–1760.
- BORJAS, G. J. (2003): [The Labor Demand Curve Is Downward Sloping: Re-examining the Impact of Immigration on the Labor Market](#). *The Quarterly Journal of Economics*, Vol. 118, No. 4, pp. 1335–1374.
- BORJAS, G. J. (2014): *Immigration Economics*. Harvard University Press, Cambridge, MA.
- BRATSBERG, B.–RAAUM, O.–RØED, M.–SCHØNE, P. (2014): [Immigration Wage Impacts by Origin](#). *The Scandinavian Journal of Economics*. Vol. 116, No. 2, pp. 356–393.
- CARRASCO, R.–JIMENO, J.–ORTEGA, A. (2008): [The Effect of Immigration on the Labor Market Performance of Native-Born Workers: Some Evidence for Spain](#). *Journal of Population Economics*, Vol. 21, No. 3, pp. 627–648.
- CATTANEO, C.–FIORIO, C.–PERI, G. (2013): [What Happens to the Careers of European Workers When Immigrants ‘Take Their Jobs’?](#) IZA Discussion Paper, 7282, Institute for the Study of Labor (IZA).
- CERITOGU, E.–GURCIHAN YUNCULER, H. B.–TORUN, H.–TUMEN, S. (2015): [The Impact of Syrian Refugees on Natives. Labor Market Outcomes in Turkey: Evidence from a Quasi-Experimental Design](#). IZA Discussion Paper, 9348. Institute for the Study of Labor (IZA).

- COHEN-GOLDNER, S.–PASERMAN, M. D. (2006): [Mass Migration to Israel and Natives' Employment Transitions](#). *Industrial and Labor Relations Review*, Vol. 59, No. 4, pp. 630–652.
- D'AMURI, F.–PERI, G. (2014): [Immigration, Jobs, and Employment Protection: Evidence from Europe before and during the Great Recession](#). *Journal of the European Economic Association*, Vol. 12, No. 2, pp. 432–464.
- DEL CARPIO, X. V.–WAGNER, M. C. (2015): [The Impact of Syrians Refugees on the Turkish Labor Market](#). Policy Research Working Paper, WPS7402, The World Bank.
- DUSTMANN, C.–FRATTINI, T.–PRESTON, I. P. (2013): [The Effect of Immigration along the Distribution of Wages](#). *The Review of Economic Studies*, Vol. 80, No. 1, pp. 145–173.
- FOGED, M.–PERI, G. (2015): [Immigrants' Effect on Native Workers: New Analysis on Longitudinal Data](#). Centre for Research and Analysis of Migration (CReAM), Department of Economics, University College London CReAM Discussion Paper Series, 1507.
- FRIEDBERG, R. M. (2001): [The Impact of Mass Migration on the Israeli Labor Market](#). *The Quarterly Journal of Economics*, Vol. 116, No. 4, pp. 1373–1408.
- GLITZ, A. (2012): [The Labor Market Impact of Immigration: A Quasi-Experiment Exploiting Immigrant Location Rules in Germany](#). *Journal of Labor Economics*, Vol. 30, No. 1, pp. 175–213.
- GONZÁLEZ, L.–ORTEGA, F. (2014): [How Do Open Economies Adjust to Large Immigration Flows? Sectoral Specialization, Household Services, and Other Mechanisms](#). DICE Report, Vol. 12, No. 2, Ifo Institute for Economic Research at the University of Munich.
- GROSSMAN, J. B. (1982): [The Substitutability of Natives and Immigrants in Production](#). *The Review of Economics and Statistics*, Vol. 64, No. 4, pp. 596–603.
- LABANCA, C. (2014) [The Effects of a Temporary Migration Shock. The Case of the Arab Spring Migration toward Italy](#). University of California, San Diego, August.
- LONGHI, S.–NIJKAMP, P.–POOT, J. (2010): [Meta-Analyses of Labour-Market Impacts of Immigration: Key Conclusions and Policy Implications](#). *Environment and Planning C: Government and Policy*, Vol. 28, No. 5, pp. 819–833.
- MANACORDA, M.–MANNING, A.–WADSWORTH, J. (2012): [The Impact of Immigration on the Structure of Wages: Theory and Evidence from Britain](#). *Journal of the European Economic Association*, Vol. 10, No. 1, pp. 120–151.
- ORTEGA, J.–VERDUGO, G. (2014): [The Impact of Immigration on the French Labor Market: Why so Different?](#) *Labour Economics*, 29 (C): pp. 14–27.
- ORTEGA, J.–VERDUGO, G. (2015): [The Impact of Immigration on the Local Labor Market Outcomes of Blue Collar Workers: Panel Data Evidence](#). CEP Discussion Paper, CEPDP1333. Centre for Economic Performance (CEP), London.
- RUIST, J. (2013): [The Labor Market Impact of Refugee Immigration in Sweden 1999–2007](#). Stockholm University Linnaeus Center for Integration Studies Working Paper No. 1.