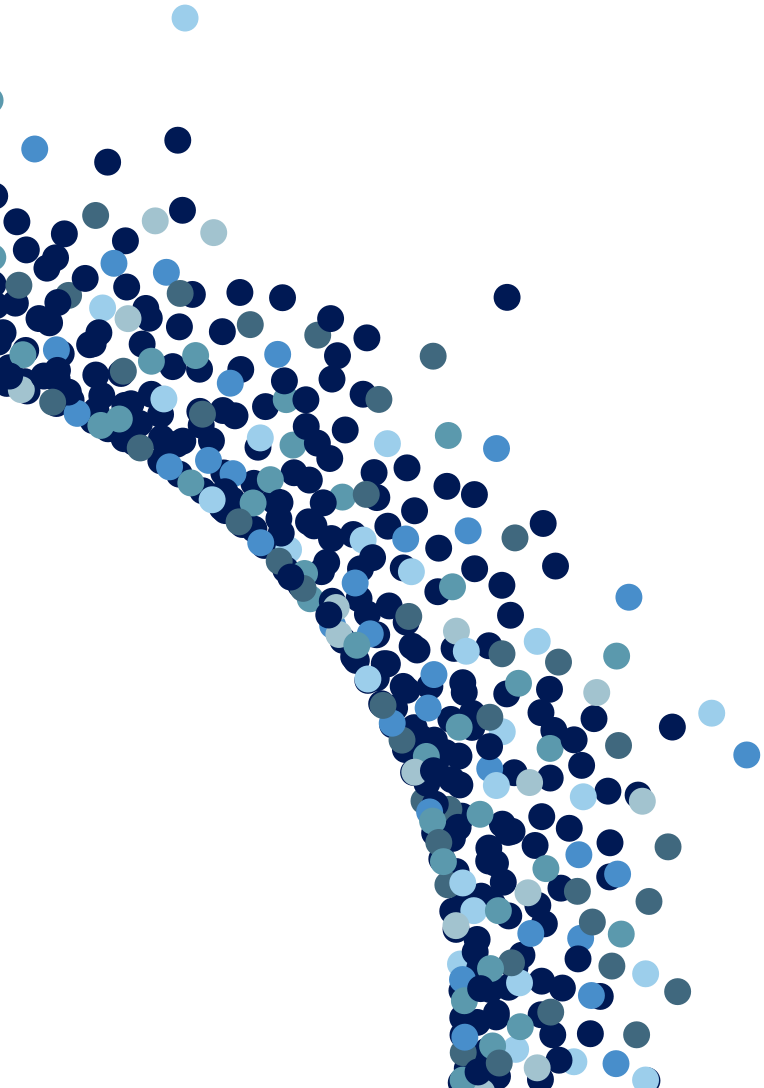
THE MIGRATION OBSERVATORY
AT THE UNIVERSITY OF OXFORD

BRIEFING

The fiscal impact of immigration to the UK



AUTHORS: Carlos Vargas-Silva
Madeleine Sumption
Peter William Walsh

PUBLISHED: 30/03/2022
NEXT UPDATE: 01/03/2023

7th revision

COMPAS
Centre on Migration, Policy & Society

UNIVERSITY OF OXFORD

www.migrationobservatory.ox.ac.uk

This briefing provides an overview of research regarding the impact of immigration on government finances in the UK.

Key Points

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

The net fiscal effects of immigration depend on migrants' characteristics, such as their age, skills, and earnings.

The most recent Government data show that EEA nationals pay more in income taxes and national insurance contributions than they receive in tax credits and child benefit – but that is not the full picture.

The Office for Budget Responsibility forecasts that higher net migration reduces pressure on government debt over time.

The government estimated that ending free movement would have a small net fiscal cost.

Understanding the evidence

The fiscal impact of immigration is estimated by calculating the contributions migrants make to public finances (such as through paying tax) minus their cost to public finances (such as through receiving benefits and healthcare). A positive net fiscal impact indicates that that migrants pay more into public finances than they take out (or in other terms, that immigration contributes more to government revenue than it costs in terms of government expenditure).

