



BRIEFING

The Fiscal Impact of Immigration in the UK

AUTHOR: DR CARLOS VARGAS-SILVA

PUBLISHED: 14/09/2016

NEXT UPDATE: 14/09/2017

4th Revision



www.migrationobservatory.ox.ac.uk

This briefing provides an overview of the existing estimates on the impact of immigration on government finances for the UK and other countries and explores the conceptual and methodological issues related to estimating the fiscal impact of immigration.

Key Points

The net fiscal impact of immigration is typically estimated as the difference between the taxes and other contributions migrants make to public finances and the costs of the public benefits and services they receive. This impact depends on the characteristics of migrants, their impacts on the labour market and the characteristics and rules of the welfare system, among other factors.

In theory, migrants who are young, skilled and doing highly-paid jobs are likely to make a more positive net fiscal contribution than those with low skills and low labour market participation rates.

The evidence suggests that the fiscal impact of migration in the UK is small (less than +/-1% of GDP) and differs by migrant group (e.g. EEA migrants vs non-EEA migrants, recent migrants vs all migrants). The existing results are subject to numerous key assumptions.

The Office for Budget Responsibility forecasts that higher net migration reduces pressure on government debt over time. This result is based on the fact that incoming migrants are more likely to be of working age than the population in general.

Cross-country evidence for the years 2007-2009 suggests that the fiscal impact of migration in the UK was more positive than the average fiscal impact of migration in OECD countries.

Understanding the evidence

The existing estimates of the fiscal impact of immigration in the UK are limited because of a lack of data and accurate information about a wide range of important factors. For this and other reasons, a significant number of assumptions must be made in order to estimate the fiscal effects of immigration, and results tend to change based on these assumptions.

The estimation of the fiscal impact of immigration requires a comparison between the costs imposed by migrants on public finances (including the services and benefits used by migrants) and their taxes and other public finance contributions they make. There are two main ways of conducting this analysis: a static approach and a dynamic approach. The static approach is based on a specific year, and simply compares the contributions of migrants to public finances with the services and benefits received for that year. The advantage of this approach is that it uses historical data, while the disadvantage is the lack of a forward-looking perspective given that it is a snapshot at one point in time.

An alternative is the dynamic approach, which computes the net present value of contributions and costs over the entire lifetime of migrants and, in some cases, their children. The advantage of this approach is the forward-looking perspective and the possibility of exploring changes over time in fiscal impacts between UK-born individuals and migrants. The limitation of the dynamic approach is that it requires strong future assumptions about many factors such as migrant fertility rates, return migration rates, productivity rates, labour market participation rates, tax rates and government spending, among others. The results of these studies tend to differ significantly based on changes in these assumptions.

In theory, the fiscal effects of immigration largely depend on migrants' characteristics (skills, age, length of stay), their impacts on the labour market and welfare entitlements

Estimating the net fiscal impact of immigration is a challenging task because of the large number of factors affecting it. Among other important factors, estimates must take account of migrants' characteristics such as skill level, age distribution, family composition, health status, fertility patterns, and the temporary versus permanent nature of immigration. Among these characteristics, the skill level of migrants (and its correlation with the other characteristics) is likely to be one of the main determinants of their fiscal impact in the short run. High-skilled migrants working in highly paid jobs can be expected to pay more taxes than low-skilled migrants in low-waged jobs. At the same time, the participation in welfare programmes tends to decrease with skill level, i.e. higher skilled migrants are less likely to be eligible for means tested welfare benefits than low-skilled migrants.

There are two key assumptions and caveats. First, not all skilled migrants are doing skilled work in the UK. Second, as is the case in other countries with high levels of immigration, some migrants are explicitly excluded from full access to certain types of benefits in the UK. For instance, many non-EU nationals with permission to reside in the UK have 'no recourse to public funds'. As such, they are not able to access many types of benefits in the UK.

The fiscal impact of migration in the UK is small and differs by migrant group (e.g. EEA migrants vs. non-EEA migrants, recent migrants vs. all migrants)

Attempts at analysing the fiscal impact of immigration in the UK started about a decade ago with a Home Office report (Gott and Johnston 2002). The report used a static approach, as do all other main studies in the topic for the UK. The focus of the report was the fiscal year 1999–2000. Among the key decisions made by the authors was the definition of which group of individuals should constitute the 'migrant population' whose net fiscal contribution would be estimated. The study defined migrants as foreign-born residents. Most of the research on the net fiscal impact of immigration in the UK has followed this approach.

