

Portes, Jonathan; Springford, John

**Working Paper**

## The Impact of the Post-Brexit Migration System on the UK Labour Market

IZA Discussion Papers, No. 15883

**Provided in Cooperation with:**

IZA – Institute of Labor Economics

*Suggested Citation:* Portes, Jonathan; Springford, John (2023) : The Impact of the Post-Brexit Migration System on the UK Labour Market, IZA Discussion Papers, No. 15883, Institute of Labor Economics (IZA), Bonn

This Version is available at:

<https://hdl.handle.net/10419/272510>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

DISCUSSION PAPER SERIES

IZA DP No. 15883

**The Impact of the Post-Brexit Migration  
System on the UK Labour Market**

Jonathan Portes  
John Springford

JANUARY 2023

## DISCUSSION PAPER SERIES

IZA DP No. 15883

# The Impact of the Post-Brexit Migration System on the UK Labour Market

**Jonathan Portes**

*King's College London, UK in a Changing Europe and IZA*

**John Springford**

*Centre for European Reform*

JANUARY 2023

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ISSN: 2365-9793

**IZA – Institute of Labor Economics**

Schaumburg-Lippe-Straße 5–9  
53113 Bonn, Germany

Phone: +49-228-3894-0  
Email: [publications@iza.org](mailto:publications@iza.org)

[www.iza.org](http://www.iza.org)

## ABSTRACT

---

# The Impact of the Post-Brexit Migration System on the UK Labour Market\*

The end of free movement and the introduction of the post-Brexit migration system represents a major structural change to the UK labour market. We provide a descriptive assessment of the impact on a sectoral basis. We examine how overall labour force growth has differed between sectors, both overall and in terms of the extent to which this growth was driven by migrant workers, both from the EU and from outside the EU, prior to the pandemic. This allows us to construct counterfactuals, which we contrast with observed outturns, as well as with data on visas issued by sector under the new system. Our analysis suggests that, although migration overall is currently running at least at pre-pandemic levels, the post-Brexit migration system has produced, as designed, a clear break with pre-Brexit trends, reducing labour supply for some sectors. There remains a substantial “shortfall” in migration for work, even taking of the impact of the pandemic. However, these impacts differ very considerably between sectors. In lower-skilled sectors, work-related migration under free movement does not appear to have been replaced by additional visa issuance under the new system. Meanwhile, in higher skilled sectors, increased visa issuance has increased, and does appear to be consistent with levels of migration that are broadly in line with pre-pandemic, pre-Brexit trends.

**JEL Classification:** F22, J48, J61, J68

**Keywords:** Brexit, migration, labour markets

**Corresponding author:**

Jonathan Portes  
Department of Political Economy  
King's College  
London  
United Kingdom  
Email: jonathan.portes@kcl.ac.uk

---

\* We are grateful to Madeleine Sumption and David Bailey for helpful comments. This research was part funded by the Economic and Social Research Council and the Japan Society for the Promotion of Science (Grant number ES/W01159X/1). The authors have no competing interests to declare.

# The impact of the post-Brexit migration system on the UK labour market

## **1. Introduction**

Over the past 25 years, immigration has been a key driver of developments in the UK labour market (**Glover et al, 2001; Portes, 2019**). The New Labour government elected in 1997 substantially liberalised the UK's migration regime, both in general and specifically for those moving here from outside the EU to work. This was then followed by the expansion of the EU to Eastern and Central Europe in 2004 and then to Bulgaria and Romania in 2007, both of which led to large migration flows (in the latter case, in 2014, when transitional restrictions were lifted). The latest data suggest that close to 1 in 5 UK workers was born abroad (**ONS, 2022**).

In January 2021, alongside the end of the Brexit transition period, the UK introduced the most far-reaching changes to immigration policy in recent history, which included in particular the end of free movement between UK and the EU. This has, perhaps unsurprisingly, led to concerns among businesses that had previously relied heavily on migrant workers from the EU, and calls for the new system to be relaxed. However, at the same time, overall migration flows are currently at record levels (**ONS, 2022; Portes, 2022**).

In this paper we attempt to explore these apparent contradictions in the light of recent developments. We provide a descriptive assessment of the impact on a sectoral basis. We examine how overall labour force growth has differed between sectors, both overall and in terms of the extent to which this growth was driven by migrant workers, both from the EU and from outside the EU, prior to the pandemic. This allows us to construct – both in terms of levels and in growth rates – counterfactuals, which we contrast with observed outturns, as well as with data on visas issued by sector under the new system, giving some insight into the extent to which flows under the new system are meeting labour demand.

While we are necessarily limited in our conclusions – in particular, it is very difficult to disentangle changes driven by labour supply resulting from the new system from those resulting from labour demand, some clear conclusions emerge. Current patterns of work-related migration are very different from those under the old system, with some, mostly high-skilled, sectors seeing overall flows that are broadly consistent with pre-pandemic, pre-Brexit trends, others, mostly lower-skilled have seen very sharp falls.

## **2. Data sources**

We use two data sources to examine trends in employment by sector and by migrant origin. First, the Annual Population Survey, which (alongside the closely related Labour Force Survey) is the standard UK data source for labour market data and provides the data that underlies almost all existing analyses of the impact of migration on the UK labour market. In particular, it includes variables on the country of birth of the respondent, which allows us to distinguish between workers born in the UK, the EU, and elsewhere.

However, the LFS/APS has some disadvantages; in particular, as a large-scale sample survey, it provides reliable data on trends in population level aggregates (the employment rate, or the proportion of workers who are born abroad), but at a sector level the estimates for migrant

proportions are considerably less reliable. More seriously, the pandemic resulted in significant, and differential, reductions in response rates between migrants and non-migrants, meaning estimates between 2020 and late 2021 are not reliable. Finally, the recently released Census data shows considerably lower levels of employment, but higher levels of self-employment, than shown in the APS (O'Connor, 2022). Nevertheless, it remains the standard source, used for example in Migration Advisory Committee (2022), which shows similar trends to those we describe below.

An alternative, and complementary, data source is HMRC data based on Pay as You Earn returns. This has the advantage of providing a full count of all employees, rather than a sample. However, by definition, PAYE data only covers employees and excludes self-employed workers, about 15% of the UK labour force. This is a significant limitation in assessing labour market trends more generally, but in analysing trends for work-related migration – where the overwhelming majority of new migrants arrive on employer-sponsored visas – it may be an advantage.