Contributions migrants make to public finances (or 'revenues') include taxes paid directly, such as income tax, National Insurance, and value-added tax (VAT) on purchases, but are sometimes extended to include shares of taxes paid by UK businesses. Costs to public finances (or 'expenditures') include direct costs such as NHS care; education for migrants' children; cash benefits such as tax credits and pensions; and government spending that is likely to be affected by an increase in population, such as transport and policing. Some studies also attribute to migrants indirect costs, such as a share of the cost of government spending on defence or running central government departments, which are less likely to be affected directly by migration. The studies reviewed in this briefing generally define migrants as those born outside the UK, whether they first arrived in the UK as adults or as children.

Many of the contributions and costs that need to be included in estimates of the net fiscal impact of migration cannot be calculated directly, because the data do not exist or are not publicly available. As such, researchers estimating fiscal impacts must make a significant number of assumptions, which in turn influence the results. For example, four different studies examined in this briefing look at the same groups of migrants during the same time period (2001 to 2011), but come to different conclusions based on the assumptions they make about what should be counted as tax contributions of migrants and the costs of using different public services (Dustmann and Frattini, 2013; Migration Watch, 2014; Rowthorn, 2014; and Dustmann and Frattini, 2014). Rowthorn (2014) provides a useful and accessible discussion of the differences. However, all come to similar conclusions that there is a difference between the contributions made by migrants from the original 14 EU Member States (the EU-15 minus the UK), the newer EU Member States (the EU-8 and EU-2), and non-EU migrants.

A key methodological question is whether to attribute to migrants the cost of educating UK-born children. If the definition of a migrant is an individual born outside the country, then the UK-born children of migrants should be part of the UK-born group. However, it could be argued that these children would not have been in the country if their parents had not migrated in the first place and, therefore, should be included as part of the migrant group. This is complicated further by the existence of children of 'mixed couples', where one parents is UK-born and one foreign-born. Recent studies have often 'split' the children of mixed couples between the two groups. However, if migrants' children remain in the UK and later enter the workforce, they will later pay taxes on earnings, and this is not accounted for in the static approaches reviewed in this paper.

Another important question when examining the fiscal impact of migration is whether to look at the net cost or contribution of migrants in *absolute* terms, that is, in £ billions, or their net fiscal impact *relative to the UK-born*. In any given year, the relative fiscal contribution of migrants depends in part on the state of public finances (i.e., whether the UK is running a budget surplus or deficit) and government spending decisions. When there is a budget deficit, the average UK resident will represent a net fiscal cost. As a result, whether migrants are having an absolute positive or negative fiscal impact does not indicate clearly how they compare to the UK-born. At the same time, relative comparisons at the whole population level are complicated by there being a much higher proportion of retired people among the UK-born. The working-age UK population is in surplus even taking into account government spending on their children.

A key distinction between fiscal impact studies is whether they use analysis that is *static* or *dynamic*. A static approach is more common, which compares in a given period (of usually a year but sometimes longer): (1) the contributions migrants make to public finances, against (2) the services and benefits they received. The advantage of this approach is that it uses historical data and does not have to make assumptions about the future. The drawback is that it is only a snapshot at one point in time, and so ignores the fact that the fiscal effects of a given migrant group will depend on where they are in their life cycle. For example, young people with no children incur relatively low costs for public services such as health and education, and thus do not need to earn as much as older people to be net fiscal contributors. This means that the estimated fiscal impact of a given group in a given year will depend on factors such as how long migrants have been in the UK and how old they are. Such an estimate does not necessarily reflect the migrant group's total lifetime fiscal contribution.

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 limitation of the dynamic approach is that it requires more assumptions, including about factors such as return migration rates, changes in productivity, labour market participation rates, tax rates, and government spending, among others.