There are major data gaps related to this topic in the UK and, as such, Gott and Johnston (2002) pointed out that they could only provide tentative results. Their study concluded that the overall contribution of migrants was positive, but that the impact varies with the characteristics of migrants. The estimates suggest that for the fiscal year 1999–2000 migrants in the UK contributed GBP 31.2 billion in taxes and used benefits and state services valued at GBP 28.8 billion. Therefore, the net fiscal contribution of migrants was approximately GBP +2.5 billion.

A report by the Institute for Public Policy Research (IPPR), presented an updated version of the Home Office analysis (Sriskandarajah et al. 2005). Its main contribution was to extend the estimation to cover five years of data. The IPPR analysis suggests that real revenues from migrants grew by 22% from fiscal year 1999–2000 to fiscal year 2003–2004 (reaching GBP 41.2 billion). However, the expenditure associated with immigrants reached GBP 41.6 billion in the fiscal year 2003–2004. Therefore, the net contribution of immigrants in the fiscal year 2003–2004 was negative at GBP -0.4 billion.

The IPPR report focuses on the relative fiscal contribution of immigrants versus that of natives. In any given year, the contribution of migrants (in volume) depends on the state of public finances (i.e. surplus versus deficit) and the fact that migrants are having a positive or negative fiscal impact (in terms of volume) does not indicate clearly how they compare to UK-born individuals. Even if migrants pay more in taxes than the cost of services received, there could still be a smaller gap (between taxes paid and services received) for migrants than for natives. Srisankandarajah et al. (2005) argue that the relevant measure is not the actual net figure, but the ratio of migrants' contributions to migrants' consumption of public services. This ratio is referred to as the net annual fiscal contribution (NAFI).

IPPR's analysis suggests that the NAFI for migrants in 1999–2000 was 1.06, higher than the UK-born value (1.01). For 2003–2004, the difference between migrants and the UK-born increased; the NAFI for migrants was 0.99

compared to 0.88 for the UK-born. The fact that the NAFI was less than one suggests that in 2003–2004 the net fiscal contribution of migrants was negative, but that it was ‘less negative’ than that of the UK-born individuals.

A study by Rowthorn (2008) adopted a slightly different approach and made an adjustment to estimate what the migrant contribution would be with a balanced budget. Rowthorn also adjusted for a number of other factors including additional costs for asylum support, ethnic relations support, excess medical costs (in relation to HIV) and a correction for the inclusion of defence spending (a public good whose scale is largely unaffected by the migrant inflow). The study concluded that the actual net contribution of migrants in 2003–2004 was small but positive of about GBP +0.6 billion (Rowthorn 2008).

A 2006 report by MigrationWatch UK was critical of the allocation of spending on services for children born to one migrant parent and a UK-born parent. Previous analysis considered the spending on these children to be part of the benefits consumed by the UK-born group (Rowthorn [2008] also adjusted estimates to address this point). According to MigrationWatch, the appropriate approach is to split this spending in equal parts between the UK-born and foreign-born groups. By making this change, MigrationWatch estimates suggest that the net fiscal impact of migrants is negative (the estimates are GBP –1 billion for 1999–2000 and GBP –5 billion for 2003–2004). MigrationWatch also presents estimates allocating all children of mixed couples to the migrant group and, as expected, the fiscal burden of migrants is estimated to be much higher (around GBP –3.8 billion in 1999–2000).