This data does not record migration status or country of birth directly, but does however distinguish between employees who grew up in the UK (and hence were automatically assigned a National Insurance number) and those who applied for one after moving here, in which case their nationality at the time of application is recorded. This is a different, and more restrictive (since it excludes people who moved here as children) measure of “migration status.” It is, however, arguably more relevant for examining the current function of the migration system than that used in analysis of the LFS and hence in most previous research, since workers who moved here as children are, by definition, not new migrants. Aggregate data by sector is available to late 2022, although data by nationality is currently only available until July 2021.

### **3. Pre-pandemic, pre-Brexit trends**

In our examination of pre-Brexit, pre-pandemic trends, we focus on the 2014-19 period. Over that period, migration was a key driver of labour force growth in the UK, accounting for over half of the net change of both total employment and the number of payroll employees. Table 1 shows that both data sources provide similar results, with overall growth of about a million in those of UK origin, and between 700 and 800,000 for those of EU origin, and broadly similar growth rates.

We also present the APS figures excluding first the self-employed, and then those whose reported date of arrival, combined with their age, suggests that they arrived here as children. This should, in principle, make them more directly comparable to the PAYE data. It does achieve this for those born outside the EU. However, for those of EU origin both levels and growth are higher in the PAYE data than in the APS data. This may in part be explained by some remaining differences in coverage (for example, the APS data excludes those residing in communal accommodation) but it seems likely that the APS is undercounting EU-origin workers. This is consistent with the early results from the 2022 Census (ONS, 2022).

Table 1. Growth in UK, EU and non-EU-origin employment, 2014-19, Annual Population Survey and HMRC data.

### **Employment, YE June 2014-YE Dec 2019 – APS**

	Number, YE June 2014	Number, YE Dec 2019	Growth	% growth	% of total employment growth
<b>UK</b>	25,459,206	26,518,239	1,059,033	4.2	50.4
<b>EU</b>	1,742,413	2,480,077	737,664	42.3	35.1
<b>Non-EU</b>	2,775,615	3,393,043	617,428	22.2	29.4

**Employment, excluding self-employed, YE June 2014-YE Dec 2019 – APS**

	Number, YE June 2014	Number, YE Dec 2019	Growth	% growth	% of total employment growth
<b>UK</b>	22,109,347	22,586,995	477,648	2.2	22.7
<b>EU</b>	1,396,292	2,066,001	669,709	48.0	31.9
<b>Non-EU</b>	1,831,539	2,784,583	953,044	52.0	45.4

**Employment, excluding self-employed and arrivals as children, YE June 2014-YE Dec 2019 – APS**

	Number, YE June 2014	Number, YE Dec 2019	Growth	% growth	% of total employment growth
<b>UK</b>	22,137,876	22,681,252	543,376	2.5	25.9
<b>EU</b>	1,398,191	1,828,809	430,618	30.8	20.5
<b>Non-EU</b>	1,839,402	2,327,383	487,981	26.5	23.2

**Growth in payrolled employees, July 2014 - December 2019 – HMRC**

	Number, June 2014	Number, Dec 2019	Growth	% growth	% of total employment growth
<b>UK</b>	24,867,500	25,889,000	1,021,500	4.1	45.5
<b>EU</b>	1,839,500	2,637,900	798,400	43.4	35.6
<b>Non-EU</b>	1,687,200	2,113,100	425,900	25.2	19.0

Source: ONS, Annual Population Survey, and HMRC, Payrolled employments in the UK, by region, industry and nationality from July 2014 to June 2021, March 2022.

When we examine the data at a sector level, however, very different patterns are observable, as well as some differences between different data sources. We focus, in Chart 1 and in what follows, on the 12 sectors with more than 1 million employees; together, they make up over 80% of total employment. We present the APS data for all those in employment, to give the broadest picture of labour market trends, although for the reasons above this means the two data sources are not strictly like-for-like.

Interestingly, while for both EU and non-EU origin workers, the two data sources give broadly similar pictures across almost all sectors, this is not the case for UK-origin workers, where the APS shows much higher growth in public administration and professional services, and lower growth in health and wholesale and retail. Some of these differences may be explained by changing patterns of self-employment; for others, it is less clear. Given our focus on trends in the migrant workforce, these discrepancies do not substantively affect our analysis below.

Chart 1. Employment growth from UK, EU and non-EU, selected sectors, 2014-2019





Sources: ONS, Annual Population Survey, and HMRC, Payrolled employments in the UK, by region, industry and nationality from July 2014 to June 2021, March 2022.

Note: Data are from the July-June 2014 and January-December 2019 rounds of the Annual Population Survey, and between July 2014 and December 2019 from the HMRC dataset.

In manufacturing, accommodation and food service, and transportation and storage increases in EU-origin employees accounted for most of the growth in workers born outside the UK. By contrast, UK-origin employees accounted for most of the growth in professional services and in health and social care. Non-EU nationals were more evenly distributed across sectors, with the largest rise in absolute terms being in health, followed by information and communication (ICT), but even here only accounted for less than a third of net employment growth. In education, they made up more than 40% of growth of non-UK-origin employees, likely concentrated in higher education.

These differential patterns are not surprising given the pre-Brexit migration system, where EU citizens, under free movement, could work in any job. For non-EU migrants, the position was much more complex; to qualify for a “Tier 2” visa, new migrants needed to satisfy relatively stringent skill and salary thresholds, although those entering by the family route or as a dependent (and recognised refugees) could generally work in any job, while students could also work subject to various restrictions.

The net effect was not only that EU migrants were much more likely to be able to work in lower skilled or lower paid occupations, but also that they and their potential employers had considerably more flexibility, with far lower costs of hiring or of moving jobs. As a result, many smaller employers were able to hire EU migrants without engaging with the costs or bureaucracy of the immigration system at all. The sectors that are particularly dependent on EU migrants were therefore not just those characterised by lower levels of pay, like accommodation and food services, but also by smaller firms and higher labour turnover, like transportation and construction.

Meanwhile, non-EU migrants arriving on work visas were generally concentrated in specific higher-skilled sectors, especially ICT. However, there are significant migration flows through other routes, in particular family reunion and refugees. While such migrants are much less likely to enter the labour market immediately, since work is not typically their main motivation for immigration, they make up a large proportion of longer-term migrants (since they are less likely, having moved to the UK, to emigrate). Over time a substantial proportion will enter employment. Since they face no specific restrictions on occupations or salaries they are likely to be much more diffused across the economy than those entering on work visas.

