

ARTICLE

# UNINTENDED CONSEQUENCES? THE CHANGING COMPOSITION OF IMMIGRATION TO THE UNITED KINGDOM AFTER BREXIT

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## Abstract

The end of free movement and the introduction of the post-Brexit migration system represent the most important changes to the UK migration system in half a century. Coinciding with the aftereffects of the pandemic, the result has been very large changes both to the numbers of those coming for work and study, and to their composition, both in terms of countries of origin and in the sectors and occupations of new migrants. It has also resulted in a political backlash, resulting in significant further changes to the system announced in December 2023. I discuss the evidence to date of the impact of recent migration trends on the UK economy and labour market, distinguishing between different sectors.

**Keywords:** migration; productivity; labour markets; Brexit

**JEL codes:** F22; J48; J61; J68

## 1. Introduction

The political impact of immigration, and specifically the European Union's principle of free movement, was central to the growth of anti-EU sentiment in the years leading up to the Brexit referendum, and was probably the most important substantive issue driving the referendum result (Portes, 2016). Despite this, analysis of the economic impact of Brexit has focused primarily on its impact on trade. Those analyses that did examine the potential economic implications of changes to immigration policy resulting from Brexit mostly suggested that the end of free movement would compound the damaging effects of new barriers to trade, although this might be partly offset by increases in non-EU migration, and there might be some small positive impacts on wages for lower-paid workers.

However, the new post-Brexit migration system proved to be considerably more liberal than anticipated; moreover, the period since its introduction in early 2021 has coincided with very high labour demand in some sectors. Against this background, I discuss migration trends since the Brexit referendum and the operation of the new system to date. Using a simple counterfactual analysis, I estimate that increased migration from outside the European Union has more than offset – rather than only partially offsetting – reductions in EU migration. I also reassess the economic impacts in the light of

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experience. I conclude that, in contrast to *ex ante* predictions, the economic impact of changes to migration resulting from Brexit have likely been mildly positive.

Despite these broadly positive outcomes, there has also been a political backlash against current high levels of migration, which in turn has resulted in recent policy changes, aiming to make the system more restrictive. I suggest that UK immigration policy would benefit from a period of stability.

## 2. The post-Brexit migration system

Brexit has led to the most significant set of changes to the UK immigration system since the late 1960s and early 1970s, when a series of legislative changes restricted immigration from the Commonwealth, while the United Kingdom's entry to the then European Economic Community introduced free movement of workers with most of Western Europe. In the run up to the Brexit referendum, migration from the European Union had risen sharply. In fact, revised estimates (ONS, 2023) now suggest that it was even higher than thought at the time, peaking at well over 300,000 in the year to June 2016.

There was considerable debate about what the “problem” with immigration was that Brexit was intended to resolve, in either political or economic terms. Was it excessive immigration *per se*, or merely that the European Union's free movement rules meant that the United Kingdom has little or no control over immigration from the European Union, as highlighted by the successful slogan “Take Back Control”? During the referendum, Vote Leave – the “official” campaign arguing for Brexit – adopted the latter interpretation, avoiding specific promises to reduce immigration, and instead stating that after Brexit, the United Kingdom would introduce “A fairer immigration system that is better for Britain, stops discriminating on the basis of where you come from, and instead allows us to pick people on the basis of skills” (Vote Leave, 2016).

This system was set out in principle in a White Paper in December 2018 (Home Office, 2018) with the details following in January 2020; the new system was introduced in January 2021, alongside wider changes to the United Kingdom's economic relationship with the European Union, after the end of the “transitional period” that followed legal Brexit in January 2020 (Home Office, 2020).

The key features of the new system were to be the following (Portes, 2022):

- eligible positions would be those paying more than £25,600 or the lower quartile of the average salary for that occupation, whichever is higher, and in an occupation requiring skills equivalent to at least RQF3 (broadly the equivalent of 2 A-levels)
- “discounts” for trainees, those with recent PhDs, and those in “shortage occupations” that meant for some occupations/recruits the salary threshold could be as low as about £20,000.
- For the National Health Service and teachers, instead of the salary threshold, recruits could be paid according to prevailing national pay scales. However, the same skill threshold applied, so not just nurses and doctors but radiographers and technicians were covered, but not lower-skilled NHS positions.
- There was also to be an expanded Seasonal Agricultural Workers Scheme, but no other sectoral schemes for workers who do not meet the skill threshold, and in particular, despite high levels of vacancies and staff shortages, not for the social care sector or for accommodation and hospitality.
- Some restrictive and bureaucratic features of the old Tier 2 system, in particular the overall quota (which had already in practice been substantially relaxed) and the “Resident Labour Market Test” requiring employers to demonstrate (in principle if not really in practice) that they could not find a suitable resident worker, were abolished.
- One proposal which was included in the original White Paper, but not implemented, was a short-term route “allowing temporary short-term workers to come for a year.” This proposal, designed to address some of the difficulties employers who previously relied heavily on EU-origin workers coming to the United Kingdom under free movement, was felt to present significant difficulties in administration and enforcement.