Table 1 – Comparison of different estimates of the fiscal effects of immigration for the fiscal years 1999–2000 to 2003–2004 (in GBP billion)

	Revenue	Expenditure	Net
Home Office (Gott and Johnston 2002)			
1999–2000	31.2	28.8	+2.5
IPPR (Sriskandarajah et al. 2005)			
1999–2000	30.9	29.0	+1.9
2000–2001	33.5	31.8	+1.7
2001–2002	36.6	34.8	+1.8
2002–2003	37.9	38.1	-0.1
2003–2004	41.2	41.6	-0.4
MigrationWatch UK (2006)			
1999–2000 (Children of mixed households split)			-1.0
1999–2000 (Children of mixed households all allocated to migrant group)			-3.8
2003–2004 (Children of mixed households split)			-5.0
Rowthorn (2008)			
2003–2004	46.0	45.4	+0.6

A study evaluating the fiscal impact of immigration from the A8 countries (those which joined the EU in 2004 and which did not already enjoy right of entry to the UK) found that in the four fiscal years after 2004 (i.e. 2005–2006, 2006–2007, 2007–2008 and 2008–2009), A8 migrants made a positive contribution to public finances (Dustmann et al. 2010). While A8 migrants work mostly in lower wage occupations, they have high labour force participation rates and employment rates, a fact which offsets the impact of their lower wages.

Dustmann and Fratini (2013) estimated the fiscal impact of EEA and non-EEA migrants during the 1995–2011 period. Their results suggest that during this period the total fiscal impact of EEA migrants in the UK was close to GBP + 8.8 billion (an average of close to GBP + 0.6 billion per year). The total fiscal impact of non-EEA migrants for this period was estimated at GBP –104 (an average of close to GBP –6.5 billion per year).

Dustmann and Frattini (2013) also presented estimates for recent migrants, defined as those who arrived to the UK since 2000. The estimates suggest that the fiscal impact of recent EEA migrants for the 2001–2011 period was GBP + 22.1 billion and the fiscal impact of non-EEA migrants was + 2.9 billion.

MigrationWatch UK (2014) criticised the assumptions of Dustmann and Frattini (2013). The criticism covers many factors, but overall it suggests that Dustmann and Frattini (2013) exaggerated the revenues the government obtains from migrants and underestimate the cost of public service provision to migrants. Using new multiple assumptions, MigrationWatch UK (2014) finds that during the 1995–2011 period the fiscal impact of EEA migrants was GBP –13.6 billion and the fiscal impact of non-EEA migrants was GBP –135 billion. Looking at the recent EEA migrants, MigrationWatch UK (2014) estimates that the total fiscal impact of recent EEA migrants for the 2001–2011 period was GBP –0.25 billion and the impact of recent non-EEA migrants was GBP –27 billion for the same period.

Rowthorn (2014) re-evaluated the estimates of Dustmann and Frattini (2013) for recent migrants. In particular, he argues for the need of a British worker displacement adjustment given the evidence that migration displaces British workers. After this and other adjustments he finds a negative impact of recent EEA migration of about GBP –0.3 billion and a negative impact of recent non-EEA migration of GBP –29.7 billion.

In an update to their 2013 research, Dustmann and Frattini (2014) find that migrants from within the EEA have had a positive net fiscal impact during the 1995–2011 years, whereas non-EEA migrants had a negative net fiscal impact of about GBP –118.0 billion. During the 2001–2011 period, recent migrants from A10 countries had an estimated net fiscal impact at approximately GBP + 4.9 billion, other recent EEA migrants at GBP + 15.3 billion, while recent non-EEA migrants at GBP + 5.2 billion.

See Rowthorn (2014) for more discussion of differences between the Dustmann and Frattini (2013) and MigrationWatch UK (2014).

Table 2 provides a summary of the findings for the UK for the fiscal years 1995–2011 and 2001–2011.

Table 2 – Comparison of different estimates of the fiscal effects of immigration for the fiscal years 1995-2011, 2001-2011 and 2014

	Net Fiscal Impact			
	All migrants		Recent migrants	
	EEA	Non-EEA	EEA	Non-EEA
Dustmann and Frattini (2013)				
1995–2011	+ 8.8	-104.1		
2001–2011	+ 9.0	-86.8	+22.1	+2.9
Dustmann and Frattini (2014)				
1995–2011	+ 4.4	-118.0		
2001–2011				+ 5.2
2001–2011 (A10)			+ 4.9	
2001–2011 (Rest of EEA)			+15.3	
MigrationWatch UK (2014)				
1995–2011	-13.6	-134.9		
2001–2011	-13.4	-116.8	-0.25	-27.17
MigrationWatch UK (2016)				
2014	-1.2	-15.6	0	-6.2
Rowthorn (2014)				
2001–2011			-0.3	-29.7

Note: see original sources for a full discussion of differences in methodology and assumptions between estimates.