#### **4. The post-Brexit migration system**

The new post-Brexit migration system was introduced in January 2021, concurrently with the end of the Brexit transition period and implementation of the Trade and Cooperation Agreement, which contained no significant provisions on migration or labour mobility (**UK in a Changing Europe, 2021**). Free movement was ended, and the vast majority of migrants coming to the UK to work, whether from the UK or beyond, now have to apply for a “Skilled Work Visa”, for which prospective migrants require a job offer above a certain salary and skill threshold (**Portes 2022**). The exception is those

from Ireland, who continue to benefit from the Common Travel Area; and those EU citizens who have acquired settled status in the UK under the Withdrawal Agreement, who will generally be able to return to the UK to work even if they have left.

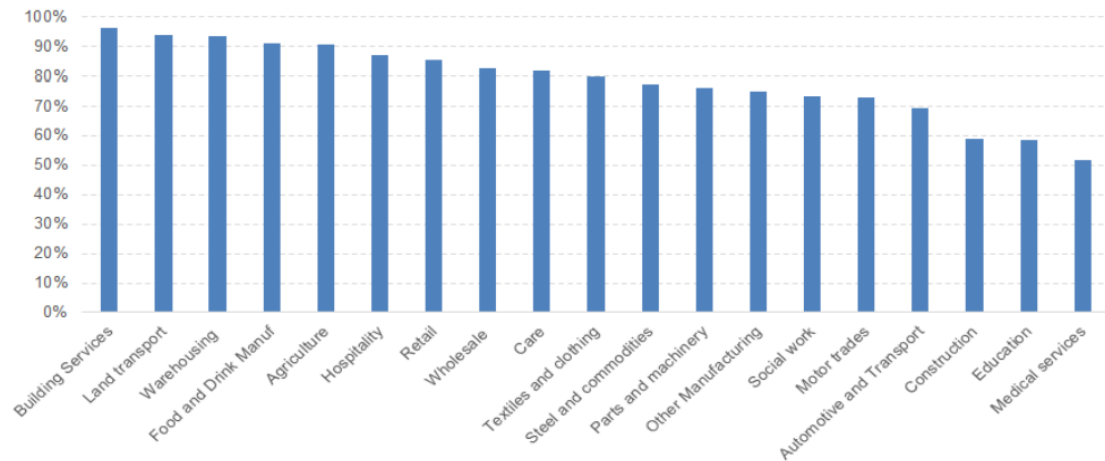
In effect, this means a significantly more restrictive system for work-related migration from the EU, with some liberalisation for those from outside the EU, as the new skill and salary thresholds are lower than under the previous “Tier 2” visa for skilled migration, and some other requirements have been loosened (for example, there is no longer a Resident Labour Market Test). There are also special provisions for the health and care sector, with lower visa fees and less stringent requirements on both skill levels and salaries. These were further loosened in early 2022 for care workers. In addition, the Seasonal Worker Visa scheme provides temporary visas, of up to six months, for workers in the horticulture sector (as well as a very small number in the poultry sector) this scheme is limited by a quota of 40,000 in 2022.

Given the complexity of work permit and work-related migration systems in advanced economies, it is difficult to compare them; however, the combination of relatively low salary and skill thresholds and the lack of a resident labour market test mean that the new system appears liberal compared to that of most advanced economies, including the major EU countries, although of course employers in EU countries can hire workers from anywhere in the EU/EEA/Switzerland free movement area. The basic salary threshold, currently £25,600, is well below median full-time earnings, and the skill threshold, RQF3 or above, also covers a clear majority of all occupations. This means that well over half of all jobs in the UK labour market are in principle eligible for a Skilled Work Visa. By comparison, the standard salary threshold in France and Germany is about €50,000, and the skill threshold for a European Blue Card is a Masters’ level qualification and 5 years of relevant experience. Even countries which are more liberal in principle, like Sweden, apply a labour market test. However, visa fees and other charges are relatively high by international standards, and employers are required to register as a sponsor, which may deter SMEs and employers who have not previously hired workers from outside the EU.

Prior to Brexit, most analyses suggested that the new system would result in a significant fall in migration for work [**Home Office, 2020; Forte and Portes, 2019**] as falls in migration from the EU resulting from the end of free movement would only be partially offset by increases in migration resulting from the effective liberalisation towards workers coming from elsewhere. At the same time, the new system was – by design – also intended to reduce inflows of lower-skilled, lower-paid workers but to increase inflows of higher-skilled workers.

In a number of sectors, the vast majority of EU workers currently working would not have been eligible for a Skilled Work Visa (Chart 2, reproduced from Home Office, 2020).

**Figure 6: Proportion of projected long-term worker EEA inflows to sectors no longer eligible under Option 1 in the central baseline and behavioural response scenario**



Source: Home Office modelling using ONS Annual Population Survey 2016-18 and Annual Survey of Hours and Earnings 2019, modelling described in the Technical Annex.