While the new system broadly fulfilled Vote Leave's pledge, the precise specification of the salary and skills thresholds was considerably more liberal than had applied to non-EU migrants under the existing system, reflecting both business concerns and the desire on the part of government (especially the Treasury) to smooth the impact of Brexit and to make a reality of "Global Britain". Indeed, early estimates suggested that, at least in principle, these specifications implied that at least half of all employee jobs in the United Kingdom would be open to almost any applicant from anywhere in the world. As I wrote at the time:

"Contrary to the hopes and fears of many, Brexit looks less like it will make a decisive turn towards restricting immigration ... instead, it may signal a different form of openness." (Portes, 2020).

Moreover, two more major changes, announced separately, further liberalised the system. In 2004, the United Kingdom had introduced a "Post-Study Work Visa", which allowed most international students graduating from UK universities to extend their stay for up to two years, during which time they could work in any job. This scheme was abolished by the Coalition government in 2012, due to (largely ill-founded) concerns over overstaying as well as more substantive ones over the employment outcomes of those making use of the scheme. Reintroducing some version of the scheme had long been a priority of the university sector, which regarded it as essential for the United Kingdom to compete in the international student market against other English-speaking countries which offer similar schemes, and it was indeed reintroduced in 2021. Again, the government's motivation was to smooth the Brexit transition, here for universities who were facing large falls in EU student numbers resulting from Brexit. Given the sector's heavy reliance on international student fees to subsidise domestic students paying below cost, any major shortfall in international students would likely have had serious adverse consequences.

The second liberalisation was that for care workers. While senior care workers were already eligible for visas under the new system, staff shortages grew throughout the sector after the end of the free movement, exacerbated severely by the pandemic and its aftermath. In December 2021 the Migration Advisory Committee – very reluctantly, given its long-standing position that these shortages were best addressed by improving pay and conditions in the sector – recommended that all care worker occupations (regardless of skill level, and, given the low levels of pay prevalent in the sector, essentially regardless of salary) should be eligible for a visa. (Migration Advisory Committee, 2021).

### 3. Impact estimates

In the period between the announcement of the Brexit referendum and the implementation of the UK-EU Trade and Cooperation Agreement and the post-Brexit migration system in January 2021, an extensive body of work examined the economic impacts of these changes under different potential scenarios. See Office for Budget Responsibility (2018) for a review. However, the primary focus of these studies was impacts via the changes to trade rules. Some studies ignored migration impacts entirely, while others used broad-brush estimates of the impact on overall migration flows, and then embedded these within a macroeconomic model.

For example, Hantzsche et al, 2018, assumed that, in the event of a free trade deal, net migration would be reduced by about 50,000 per year. This contributes about 1 per cent of a total forecast GDP reduction from Brexit (compared to the United Kingdom remaining in the European Union) of about 4 per cent by 2030; the impact on GDP per capita would be negligible. Other studies making similar assumptions found broadly similar results, including the Government's own analysis of the impact of future Brexit scenarios (HM Government, 2018).

The Office of Budget Responsibility itself, while assuming Brexit reduces long-run UK productivity by about 4 per cent, does not model the impact of migration; instead, it assumes that changes to net migration feed through directly to changes in employment. As of 2020 it assumed that net migration

would fall by about 100,000 a year, mostly as a result of the Brexit-related changes, reducing trend growth by about 0.2% per year 2018(OBR, 2018).

However, some studies did focus more directly on the impact of migration, estimating which occupations would and would not be eligible for work visas under the new system, albeit not within a broader macroeconomic modelling framework, and using this to project both changes to employment and GDP impacts. Forte and Portes (2017) estimated a fall in about 600,000 in EU migration over 10 years, partly offset by an increase in non-EU migration of about 50,000, with the latter being higher skilled and higher paid. The net effect was a GDP reduction of 1.4 to 1.9 per cent and a GDP per capita reduction of 0.4 to 0.9 per cent.

This assumed a salary threshold of £30,000. In subsequent work (UK in A Changing Europe, 2019), Portes elaborated these estimates, broadly reflecting the system ultimately adopted. This projected a somewhat smaller fall in EU migration (about 500,000 over ten years) and a considerably larger rise in non-EU migration (about 150,000), and consequently a much smaller reduction in GDP (0.2 to 0.6 per cent) and a small rise (0.2 to 0.6 per cent) in GDP per capita, reflecting higher salaries among new migrants.

Similarly, the official Home Office impact assessment of the new system (Home Office, 2020b) projected a reduction of 200–400,000 in net EU migration over the period to 2025, partly offset by an increase of 40–100,000 in non-EU migration. They did not estimate the impact on GDP, but their results imply a small reduction in GDP (below 0.5 per cent) and little impact on GDP per capita. Given the different time periods, these estimates are quite similar to Portes' results.