The Office for Budget Responsibility forecasts that higher net migration reduces pressure on government debt over time. This result is based on the fact that incoming migrants are more likely to be of working age than the population in general

The Office for Budget Responsibility (OBR, 2016) forecasted fiscal aggregates—such as net government borrowing and debt as a percentage of GDP—under alternative scenarios of net migration. In their central forecast they use the ONS principal population projection, which assumes net migration of 329,000 in 2015 and 256,000 in 2016, declining to 185,000 in 2021. In the ‘high migration’ scenario, net migration falls to 265,000 by 2021. In the ‘low migration’ scenario, net migration falls to 105,000 by 2021.

The OBR estimates suggest that the government budget surplus in 2020–2021 would be higher under the high migration scenario and lower in the low migration scenario: it projected a £16.9bn surplus in 2010–2021 under the high migration scenario, compared to £5.2bn in the low migration scenario. Debt as a share of GDP would also be lower under the high migration scenario (73.3% vs. 76.1% by 2020–2021).

One of the key drivers behind these results is that incoming migrants are more likely to be of working age than the population in general and therefore more likely to be working and contributing to public finances. The analysis differs from the studies above in that it assumes that if migrants and non-migrants have the same age and gender they will make the same net contributions to public finances. It does not attempt to measure the different components of migrants’ fiscal contributions.

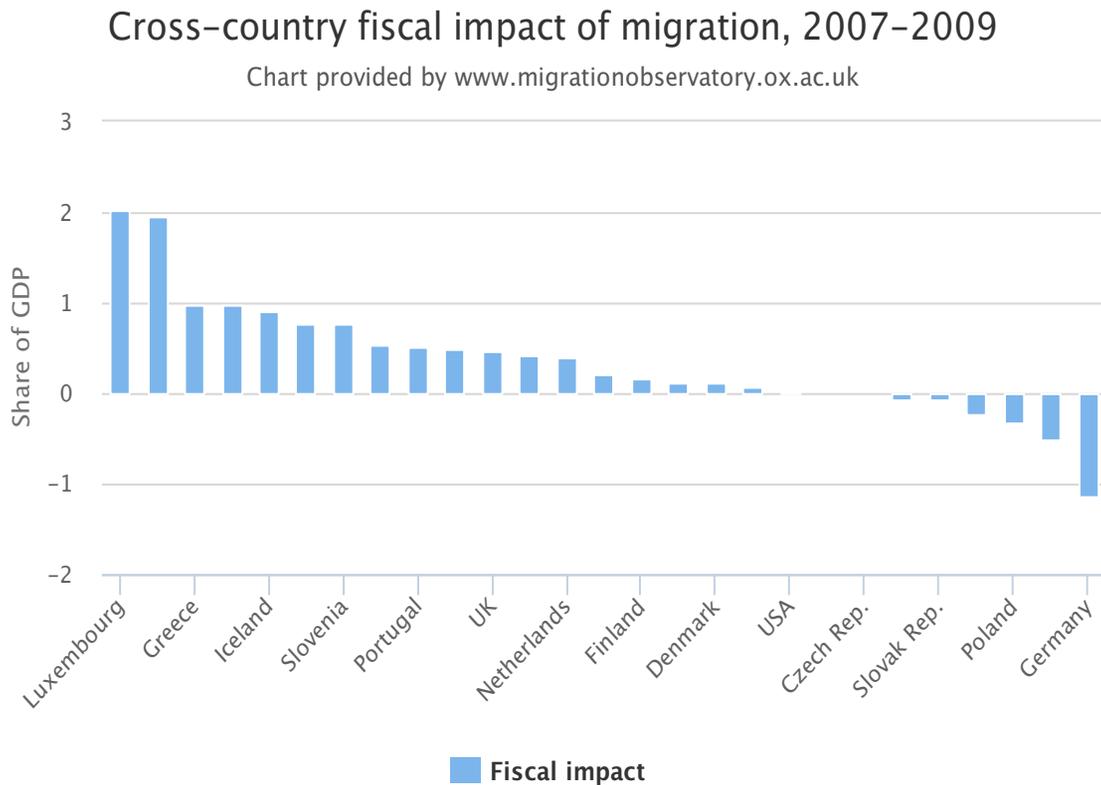
Table 3 – OBR forecast of fiscal aggregates under alternative net migration scenarios