Understanding the policy

The UK does not have a single policy or strategy on the fiscal impact of immigration, but there are several policies that are expected to shape migration's impact on public finances. For example, the government has said that the visa condition called No Recourse to Public Funds (NRPF) is designed to prevent fiscal costs resulting from the payment of benefits. The NRPF condition prevents non-EU citizens on work, study, or family visas from accessing most benefits, including Universal Credit or Child Benefit, until the visa holder has been granted indefinite leave to remain (ILR).

Other policies may also have fiscal impacts or have been justified partly on fiscal logic. These include policies governing work migration, including the minimum income threshold for skilled workers which increases the likelihood that they will make substantial tax contributions. In addition, the Immigration Health Surcharge (IHS), which must be paid by most people applying for work, family, or study visas (some applicants are exempt from the charge, such as applicants for Health and Care visas), effectively operates as an additional tax on temporary visa holders. (These workers also contribute to the costs of their use of the NHS in the same way as other UK taxpayers, through the tax system.) The IHS is currently set at £624 per year for work or family migrants, and £470 per year for students.

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

There is no single 'correct' estimate of migrants' fiscal impact. Different studies make different assumptions, and not everyone will agree on what the best assumptions to make are (see 'Understanding the Evidence,' above). Studies examining the fiscal impact of migrants have produced different results, although in all cases, the impacts have been estimated at less than +1% or -1% of GDP.

There are two points on which studies consistently agree. First, the fiscal impact of EEA migrants is more positive than that of non-EEA migrants; and second, that the impact of recent migrants is more positive than the impact of migrants overall. Table 1 summarises the results of the most recent studies on the net fiscal impact of migrants in the UK.

A study by Oxford Economics (2018), commissioned by the Migration Advisory Committee, estimated the net fiscal contribution of EEA migrants in the financial year (FY) 2016/17 at £4.7bn, compared to a net cost of £9bn for non-EEA migrants. During this period, the UK was running a budget deficit, so the UK-born were also estimated to have made a negative net fiscal contribution (of -£41.4bn). By contrast, using a similar methodology but slightly different assumptions, Migration Watch UK (2016) found that in FY2014/15 both EEA and non-EEA migrants represented a net fiscal cost (of £1.2bn and £15.6bn respectively). A large part of the difference between these studies arises from the choice of how much of the taxes paid by businesses to attribute to migrants.

Oxford Economics (2018) found that the negative net fiscal contribution of non-EEA migrants was primarily due to higher spending on the education of children, since non-EEA migrants are currently more likely to have dependent children than the UK-born. They were also estimated to receive more in family benefits and tax credits. Separate calculations in the same study that looked at the whole life cycle of non-EEA migrants and excluded the cost of children did not find a negative impact for this group (see below).

Table 1: Different estimates of the fiscal effects of immigration to the UK, in £ billions (with annual average)

	All migrants and UK-born			Recent migrants only	
	EEA	Non-EEA	UK born	EEA	Non-EEA
Oxford Economics (2018)					
FY 2016/17 (1 year)	+£4.7b	-£9.0b	-£41.4b		
Migration Watch (2016)					
FY 2014/15 (1 year)	-£1.1b	-£15.6b	-£87.8b	£0.0	-£6.2b
Dustmann and Frattini (2014)					
1995–2011 (17 years)	+£4.4b (+£259m pa)	-£118b (-£6.9b pa)	-£591b (-£34.8b pa)		
2001–2011 (12 years)			-£617b (-£51.4b pa)	+£20.2b (+£1.68b pa)	+£5.2b (+£0.43b pa)
2001–2011 (A10) (12 years)				+£4.9b (+£0.41b pa)	
2001–2011 (Rest of EEA) (12 years)				+£15.3b (+£1.28b pa)	
Rowthorn (2014)					
2001–2011 (12 years)				-£0.3b (-£25m pa)	-£29.7b (-£2.48b pa)
Migration Watch (2014)					
1995–2011 (17 years)	-£13.6b (-£0.8b pa)	-£134.9b (-£7.94b pa)	-£565b (-£33.2b pa)		
2001–2011 (12 years)	-£13.4b (-£1.12b pa)	-£116.8b (-£9.73b pa)	-£586b (-£48.8b pa)	-£0.25b (-£20.8m pa)	-£27.17b (-£2.26b pa)
Dustmann and Frattini (2013)					
1995–2011 (17 years)	+£8.8b (+£0.52b pa)	-£104.1b (-£6.12b pa)	-£605b (-£50.4b pa)		
2001–2011 (12 years)	+£9b (+£0.75b pa)	-£86.8b (-£7.23b pa)	-£624b (-£52b pa)	+£22.1b (+£1.84b pa)	+£2.9b (+£242m pa)