Overall, then, *ex ante* estimates of the impact of the new system were that it would lead to an overall reduction in net migration, with reductions in EU-origin migration being partly but not wholly offset by increases in non-EU migration; and that this would in turn lead to reductions in GDP, of perhaps 1 per cent over a decade, although the impact on GDP per capita would be considerably smaller, and perhaps even positive (Portes, 2022).

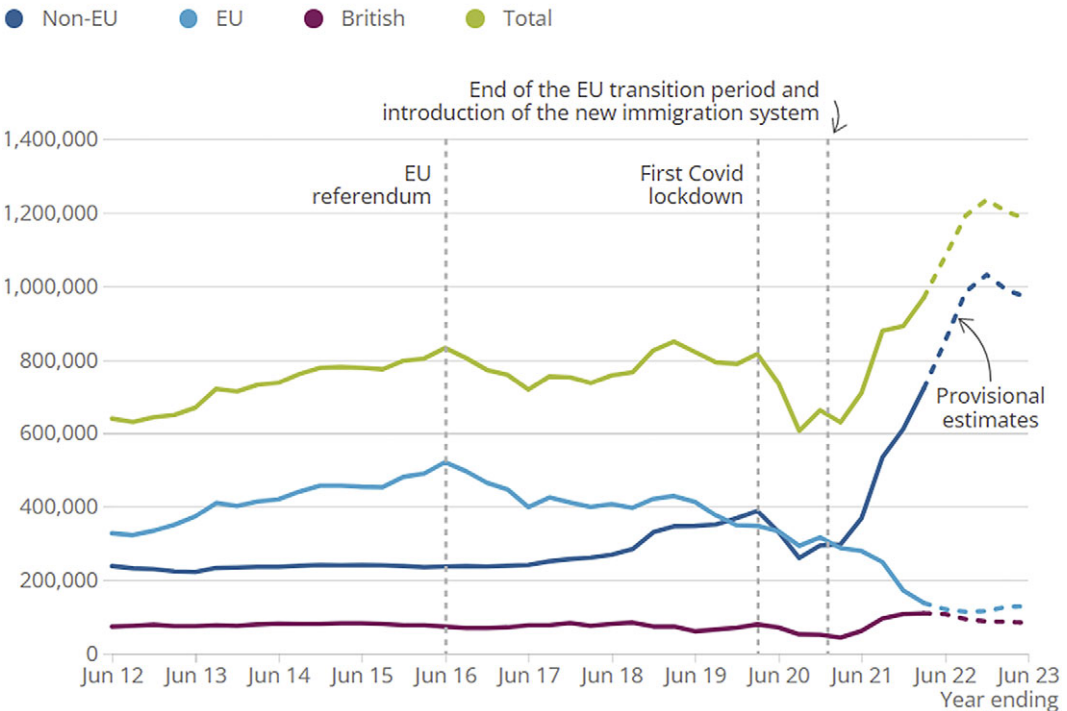
#### 4. Recent migration trends

What, then has the impact of Brexit and the new system been on migration trends, and how does it compare to these predictions? We can divide the period between the Brexit referendum and now into three periods, as illustrated in [Chart 1](#):

- The period between the referendum and the pandemic (that is, June 2016 to February 2020), during which there were only minor changes to immigration policy (since free movement remained in force until January 2021).
- The pandemic and the associated lockdowns, including enforced closures and other restrictions, from March 2020 to the spring of 2021 (retailers were allowed to reopen in April 2021). As noted above, the post-Brexit migration system was introduced in January 2021.
- The period of full operation of the post-Brexit system, alongside the reopening and normalisation of the economy, up to the present.

During the first period, although free movement remained in place, net EU migration fell sharply and steadily, from its peak of over 300,000 per year at the time of the referendum to below 100,000 at the start of the pandemic; broadly consistent with the forecasts in Forte and Portes (2017). This fall was driven by a combination of factors: labour market developments in the United Kingdom and (especially) in the key “source” countries for EU-origin migrants coming to the United Kingdom (as discussed in more detail below, there was also a substantial reduction in net migration from other EU countries to Germany over this period), exchange rate movements, and the (psychological and expectational, rather than legal) impacts of Brexit (Portes 2022). There was some acceleration of this fall in 2019, perhaps reflecting Brexit-related uncertainty and the possibility of a “no deal” Brexit. Meanwhile, there was a steady