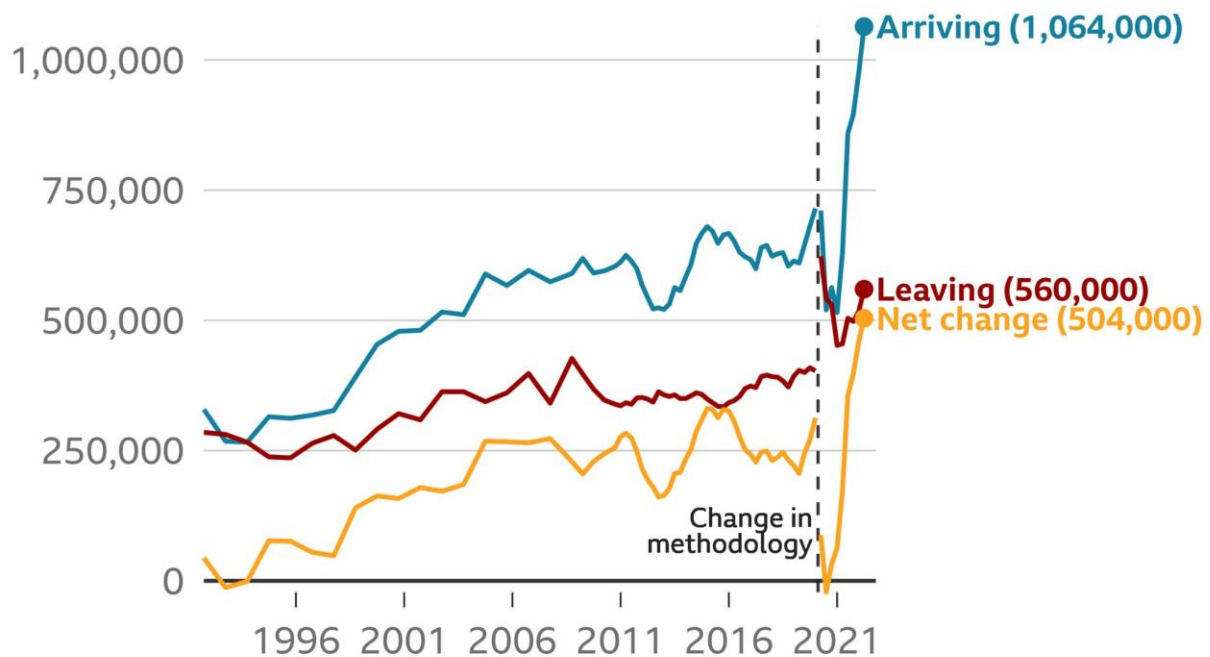
The introduction of the new system coincided with a turbulent period in the UK economy and labour market. With the removal of most covid-related restrictions in early 2021, labour demand rose sharply, and substantial labour shortages and bottlenecks became apparent. Much of this related directly to the disruption resulting from the pandemic and the reopening, but there had also been significant net emigration of EU-origin workers during the pandemic (**Sumption 2021**), which further aggravated labour shortages in some sectors. Not surprisingly, given the various different factors at work – not to mention the disruption to the compilation of official statistics on migration and labour markets during the pandemic period – it is very hard to draw any firm conclusions on the impact of the new migration system from developments during this period.

Two years after the introduction of the new system, however, appears to be an appropriate time to assess its early impacts, particularly in terms of labour market flows. In particular, current discussion of the new system has two, apparently contradictory, themes. On the one hand, there is a clear consensus among business groups the new system is leading to labour shortages, which are inhibiting growth (**House of Commons Library, 2022**). For example, Lord Wolfson, the Chairman of Next, said that the current system is “crippling growth”.

By contrast, others, including influential voices within the current government, argue that the new system is actually far too liberal (O’Brien, 2022), as a result of “employer lobbying”, and was “[created to increase](#)” work-related migration (Timothy, 2022) This reflects recent data suggesting that contrary to the expectations described above, total net migration is now substantially higher than immediately prior to the pandemic [**ONS 2022**].

# UK migration in the year to June 2022

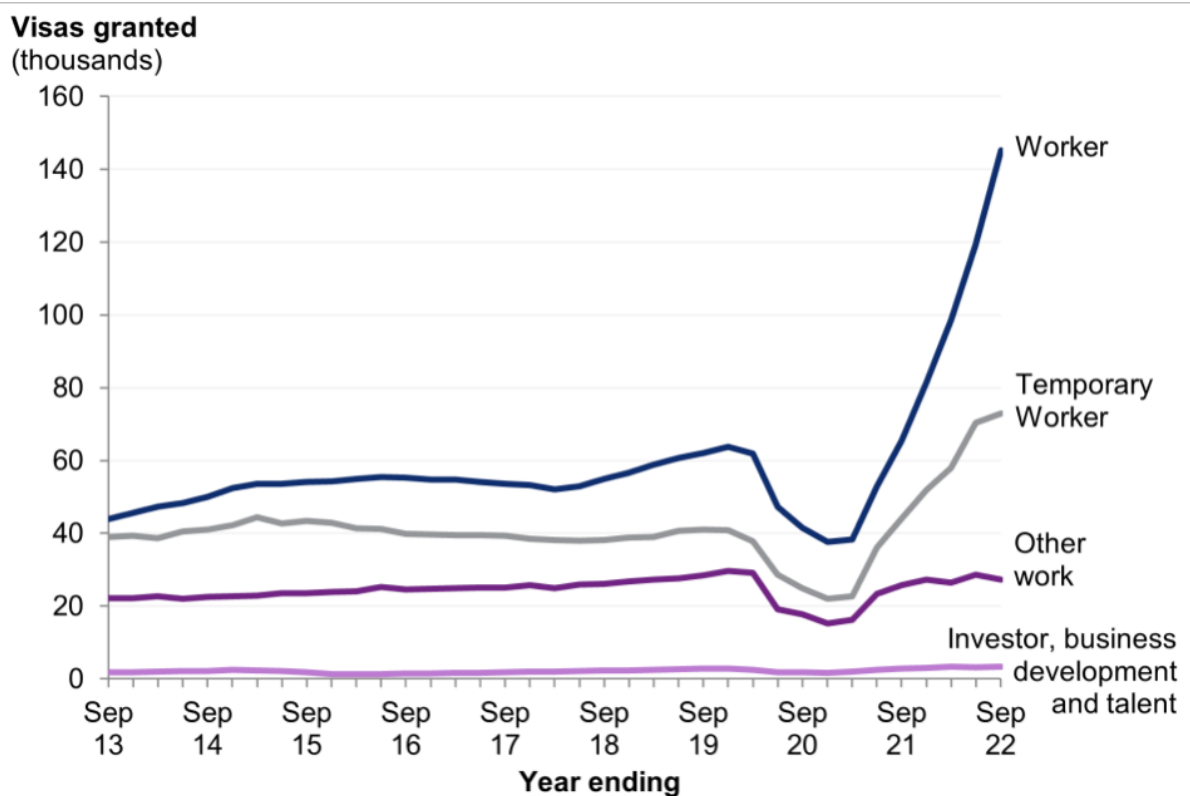
Long-term international migration estimates in the UK



Source: Office for National Statistics

BBC

The very sharp rise in the latest data in large part reflects special factors, including large numbers of arrivals from Ukraine and Hong Kong. Much is also driven by increasing number of international students, the vast majority of whom subsequently leave the UK. However, aggregate data on work visas issued also suggests a significant increase in work-related migration, as shown in Chart 3 (reproduced from **Home Office, 2022**). [Portes 2022b].



How might we expect employers to respond to the new system? In principle, there a number of ways employers could respond to the end of free movement (see, e.g., **Portes, 2021; Sumption et al, 2022**):

- Recruiting workers from abroad (either from the EU or elsewhere) under the new system, usually by sponsoring them on a skilled work visa
- Attracting more workers from the resident UK workforce, most obviously by raising wages, but also perhaps by making jobs more attractive or accessible in other ways
- Increasing productivity, via investment or training
- Reducing employment or output.