Outcome	2015-16	2016-17	2017-18	2018-19	2019-2020	2020-2021
	Central forecast					
Net borrowing (£bn)	72.2	55.5	38.8	21.4	-10.4	-11.0
Net debt (% GDP)	83.7	82.6	81.3	79.9	77.2	74.7
	High net migration					
Net borrowing (£bn)	72.2	54.7	36.9	18.4	-14.8	-16.9
Net debt (% GDP)	83.7	82.5	81.0	79.3	76.2	73.3
	Low net migration					
Net borrowing (£bn)	72.2	56.3	40.6	24.5	-6.1	-5.2
Net debt (% GDP)	83.7	83.0	81.9	80.8	78.3	76.1

Cross-country evidence for the years 2007-2009 suggests that the fiscal impact of migration in the UK was more positive than the average fiscal impact of migration in OECD countries

The OECD (2013) estimated the fiscal impact of immigration in all OECD countries. The OECD’s baseline estimate for the years 2007–2009 suggested that the fiscal impact of migration in the UK (+0.46% of GDP) was more positive than the fiscal impact of migration in 16 other OECD countries. The UK occupied the 11th position in regards to the fiscal impact of migration across OECD countries (see Figure 1). The estimated fiscal impact of migration in the UK was also higher than the average impact in OECD countries (+ 0.35% of GDP).

Figure 1



Source: OECD 2013 International Migration Outlook

These calculations only include direct cash transfers to and from households, not the cost of in-kind benefits such as health care. However, the UK’s relative position was also slightly above the OECD average in alternative calculations that did attempt to account for spending on in-kind benefits.

Evidence gaps and limitations

Estimates of the fiscal effects of immigration depend on assumptions about how migrants use public services. Most studies simply estimate the share of the population represented by migrants and assume that they account for the same share of consumption of public services as people with similar demographic characteristics (e.g. age and gender). Yet migrants have different characteristics from UK-born individuals and as such may use public services differently. For instance, migrants may use services such as translation services in schools and hospitals that are not typically used by the native-born population. One difficulty in addressing this point is that there is no systematic collection of the user’s migration status at the point of delivery of many public services.

On the other hand, some migrants deliver public services as well as consuming them. It may be possible to deliver services in the public sector at a lower cost because of the availability of migrants. These pros and cons of migration for specific sectors are difficult to measure in practice because of the lack of data in most cases.

Any assessment of the fiscal effects of immigration also depends on the treatment of migrants’ children. If the definition of a migrant is an individual born outside the country, then the children of migrants born in the country should be part of the native-born group. However, it is possible to argue that these children would not have been in the country if their parents had not migrated in the first place and, therefore, children are part of the migrant group. This is complicated further by the existence of children of mixed couples (i.e. one UK-born and one foreign-born). It is not clear if these children should be included in one group or the other, or simply ‘split’ between the two groups.

The fiscal impacts of immigration also depend on the effects of migrants on the tax contributions and use of public services of the UK-born. One example is the labour market impact of immigration, especially whether and

to what extent the employment of migrants creates more unemployment among domestic workers. Increasing unemployment among domestic workers leads to less tax revenues and increase consumption of welfare benefits. Most fiscal impact studies assume that the impact of migrants on domestic workers employment is negligible, yet empirical findings from the literature on the employment effects of immigration remain mixed (Migration Advisory Committee 2012, Rowthorn 2008). Another typical example about immigration increasing the fiscal burden of the UK-born population is the possibility that the presence of migrants increases housing prices (including rents) and displaces the UK-born population from the rental sector to the social housing sector (see our briefing on 'Migrants and Housing in the UK: Experiences and Impacts'). On the other hand, the presence of migrants may also increase the tax contribution of the UK-born. For instance, the presence of low skilled migrant females working as nannies may allow domestic workers to increase their labour supply increasing also their tax contributions. These types of indirect effects has been mostly absent from the previous literature in the UK.