### Number of non-EU, EU, and British nationals immigrating into the UK, between YE June 2012 and YE June 2023



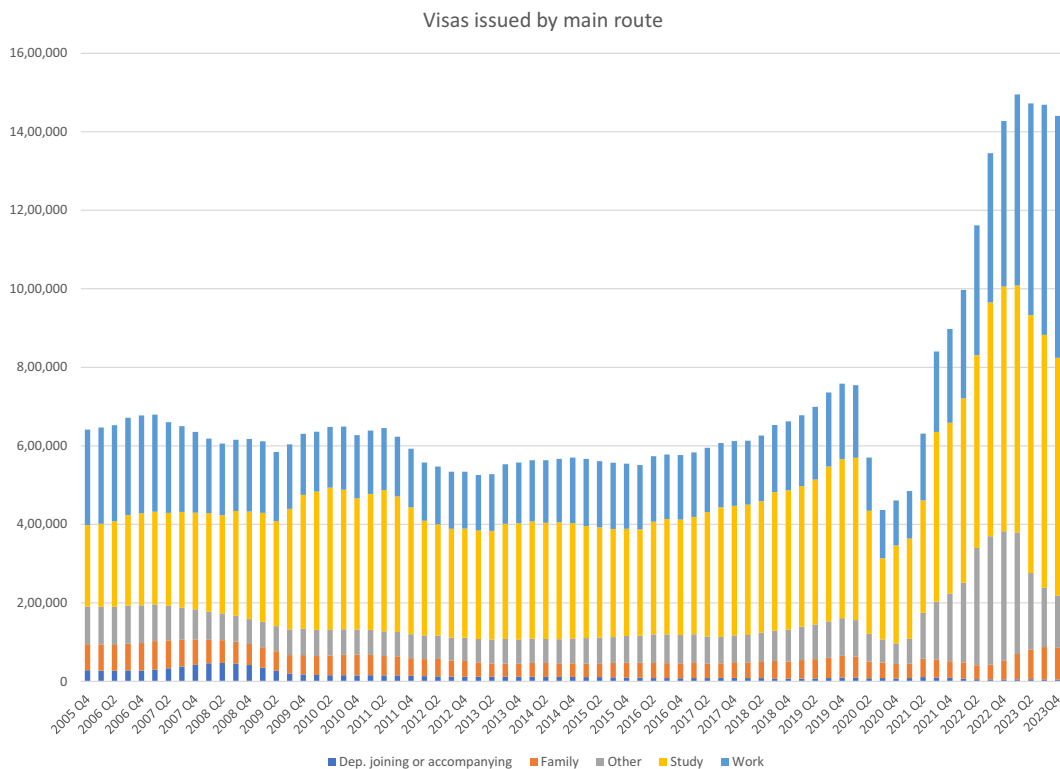
**Chart 1.** Annual number of EU, non-EU and British nationals migrating into the United Kingdom. Figure reproduced from ONS, 2023.

although less marked increase in non-EU migration. In part this reflected increases in migration for work, resulting from substitution from EU to non-EU migrants (especially in the health and social care sectors) as well as increased student and refugee/humanitarian flows.

The pandemic and associated lockdowns and travel restrictions, unsurprisingly, led to sharp falls in inward migration. There was also a substantial increase in return migration, particularly of EU nationals leaving the United Kingdom, reflecting their concentration in sectors (accommodation, hospitality, tourism, and retail) that were almost entirely shut down. Considerable uncertainty remains over the magnitude of this return migration, since both migration (flow) and population (stock) statistics are measured using survey data, which essentially became useless due to high and differential levels of non-response (Sumption, 2021). Administrative data suggests that it was likely to have been in the hundreds of thousands. Student migration was also severely impacted, although both student immigration and (especially) emigration are poorly measured even in normal times, and hence the uncertainties here are even higher.

The reopening of the economy in mid-2021 led to widespread labour shortages in some sectors, as resurgent demand met reduced supply. This was particularly acute in sectors where significant numbers of EU-origin migrants had left the workforce, as well as in the health and social care sectors, where the pandemic appears to have led to both persistent increases in demand and increased exit rates among existing staff, as a result of pressure on working conditions and wages. More broadly, there also appears to have been some structural increases in the levels of inactivity related to ill-health among the resident workforce.

This coincided with the introduction of the new system and the other liberalisations described above, as well as large refugee flows from Ukraine and Hong Kong, and increases in the number of asylum



**Chart 2.** Visas issued by main route (annual rolling total).

Source: Home Office, 2024; authors' calculations.