Similarly, of course, employers could respond to the liberalisation of migration rules for non-EU citizens in analogous but opposite ways, in particular by recruiting employees from abroad when previously they did not; this could in turn lead to increased employment or output, or possibly reduced wages or employment of resident workers.

### 5. Counterfactual analysis of employment trends

Our particular interest here is in trends in employment (**Hunsaker and Portes, forthcoming**, will examine wage trends). We examine post-pandemic, post-Brexit trends in employment by nationality, and compare them with a counterfactual under which previous, pre-pandemic trends continued. Interpretation of these trends is obviously complicated by other factors which might mean that post-pandemic trends in labour demand differ between sectors; for example, structural changes resulting from behaviour change (for example, the growth of remote working) and Brexit

impacts more broadly than just migration. Separating out these other potential shocks to demand is extremely difficult and unlikely to be feasible with data available now.

Nevertheless, it does seem likely that changes to migration flows, driven at least in part by the new system, are one driver. In this section, we attempt a rough quantification of the overall “shortfall” in migration flows, first for the economy as a whole, and then by sector, using a difference-in-differences approach. We proceed as follows:

- we calculate the average growth rate in the workforce, by region of origin (UK/EU/non-EU), for the 2014-19 period, using the Annual Population Survey. Given the unreliability of the data during the pandemic, we ignore 2020 and 2021 for the purpose of constructing the trends prevailing prior to the introduction of the new system.
- we assume, for the purposes of our counterfactual, that growth rates in the non-UK born workforce would have followed a similar trajectory to that of the UK-born workforce. Note that this does not ignore the impact of the pandemic – rather, it assumes that there is no marked differential impact on labour demand between UK and non-EU workers.
- that is, if average growth in UK-origin employees fell by 1 percentage point in the post-pandemic period compared to the pre-pandemic period, then we assume that absent changes to the migration system then the 2014-19 growth rate in EU and non-EU employment would have also fallen by 1 percentage point.

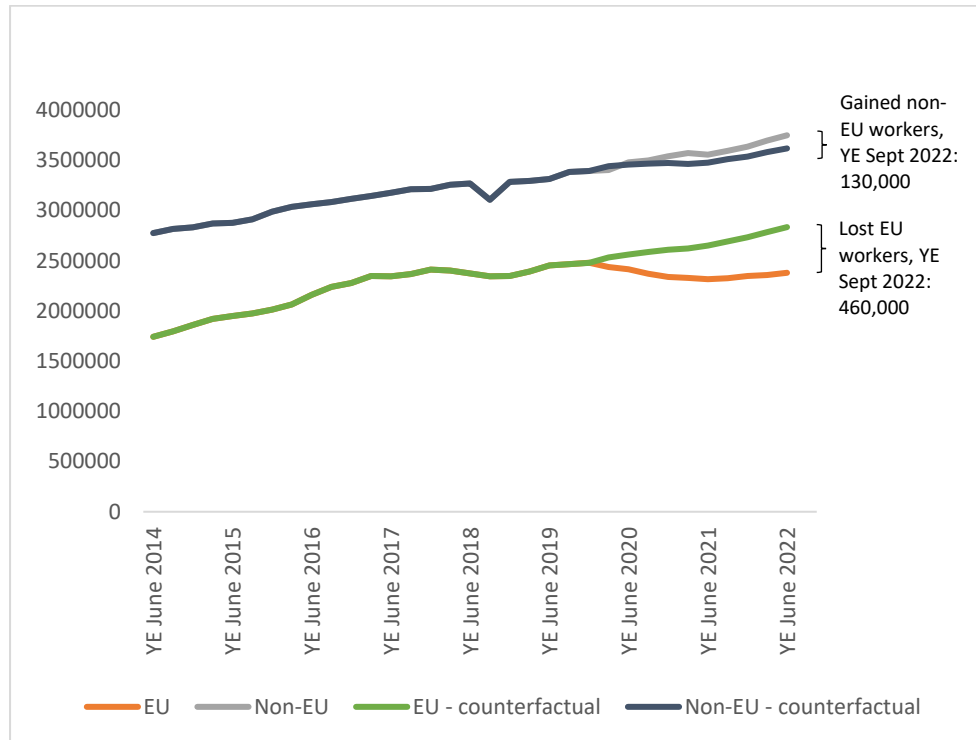
This attempts to control for changes in labour demand at a sector level driven by factors unrelated to migration by comparing trends in migrant workers to that of the domestic workforce. Note that to the extent that part of the change in the trend growth rate of the UK born workforce will also be driven by labour supply – in particular, the marked rise in inactivity following the pandemic (ONS, 2022) – our counterfactual will underestimate the rise in migrant workers that would have otherwise occurred. On the other hand, our estimates will at least partially be picking up the lasting impact of the pandemic on the stock of resident migrant workers, so may overstate the impact of the introduction of the new system. Particular issues apply to the health sector, as described below. Our methodology is necessarily crude, and inevitably, given the time period covered, we are even with the adjustments described above to some extent conflating the impact of the pandemic with that of the introduction of the new system – and the two clearly interact. Nevertheless, we think this is a useful thought experiment.

The results for the entire labour force are shown in Chart [4]. There is a significant shortfall of EU-origin workers of about 460,000 workers, partly but not wholly compensated for by an increase (relative to our assumed counterfactual, not relative to pre-pandemic growth rates) of about 130,000 non-EU workers.

Note that as illustrated on the chart, the shortfall begins during the pandemic, coinciding with the departure of a substantial number of EU workers – in other words before the introduction of the new system.. While we would not place too much weight on the precise path of our estimates over the pandemic period, given the issues with the data, this does mean that our estimates will to some extent conflate the influence of the new system with that of the pandemic (although this effect is

much less visible for non-EU workers, so it is not purely a pandemic effect). They could also be interpreted as implying that some of the shortfall for EU workers reflects that, absent the new system, a period of catch-up growth might have been expected after pandemic restrictions ended.

Chart 5. EU and non-EU change in employment, with counterfactuals from March 2019.



Source: ONS, Annual Population Survey.

As set out above, our difference in difference approach assumes that the fall in the number of UK workers was largely driven by a shock to labour demand; if the growth rate of UK-origin workers fell, we assume that the growth rate of non-UK workers fell proportionately, and that employers were not seeking to replace UK workers with those born elsewhere. But, as noted above, the fall in UK origin workers may also reflect lower labour supply. As a check, we also adopt an alternative, simpler counterfactual that assumes that the pre-pandemic growth rates would have continued at the same rate for UK, EU and non-EU origin workers, but that one year of growth is “lost” to the pandemic.