Source: Migration Observatory analysis of various studies (see References for citations).

Similarly, studies have consistently found that recent migrants have a more positive fiscal impact than those who have been here for longer. For example, Dustmann and Frattini (2014) estimated that EEA migrants who had arrived since 2000 had a positive net fiscal contribution of just over £20bn in the 11-year period 2001 to 2011 inclusive, compared to a net impact of £4.4bn for all migrants between 1995 and 2011. The Migration Watch (2016) estimates are also less negative for recent migrants than for migrants overall; they estimated that non-EEA migrants had a net fiscal cost of £15.6bn in 2014/15, but that this cost was £6.2bn for recent non-EEA migrants. There will be multiple reasons for this, including changes over time in the characteristics of new arrivals, and that after a few years of residence people are more likely to have children.

The net fiscal effects of immigration depend on migrants' characteristics, such as their age, skills, and earnings.

Whether migrants are employed and how much they earn has an important impact on their estimated net fiscal contribution. The OECD (2021) compared estimates of net contributions to the tax and benefits system across 25 OECD countries over a 13-year period from 2006 to 2018. It found that the age of migrants (specifically, being of prime working age, i.e., 25–54) was the single most important factor explaining differences in their net fiscal contributions compared to the native-born population. A key reason for this is that migrants in this age group are most likely to be working. The skill level of migrants was also found 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, on average, than low-skilled migrants in low-wage jobs, although in the UK some migrant groups are characterised by considerable skills mismatch where they work below their actual skill level (ONS 2016).

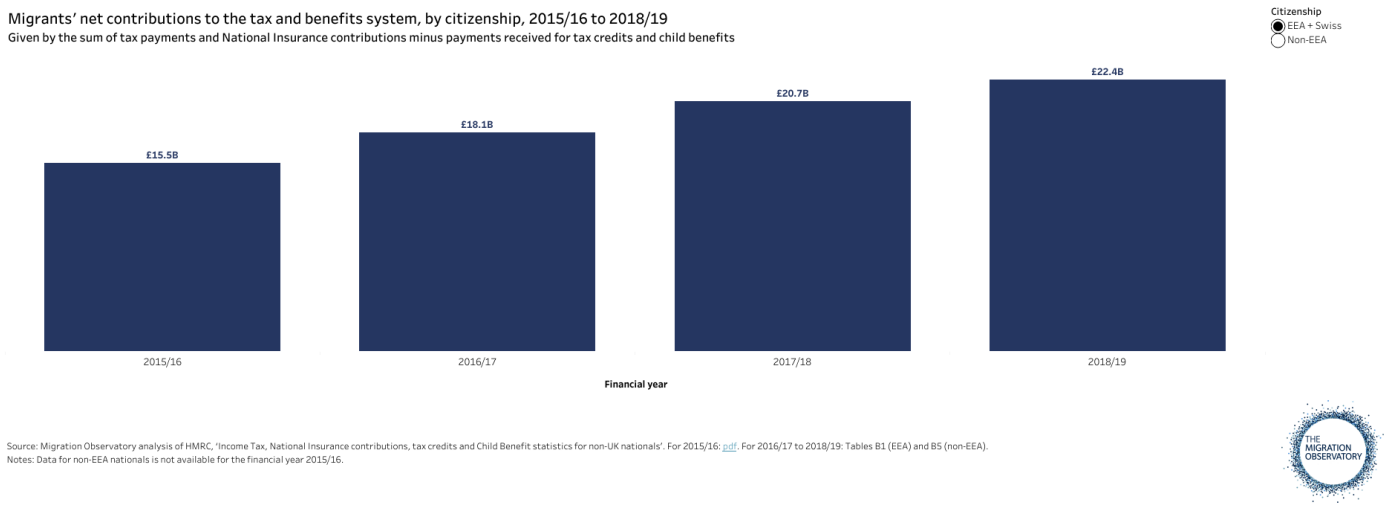
Migrants' use of public services and benefits also depends to a large extent on their age and household situation. In a series of stylised calculations for different illustrative households types, Oxford Economics (2018) found that a single 20-year old with no children only needed to earn just over £10,000 per year in order to 'break even' from a fiscal perspective, while a couple with two dependent children—who incur much greater expenditure on health and education—would not become net fiscal contributors until they earned around £45,000.