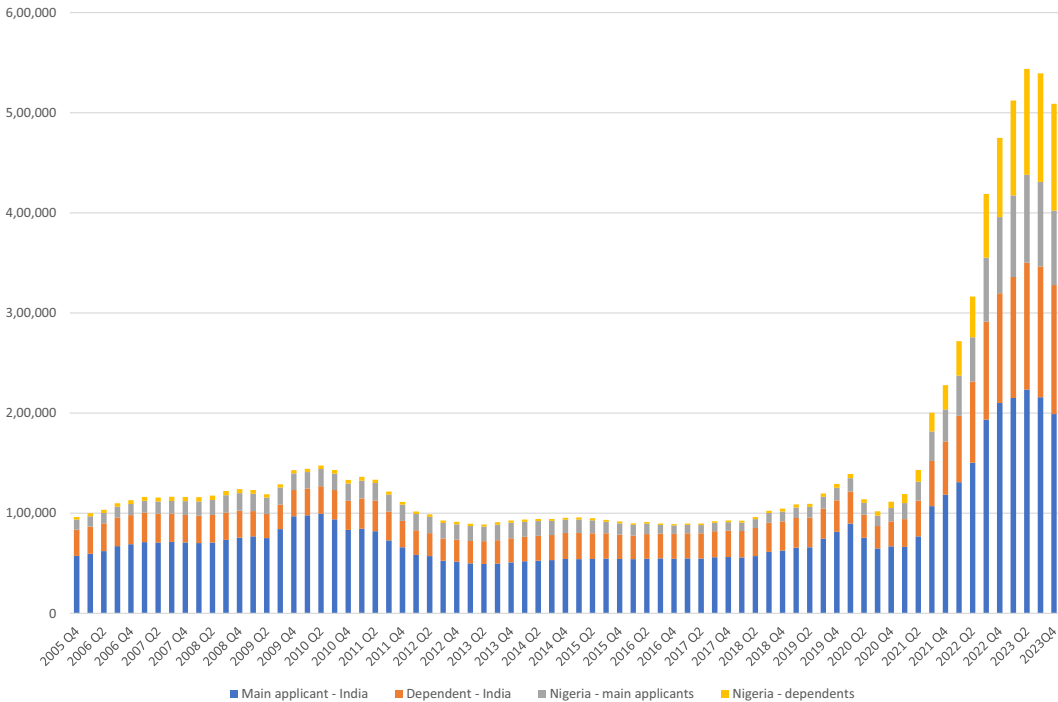
seekers arriving by other routes. The result has been historically very high levels of migration, overwhelmingly from outside the European Union as illustrated in [Chart 2](#).

The nationality mix of new migrants has also shifted radically, as shown in [Chart 3](#). India has long been the largest source country for those coming here on skilled work visas; this remains the case both for the main Skilled Work Visa but also for those coming to work in the health and care sectors, and meanwhile India has also surpassed China as the largest source country for international students. Even larger proportional increases have been observed for other “New Commonwealth” countries (Nigeria, Pakistan, Bangladesh, and Zimbabwe). This shift in nationalities has also driven the overall increase in numbers, since those coming from these countries – whether to work or study – are far more likely to bring dependents (spouses and/or children) than those from other countries such as China.

Meanwhile, net EU migration has continued to fall, and is now estimated to be negative. Flows of new EU-origin migrants into the UK labour market have fallen very sharply – only about 5,000 work visas were issued to French nationals (the largest single European source country) in 2023, compared to over 160,000 to Indians, although it is important to note that the EU Settlement Scheme means that some 5.5 million EU nationals have a continuing right to reside and work in the United Kingdom without having to apply for a visa. As I wrote (Portes 2023) “there has been a complete reorientation of UK migration flows away from the European Union and towards the rest of the world, especially India, driven both by the operation of the new post-Brexit migration system and broader demographic and economic trends.”

To what extent can we attribute these changes to Brexit? In some sense, the question is not well defined; even prior to Brexit, the United Kingdom had almost complete flexibility to determine the migration system that applied to those coming from outside the European Union, especially when it came to work and study visas. So, while the end of free movement, and the consequent reduction in EU

Visas issued, India and Nigeria

**Chart 3.** Visas issues, India and Nigeria (annual rolling total).

Source: Home Office, 2024; authors' calculations.

migration, is undoubtedly a consequence of Brexit, the changes to the system applying to non-EU migrants was a policy choice driven both by the political and economic ramifications of Brexit and other exogenous factors, notably – but by no means only – the pandemic and its aftereffects.

Nevertheless, it still seems reasonable to conclude that, while the *ex ante* predictions of the impact of Brexit on migration flows and the economy summarised above were broadly correct when it came to EU migration, they were far from accurate for non-EU migration. It therefore seems opportune to reexamine those predictions in the light of the recent data.

## 5. Economic and labour market impacts

In this and the subsequent section, I examine the labour market impacts of these trends at a sectoral level. I adopt a similar approach to that used by Portes and Springford (2023). However, as well as using more up-to-date data, rather than using the Labour Force Survey and/or Annual Population Survey (LFS/APS), I use data from HMRC on “payrolled employments” (that is, workers recorded on HMRC’s PAYE system), disaggregated by citizenship at the time of first registration for a National Insurance Number (Her Majesty’s Revenue and Customs, 2023). This is shown in Chart 4.

There are significant disadvantages to this data: notably, it excludes the self-employed, and (in the form used here) is a count of employments rather than employees (that is those with two jobs with two employers are counted twice), but these issues seem unlikely to affect the key trends described below. Further details on the data used, and the rationale for preferring it to the LFS/APS, are at Annex A. In aggregate, this data shows similar trends to that seen in the overall figures described in the previous section.