In contrast to our first approach, which assumed that the fall in the number of UK workers was driven solely by a shock to labour demand, this also allows for differential falls in supply, and produces a shortfall of just over 500,000 UK-origin workers, not far off the rise in inactivity (ONS 2022), and comparable to that suggested by other analyses (Bank of England, 2022). The shortfall for EU workers by this method is about 350,000, while the “excess” of non-EU workers is about 165,000, so this method gives quite similar results to our preferred approach, suggesting that at the level of the workforce as a whole it is a reasonable guide to developments.



On a sector level, the results are unsurprisingly much more mixed. The results (using our preferred counterfactual) are shown in the table below. There are large shortfalls in manufacturing, transport, construction, wholesale and retail, and accommodation and food service. In all of these sectors EU employment is well below the counterfactual (as well as its previous level), while there is no visible substitution from non-EU origin workers. Our simpler alternative counterfactual gives very similar results.

Table 2. EU and non-EU change in employment, 2020-22, with counterfactuals.

Sector		Out-turn, Q2 2022 Number of workers	Counterfactual, Q2 2022 Number of workers	Gain/loss of workers under new system	Gain/loss as % of total employment in sector
Health and social work	EU	276,000	278,000	-1,700	-0.04%
	Non-EU	711,000	637,000	74,000	1.65%
Education	EU	237,000	195,000	42,000	1.20%
	Non-EU	357,000	299,000	58,000	1.68%
Public admin and defence	EU	100,000	106,000	-5,800	-0.23%
	Non-EU	188,000	163,000	25,000	0.99%
Admin and support	EU	121,000	153,000	-32,000	-2.26%
	Non-EU	182,000	204,000	-22,000	-1.56%
Finance and insurance	EU	103,000	114,000	-12,000	-0.84%
	Non-EU	184,000	189,000	-5,500	-0.39%
Information and communicat ion	EU	150,000	159,000	-9,000	-0.55%
	Non-EU	291,000	271,000	20,000	1.22%
Accommoda tion and food	EU	177,000	244,000	-67,000	-4.08%
	Non-EU	251,000	282,000	-31,000	-1.86%
Transportati on and storage	EU	137,000	265,000	-128,000	-8.45%
	Non-EU	253,000	256,000	-3,100	-0.20%
Constructio n	EU	164,000	210,000	-46,000	-2.17%
	Non-EU	132,000	139,000	-6,600	-0.31%
Manufacturi ng	EU	277,000	324,000	-47,000	-1.73%
	Non-EU	234,000	242,000	-7,900	-0.29%
	EU	263,000	366,000	-103,000	-2.79%

<b>Wholesale, retail, repair of motor vehicles</b>	<b>Non-EU</b>	360,000	377,000	-17,000	-0.46%
<b>Professional, scientific, technical</b>	<b>EU</b>	193,000	241,000	-48,000	-1.79%
	<b>Non-EU</b>	344,000	321,000	23,000	0.85%

Source: ONS, Annual Population Survey.

Other sectors, which typically employ higher skilled or paid workers, show rather different patterns. In Information, communication and technology, the growth in non-EU workers is above pre-pandemic trends, and has more than offset the fall in EU workers. In other high skill service sectors – professional service and finance – non-EU workers are broadly in line with trend, while there is a relatively modest shortfall in EU workers in finance, and a somewhat larger one in professional services.

One clear outlier is health, where the growth in the non-EU workforce has been very large, more than compensating for the small fall in the EU-origin workforce compared to trend. This reflects both high demand both during and after the pandemic, and difficulties in retaining the existing NHS and care workforce at a time of considerable pressure on workloads and falling pay relative both to inflation and to the private sector, which means that despite high demand UK-origin workforce growth has been very weak.

## 6. Visa data

An alternative perspective on the shortfall in migrant workers is gained from looking at data on visas issued under the new system. Overall, the number of skilled work visas has risen substantially compared to the pre-Brexit system; but this obviously reflects in part the fact that under free movement EU citizens did not need visas.

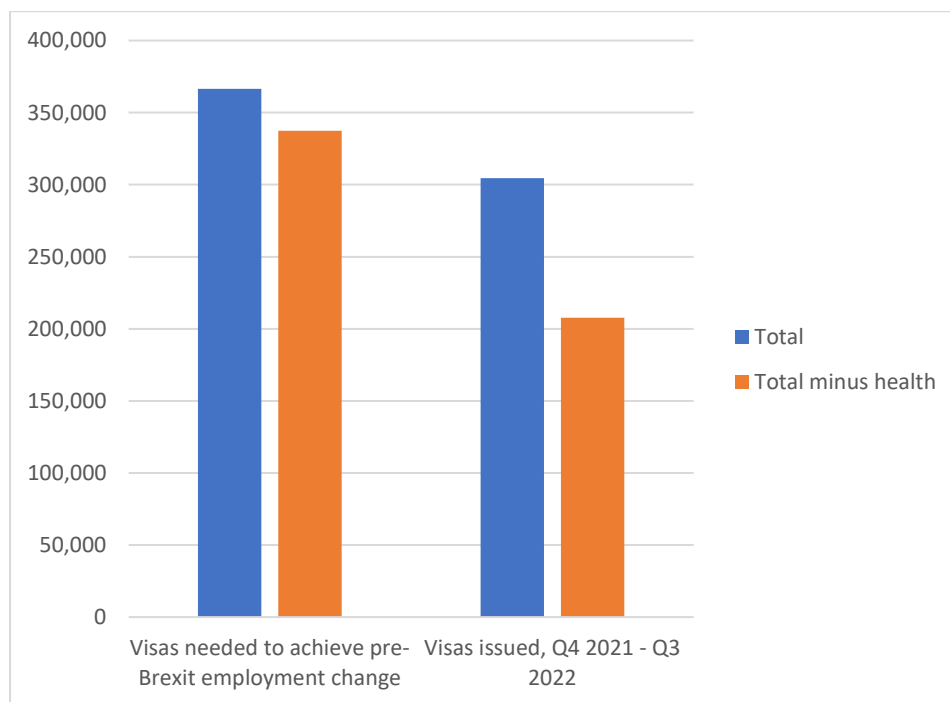
One way of looking at this is to note that in the 2014-2019 period, the number of work visa applications per year averaged just over 130,000<sup>3</sup>; this translated into a net increase in non-EU origin payrolled employments of about 80,000 a year (when using the HMRC data described above. This translation is not mechanical – we are comparing gross flows with net changes, and moreover, as noted above, a significant proportion of non-EU migrants taking up employment will not have required (or been eligible for) a work visa. Nevertheless, for the main sectors employing non-EU migrants, there is a reasonably strong correlation between the two figures.