As noted earlier, the fact that non-EEA migrants are more likely to have dependent children is a key reason that non-EEA migrants are estimated to have a negative net fiscal impact in the short run. The same Oxford Economics study estimated that over the course of their whole lifecycle, the average non-EEA migrant arriving in 2016 would make a positive net fiscal contribution (of £28,000, net present value). However, their children's education is not included in this latter figure, because under this lifecycle method the cost of education is attributed to the child and expected to be offset by tax on their earnings when they enter the labour market.

The most recent Government data show that EEA nationals pay more in income taxes and national insurance contributions than they receive in tax credits and child benefit – but that is not the full picture.

In the past few years, the government has published data derived from Her Majesty's Revenue and Customs (HMRC, the government body responsible for collecting taxes and paying certain benefits) and the Department for Work and Pensions (DWP) of amounts paid and received by foreign nationals. For example, HMRC data show that in FY2018/19 (the most recent year for which there are data), EEA and Swiss citizens paid £22.4bn more in income tax and National Insurance contributions than they took out in tax credits and child benefit (HMRC, 2022). Non-EEA (and non-Swiss) citizens paid £20bn more in income tax and National Insurance than they received in tax credits and child benefit.

Figure 1



These figures are not at all comparable with the studies discussed above because they simply compare some amounts received by HMRC in direct tax with amounts paid out by HMRC in cash benefits. This calculation takes no account of people paying other taxes like VAT and council tax, nor that they also receive other benefits like Universal Credit and Jobseekers' Allowance (JSA), and also use public services. However, the data do provide more detailed information showing broadly that taxpayers from EU-15 countries paid more than the average taxpayer, while those from the newer Member States paid less.

The Office for Budget Responsibility forecasts that higher net migration reduces pressure on government debt over time.

The Office for Budget Responsibility forecasts fiscal aggregates—such as net government borrowing and debt as a percentage of GDP—under alternative scenarios of net migration.

OBR (2018), for example, based its main fiscal projections on the assumption that net migration will average 165,000 per year in coming years. However, it estimated that net immigration of 245,000 (the 'high-migration' scenario) would mean that by 2067-68, the primary budget deficit (i.e. excluding interest payments on debt) would be 0.8% of GDP lower, and net debt would be 30% lower.

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. These forecasts extend to 50 years in the future. In earlier analysis, the OBR (2013) noted that over an even longer time horizon than 50 years, these migrants would also retire and add to age-related spending pressures. It concluded that "higher migration could be seen as delaying some of the fiscal challenges of an ageing population rather than a way of resolving them permanently".

The government estimated that ending free movement would have a small net fiscal cost.