The Skilled Work Visa is the main route for those coming to work in the United Kingdom from abroad. The key point here is the overwhelming and growing concentration of visas within the health and social care sectors, which now accounts for two-thirds of all work visas. Within this, more than two-thirds (about 100,000) are care workers (of whom most fall under the least skilled occupational classification). NHS staff, mostly doctors and nurses, account for the rest.

Meanwhile, outside health and care, the key sectors making use of the skilled work visa system are those that used the previous Tier 2 system: ICT, professional, scientific, and technical services, and financial services. In these sectors, most new migrants are relatively highly skilled and highly paid. In the last year, however, there has been some increase – from a low base – in those coming in other sectors to work in “middle-skilled” jobs, such as chefs and butchers (Brindle and Sumption, 2023).

So, looking at the Skilled Work Visa, the centrepiece of the new system, alone, one might be tempted to conclude that the United Kingdom has essentially a bifurcated system for work migration – one for the (mostly publicly owned and/or publicly funded) health and care system, which allows workers at all skill levels to come to the United Kingdom, if they are prepared to accept the pay and conditions set by government, directly or indirectly; and one for mostly relatively highly skilled and well paid workers in high productivity service sectors in the private sector. Other aspects of this bifurcation are regional; the health and social care sectors are very dispersed around the country, for obvious reasons, while the sectors making most use of other skilled work visas are disproportionately concentrated in London, where salaries in these sectors are also higher.

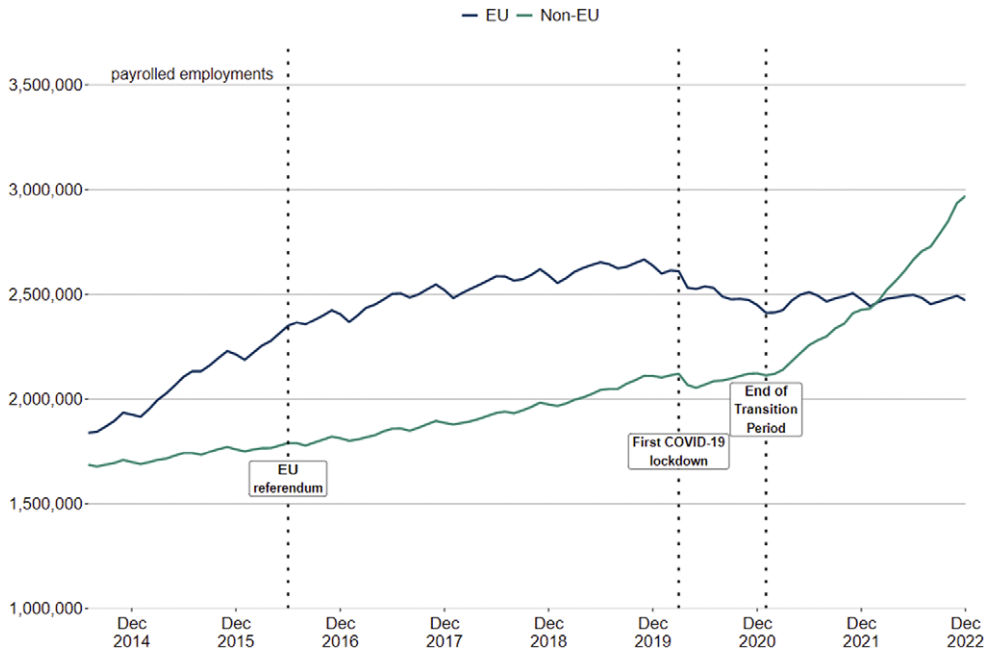
However, while there is some truth in the above discussion, it misses the point that the Skilled Work Visa is by no means the only route by which migrants enter the UK labour market. In 2022, approximately 165,000 visas were issued to main applicants under this route. Yet, according to HMRC data (Brindle et al, 2023), approximately 550,000 non-EU origin workers took up (payroll) employment in the United Kingdom.<sup>1</sup> Timing and definitional issues mean these figures cannot be compared directly, but they illustrate the extent to which other migration routes also impact the UK labour market. The main ones are:

- Humanitarian and refugee routes. There have been large inflows in recent years of British National (Overseas) citizens from Hong Kong, under the UK special visa scheme; and of Ukrainian refugees. Almost all of these will have the right to work, although they face significant obstacles in the UK labour market. Those who obtain refugee status after claiming asylum here also have the right to work.
- The dependents of those on study and work visas. Students can work only for limited periods, since they are supposed to be studying, but dependents' work rights are unrestricted. They have no access to public funds, meaning they cannot claim social security benefits, and the financial incentive for most spouses (who make up the overwhelming majority of dependents) to work is strong.
- (ex)-students now on the Graduate Visa (and their dependents). Again, they have full work rights and can work in any job and have no access to public funds.