Very crudely, this would suggest that, since the net increase in EU employees between 2014 and 2019 was about twice as large, the number of work visas issued would also need to increase almost three-fold, to just under about 370,00 a year. In fact, in the latest data, in the year to the third quarter of 2023, it had risen to just over 300,000 a year. A number of further caveats need to be

<sup>3</sup> We use applications since the data are available at sector level in a timely fashion. Almost all applications are approved.

applied here. In particular, this figure ignores EU citizens with settled status now resident outside the UK, who may well number over a million, although their propensity to return to the UK is unknown. It also ignores the potential boost to non-EU labour supply from refugees, in particular Hong Kong and Ukraine, and the increased number of dependants entering under the new system, who typically have unrestricted rights to work. However, excluding the health sector, which accounts for about 40% of visas issued, the shortfall appears considerably larger, with only about two-thirds of the “required” number of visas issued.

Chart 6. Visa applications, year ending Q3 2022, and visas needed to achieve pre-Brexit annual change in employment



Sources: HMRC, Payrolled employments in the UK, by region, industry and nationality from July 2014 to June 2021, March 2022; Home Office, Immigration statistics, year ending September 2022, work sponsorship.

This in turn, as with employment trends, reflects the very different experience of different sectors.

Table 3. Change in non-UK-origin employees, 2015-19, and visa applications, year ending Q3 2022, selected sectors

	Annual average increase in non-UK-origin payrolled employees, 2015-2019	Annual average visa applications per year, 2015-2019	Visa applications, Q4 2021 to Q3 2022
Health and social work	32,800	16,499	96,928
Wholesale and retail; repair of motor vehicles	29,920	1,806	3,446

Administrative and support services	22,120	3,983	5,702
Accommodation and food service activities	22,060	1,088	6,397
Transportation and storage	20,460	607	1,523
Manufacturing	20,020	4,096	9,081
Professional, scientific and technical	19,180	17,479	29,541
Information and communication	15,180	30,011	37,527
Education	12,520	7,813	10,476
Construction	9,880	839	3,066
Finance and insurance	5,160	11,046	20,317
Public administration and defence; social security	2,320	417	1,106

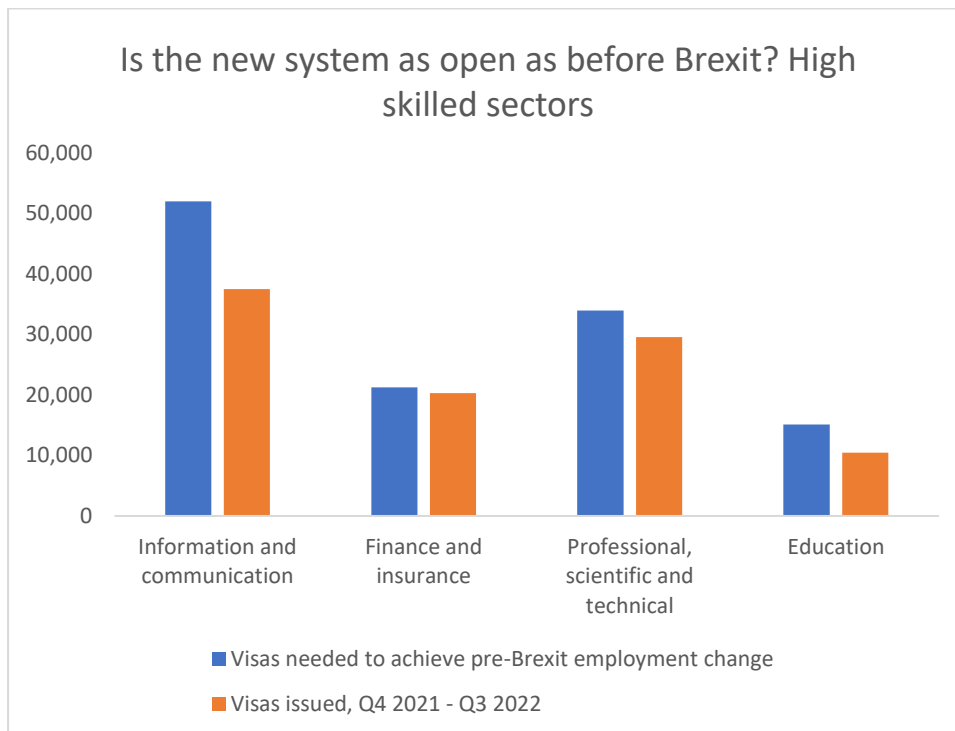
Sources: HMRC, Payrolled employments in the UK, by region, industry and nationality from July 2014 to June 2021, March 2022; Home Office, Immigration statistics, year ending September 2022, work sponsorship.

We can see that – excluding health – sectors effectively fall into two groups. In lower skill sectors, such as manufacturing, hospitality and wholesale and retail, very few work visas have been issued; in other words, the new system is providing little or no replacement for the fall in migration from the EU resulting from the end of free movement. This does not mean that such sectors are not recruiting migrants at all, since those arriving via other routes can still work in these sectors, but it does demonstrate that the new system is not facilitating work-related migration to any significant extent, in contrast to the pre-Brexit position.

By contrast, in some higher skilled sectors – ICT, finance, professional and technical, and education – visa issuance is comparable to the net change in non-UK employment seen pre-pandemic. These were also the sectors which relied heavily on work-related visas prior to the introduction of the new system. For these sectors we attempt to measure whether or not in fact the new system is as “open” overall as before, using a similar approach to that shown above for the labour market as a whole. We calculate the ratio of the net change in non-EU employment to visa issuance for the pre-pandemic period, and then calculate the number of visas that would be required to support the pre-pandemic growth in employment, assuming this ratio remains constant.

This is clearly a crude measure – we are comparing the net change in the stock of non-EU workers, not all of whom will require a visa – with visa flows, but seems like a reasonable way to scale the current flows. The results are shown below, and suggest that the new system does overall provide a comparable degree of openness, albeit somewhat less so in ICT and education, at least so far (note that the effective abolition of the long-term intra-company transfer visa has disproportionately affected the ICT sector)

Chart 7.