The central policy of the government's new points-based immigration system, introduced from 1 January 2021, was a reform of the main work route, now called the Skilled Worker route (for details of the route, see our Policy Primer: The UK's 2021 points-based immigration system). A government Impact Assessment of the Skilled Worker route estimates that it would have a total fiscal cost of £2.4 billion over its first ten years of implementation. The calculation takes into account a range of costs and benefits, including the fiscal cost of public service provision, fiscal benefit from tax revenue, revenue from visa fees, and the cost to the Home Office of administering the route. These costs are a small share of overall UK GDP, which was estimated at approximately £2.4 trillion at the end of 2021.

This overall cost results primarily from fewer EEA migrants being expected to come to the UK, which would reduce tax revenues. These losses exceed the projected savings of not providing public services or benefits to EEA migrants). Projected increases in non-EEA migrants offset some of these costs, but not enough to make the overall impact of the policy positive.

The government also published an Impact Assessment for the Hong Kong British National (Overseas) visa, which included estimates of its fiscal impact. Under the 'central scenario' that assumed around 290,000 BNO applicants in the first five years of the policy, the Home Office estimated that BNO migration under the new route would generate a net fiscal benefit of £2.65 billion in the first five years of the policy (from Q4 2020/21 Q4 to 2025/26 Q3). This included several fiscal costs and benefits: the cost to businesses of familiarising themselves with the policy; the cost to the Home Office of processing the visa route; the increase in the cost of public service provision (e.g., healthcare and education); the increase in the government's revenue from the BNO visa fee and immigration health surcharge; and direct and indirect tax revenues from BNOs in UK employment. The estimate is based on several assumptions, and is presented as "highly uncertain" (for more details see our Q&A: the new Hong Kong British National (Overseas) visa).

Evidence gaps and limitations

Estimates of the fiscal effects of immigration have many limitations. For example, the studies reviewed in this briefing rely primarily on the Labour Force Survey (LFS) to identify the characteristics of migrants and the factors associated with tax contributions (e.g. whether someone is working) and expenditure (e.g. whether some has school-age children). However, the LFS itself has important limitations. It excludes migrants living in communal establishments,

and some groups may be underrepresented due to non-response to the survey. Income is a crucial component of fiscal impact calculations, but LFS income information is limited and only includes employee earnings.

Another key limitation is that the studies 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 using them. It may be possible to deliver services in the public sector at a lower cost because of the availability of migrant workers. However, it is very difficult to quantify these contributions, as doing so would require strong assumptions about how public services would have been staffed in the absence of migration.

Finally, 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). 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. 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
- 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
- OECD. "International Migration Outlook 2021". OECD Publishing, Paris, 2021
- OBR. "2013 Fiscal Sustainability Report." Office of Budget Responsibility, London, 2013
- OBR. "Fiscal Sustainability Report: July 2018" Office of Budget Responsibility, London, 2018
- ONS "Analysis of the UK labour market – estimates of skills mismatch using measures of over and under education: 2015" ONS, 2016
- Oxford Economics. "The Fiscal Impact of Immigration in the UK" Oxford: Oxford Economics
- Rowthorn, R. "Large-scale Immigration: Its Economic and Demographic Consequences for the UK." Civitas, 2014
- HMRC. "Income Tax, National Insurance Contributions, Tax Credits and Child Benefit Statistics for Non-UK Nationals: 2018 to 2019", January 2022.

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 authors

Carlos Vargas-Silva
Director,
The Centre on Migration, Policy & Society
carlos.vargas-silva@compas.ox.ac.uk

Madeleine Sumption
Director,
The Migration Observatory
madeleine.sumption@compas.ox.ac.uk

Peter William Walsh
Senior Researcher,
The Migration Observatory
peter.walsh@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

Recommended citation

Vargas-Silva, C., Sumption, M. & Walsh, P.W. (2022) *The fiscal impact of immigration to the UK*. Migration Observatory briefing, COMPAS, University of Oxford