The existence of these groups means that the impact of migration on the UK economy and labour market is far broader than simply that resulting from the skilled work visa. Below (Chart 5), we show changes in payroll employments for several large sectors between December 2019 and December 2022, covering the period of the pandemic and the first two years of the new system. It is evident that as well as in the sectors seeing high numbers of Skilled Work Visas, the rise in non-EU migration has also has a major impact in other sectors; for example, largely offsetting the fall in EU-origin employees in the accommodation and food services sector.

<sup>1</sup>This figure is higher than the change shown in the chart above, since the chart shows the stock of non-EU origin workers at any one time, whereas the data referred to here is a “flow” figure, that is the number of new registrants of non-EU origin during the year. See Brindle et al (2023), Figure 1.





**Chart 4.** Payrolled employments held by non-UK nationals.  
Figure reproduced from HM Revenue and Customs, 2023.

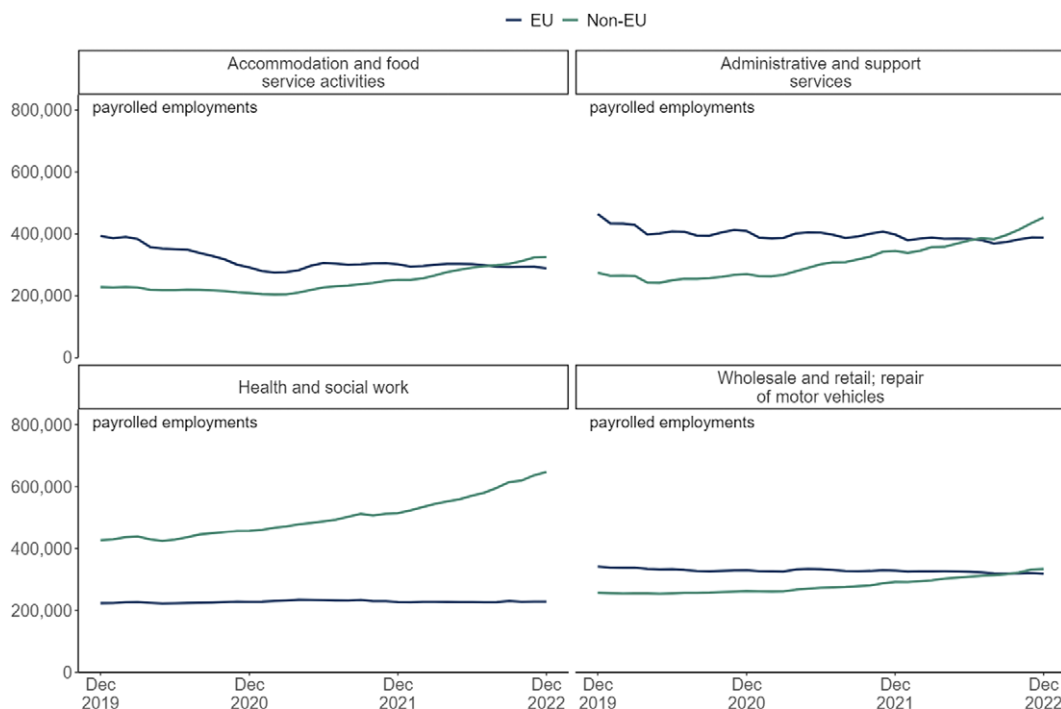
## 6. A simple counterfactual analysis

We now return to the question of the impact of Brexit-induced changes to migration on the UK economy. As noted above, it is not possible, even conceptually let alone empirically, to distinguish between Brexit and other policy changes and shocks (Brexit-related or otherwise). Nevertheless, if we reframe the question as “what would have happened had pre-existing trends continued” it is more meaningful.

Following (broadly) Portes and Springford (2023), we focus on changes to the stock of EU and non-EU origin migrants at a sectoral level, again using the HMRC PAYE data. As Chart 4 shows, there was a clear reduction, relative to trend, in EU-origin migrants in the UK workforce, after the referendum; and a slight increase, again relative to trend, in non-EU origin migrants, which accelerated sharply in 2021. Unlike Portes and Springford (2023), our counterfactual begins at the time of the referendum; we are trying to estimate the size and composition of the non-UK origin labour force had the outcome been different, and the analysis above suggests that migration trends began changing relatively soon after the referendum result. Our analysis also relates to that of De Iasio and Wahba (Di Iasio and Wahba, 2023), who use a more developed differences-in-differences framework and find that EU-origin inflows fell by about 30% after the referendum, although our results are not directly comparable.

Given the relatively smooth profile of non-EU migration prior to the referendum, we proceed as follows. We calculate the growth rate over the period July 2014 to June 2016, by broad industrial sector, of the non-EU origin workforce. We apply an adjustment to reflect changes in the growth rate of the UK-born workforce; 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. See Portes and Springford (2023) for a more detailed explanation. We then project forward to the end of 2022 and compare the “counterfactual” numbers to those observed in the data.