Sources: HMRC, Payrolled employments in the UK, by region, industry and nationality from July 2014 to June 2021, March 2022; Home Office, Immigration statistics, year ending September 2022, work sponsorship.

## 7. Analysis

Prior to the pandemic, migration was a key driver of UK labour force growth, not just in aggregate but for most sectors. But the nature of the migration system dictated the sectoral distribution of this migration, with relatively low-paid workers in typically lower skilled sectors coming from the EU under free movement, while higher skilled sectors (including the health sector) recruited both from the EU and beyond, under the relatively restrictive rules governing work-related migration from outside the EU.

The new system, which has equalised this two-tier system by applying the same rules to new work migrants regardless of country of origin (with the exception of those from Ireland) has, as expected, resulted in a large reduction in EU migration and an increase in non-EU migration. Our analysis suggests that, although migration overall is currently running at least at pre-pandemic levels, there remains a substantial "shortfall" in migration for work; that is, that migration-driven labour force growth is substantially below plausible counterfactuals, even taking account (in a mechanistic way) of the impact of the pandemic and associated changes in labour demand, although these calculations are admittedly based on a very broad-brush methodology.

However, as would be expected given the nature of pre-pandemic work migration, these impacts differ very considerably between sectors. In lower-skilled sectors, work-related migration under free movement does not appear to have been replaced by additional visa issuance under the new system. Meanwhile, in higher skilled sectors, increased visa issuance has increased, and does appear

to be consistent with levels of migration that are broadly in line with pre-pandemic, pre-Brexit trends; that is to say, the loss of free movement has been balanced by the somewhat more liberal post-Brexit regime for skilled work visas.

One point that emerges from the above is that while under the new, more liberal system, non-EU migration has, as expected, increased quite significantly it has done so primarily by increasing visa numbers in sectors and occupations which were already relatively open, especially the health sector, rather than by taking advantage of the new system to extend the use of the system to sectors which previously relied on EU migrants. This is despite the fact that a substantial proportion of jobs in these sectors would in principle be eligible for skilled work visas. For example, while median pay in accommodation and food services is less than half the national average – suggesting that relatively few positions would qualify for a Skilled Work Visa – both construction and transportation have above average pay (**Migration Observatory, 2022**).

There are a number of possible explanations for this. Many employers, particularly smaller employers and those who have previously relied on EU workers, are less likely to have sponsored non-EU migrants for work visas in the past, so face the start-up costs of securing a sponsor license and familiarising themselves with the system. And the costs (financial and administrative) will make up a greater proportion of employment costs for lower-paid workers (MAC, 2021). This may mean that the apparent liberalism of the new system proves more restrictive in practice; alternatively, over time, as awareness spreads and employers become more familiar with the new system, it may be that visa issuance spreads beyond the ‘traditional’ higher skilled sectors. And of course broader labour market developments will influence future demand for migrant workers.

## **8. Conclusion**

The post-Brexit migration system has produced, as designed, a clear break with pre-Brexit trends, reducing labour supply for some sectors. This is arguably “a feature not a bug” (**Portes, 2022**). The rationale for the new system was, at least in large part, a view the availability of a relatively flexible supply of labour, particularly in lower paid occupations, had reduced the incentive for firms to increase productivity by training the resident workforce or investing in equipment or other ways of enhancing labour productivity, and hence wages. Restricting this option would therefore, it was argued, result in increases in productivity. Others, however, noted that there was little evidence that migration had in fact reduced either productivity or training in the UK (**Portes 2018**) and argued that the main response was likely to be reductions in employment and output, perhaps alongside some adjustment in relative wages.

The jury is still very much out on these issues, with impacts on productivity in particular likely to manifest only over a longer period. As yet there is little evidence either of non-UK workers being substituted by UK ones or of wages responding (**Migration Advisory Committee, 2022**). Most of the adjustment is therefore likely to take place through lower employment, which is indeed visible; whether businesses can over time compensate with increased productivity, rather than simply reducing output, remains to be seen.

## References

- Glover, S., Gott, C., Loizillon, A., Portes, J., Price, R., Spencer, S., Srinivasan, V. and Willis, C. (2001) *Migration: An Economic and Social Analysis*, RDS Occasional Paper 67. Home Office: London.
- Portes J (2016) Immigration, free movement and the EU referendum. *National Institute Economic Review* 223: 14–22.
- Portes J (2019) *What Do We Know and What Should We Do about Immigration?* London: SAGE.
- Forte, G., and Portes, J., (2019), “Migration to Wales: the impact of post-Brexit policy changes, Welsh Centre for Public Policy, University of Cardiff, February 2019  
[https://www.wcpp.org.uk/wp-content/uploads/2019/03/FINAL-WCPP-report\\_Immigration-in-Wales-post-Brexit.pdf](https://www.wcpp.org.uk/wp-content/uploads/2019/03/FINAL-WCPP-report_Immigration-in-Wales-post-Brexit.pdf)
- Home Office (2018), “Policy Paper: the UK’s future skill-based immigration system”, December 2018.  
<https://www.gov.uk/government/publications/the-uks-future-skills-based-immigration-system>
- Home Office (2020a), “ Impact Assessment for Immigration and Social Security Co-ordination (EU Withdrawal) Bill 2020”  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/885682/2020-05-18\\_IA\\_ImmSSC\\_Bill\\_v21\\_with\\_Signature.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/885682/2020-05-18_IA_ImmSSC_Bill_v21_with_Signature.pdf)
- Hunsaker, S. and Portes, J (2023, forthcoming), “Migration and wages in the UK after Brexit”, UK in a Changing Europe.
- Migration Advisory Committee (2018), “EEA Migration in the UK: Final Report”,  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/741926/Final\\_EEA\\_report.PDF](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741926/Final_EEA_report.PDF)
- Migration Advisory Committee (2020), “Points-based systems and salary thresholds”,  
<https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-points-based-system-and-salary-thresholds>
- Portes, J. (2019). *Immigration: what do we know and what should we do*. Sage Publishing.
- Portes, J., (2020), [Between the Lines: Immigration to the UK between the Referendum and Brexit: DCU Brexit Institute Working Paper 12-2020](#), Bridge Network, Dublin, December 2020.
- Sumption, M., “Where did all the migrants go? Migration data during the pandemic”, Migration Observatory, February 2021  
<https://migrationobservatory.ox.ac.uk/resources/commentaries/where-did-all-the-migrants-go-migration-data-during-the-pandemic/>