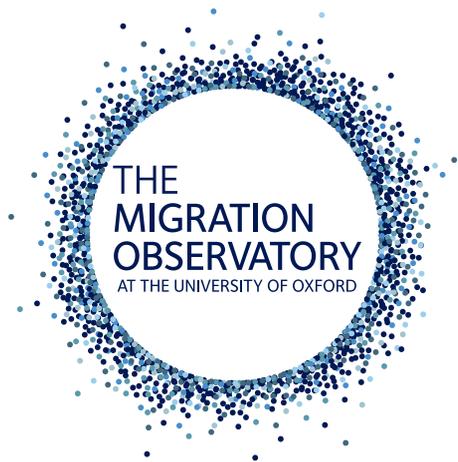
References

- Dustmann, C., T. Frattini, and C. Halls. "Assessing the Fiscal Costs and Benefits of A8 Migration to the UK." *Fiscal Studies* 31 (2010): 1–41.
- Dustmann, C. and Frattini, T. "The Fiscal Effects of Immigration to the UK." Discussion Paper Series, CDP No 22/13, Centre for Research and Analysis of Migration, Department of Economics, University College London, 2013.
- Dustmann, C. and Frattini, T. "The Fiscal Effects of Immigration to the UK." *The Economic Journal* 124 (2014): F593–F643.
- Gott, C. and K. Johnston. "The Migrant Population in the UK: Fiscal Effects. Development and Statistics Directorate Occasional Paper 77, Home Office, London, 2002.
- MigrationWatch UK. "The Fiscal Contribution of Migrants." Economic Briefing Papers 1.9, MigrationWatch UK, London, 2006.
- MigrationWatch UK. "An Assessment of the Fiscal Effects of Immigration to the UK." MigrationWatch UK, London, 2014.
- MigrationWatch UK. "The Fiscal Effects of Immigration to the UK 2014/15." MigrationWatch UK, London, 2016
- OECD. "International Migration Outlook 2013." OECD, Paris, 2013.
- Office for Budget Responsibility. "2013 Fiscal Sustainability Report." Office of Budget Responsibility, London, 2013.
- Rowthorn, R. "The Fiscal Impact of Immigration on the Advanced Economies." *Oxford Review of Economic Policy* 24 (2008): 560–580.
- Rowthorn, R. "Large-scale Immigration: Its Economic and Demographic Consequences for the UK." Civitas, 2014.

Related Materials

- Migration Observatory briefing – Migrants and Housing in the UK: Experiences and Impacts www.migrationobservatory.ox.ac.uk/resources/briefings/migrants-and-housing-in-the-uk-experiences-and-impacts/

Thanks to Professor Robert Rowthorn for helpful comments and suggestions on an earlier version of this briefing.



The Migration Observatory

Based at the Centre on Migration, Policy and Society (COMPAS) at the University of Oxford, the Migration Observatory provides independent, authoritative, evidence-based analysis of data on migration and migrants in the UK, to inform media, public and policy debates, and to generate high quality research on international migration and public policy issues. The Observatory's analysis involves experts from a wide range of disciplines and departments at the University of Oxford.



COMPAS

The Migration Observatory is based at the Centre on Migration, Policy and Society (COMPAS) at the University of Oxford. The mission of COMPAS is to conduct high quality research in order to develop theory and knowledge, inform policy-making and public debate, and engage users of research within the field of migration.

www.compas.ox.ac.uk

About the author

Dr Carlos Vargas-Silva
Senior Researcher, COMPAS
carlos.vargas-silva@compas.ox.ac.uk

Press contact

Rob McNeil
Head of Media and Communications
robert.mcneil@compas.ox.ac.uk
+ 44 (0)1865 274568
+ 44 (0)7500 970081

Glossary and Terms

- NAFI: Net annual fiscal contribution of migrants expressed as a ratio of migrants' contributions to migrants' consumption of public services and state benefits.
- Net Fiscal Impact: If migrants contribute more to the government finances than the cost of services received, they are net fiscal contributors. If the cost of the services used by migrants is higher than their contributions, they represent a net fiscal cost.

Suggested citation

Vargas-Silva, Carlos. "The Fiscal Impact of Immigration in the UK." Migration Observatory briefing, COMPAS, University of Oxford, UK, September 2016.