For EU-origin migration, however, it is not plausible to assume that the extremely high growth rates observed just prior to the referendum would have continued, even absent the referendum result; as noted above, there were a number of exogenous factors which would undoubtedly have led to a significant fall in the growth rate, albeit not as pronounced as that actually observed. We therefore compare the UK experience with that of Germany, which also saw large inflows of EU-origin migrants through the 2010s



**Chart 5.** Changes in payroll employments by sector.  
Figure reproduced from HM Revenue and Customs, 2023.

and has reliable data on migration by nationality. This data suggests that Germany saw a fall of approximately 50% in EU-origin net migration, comparing the period before the UK referendum to the period from that date to end-2022. While obviously a crude approximation, this seems as credible an estimate as possible of the counterfactual fall in net flows that might have been expected absent Brexit. We assume therefore for our counterfactual that the net increase in EU-origin migrants would have fallen by 50% relative to the pre-referendum trend.

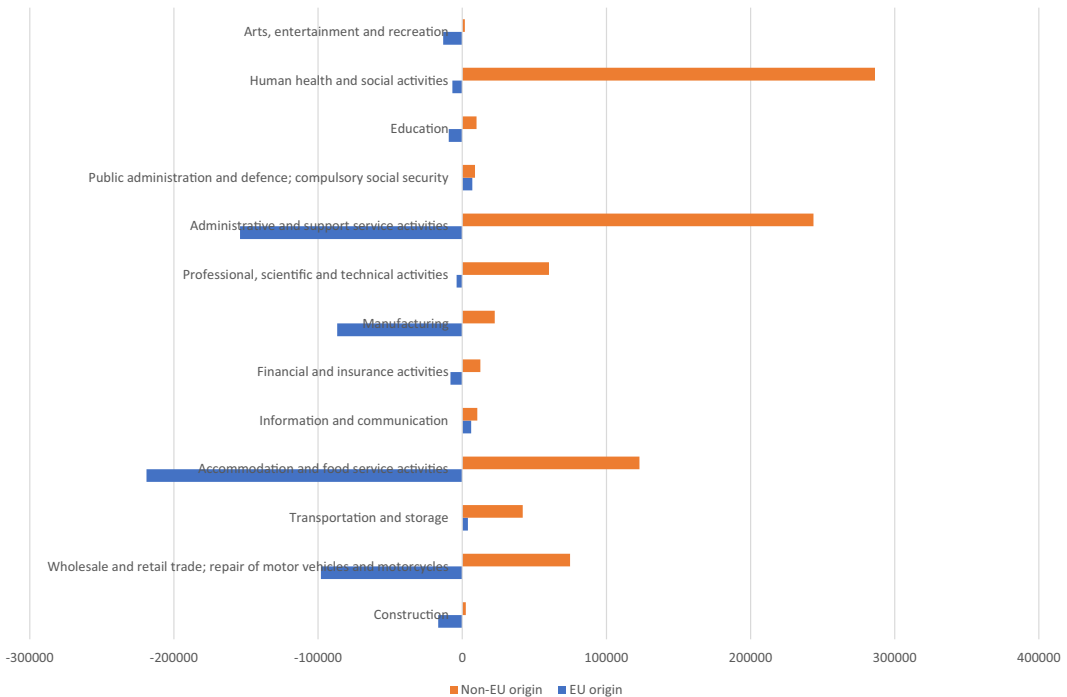
The results are shown below (Chart 6). Overall, we estimate that absent Brexit there would have been a net increase in EU-origin workers in payrolled employments of about 630,000, compared to the actual figure; by contrast, non-EU payrolled employments would have been 935,000 lower. The latter estimate appears high – but it is consistent with the actual growth observed of well over a million, given that the pre-pandemic trend was only modestly upward.

Three features of this analysis – all consistent with the descriptive account above – stand out. First, the very large increase, relative to the counterfactual, in non-EU migrants in the health and care sector; not offset by corresponding falls in EU-origin migrants, but rather supporting the large expansion in the sector's workforce. Second, smaller but still material (relative to the size of the sectors) increases in non-EU origin migrants in high skill, high productivity sectors such as professional, scientific and technical; finance; and ICT; and third, substantial increases in non-EU origin migrants in lower skilled and lower paid sectors where the EU-origin migrant workforce has fallen relative to the counterfactual, in particular administrative services, accommodation and hospitality, and wholesale and retail trade.

## 7. Economic impacts

What can we say about the economic impacts of these changes, and how does it compare to ex ante predictions? At a sectoral level, the message from the analysis above is clear. In the health and social care

Change in payrolled employment of migrant workers, June 2016 to December 2022, relative to no-Brexit counterfactual



**Chart 6.** Changes in employment of migrant workers compared to a 'no Brexit' counterfactual.  
Source: HM Revenue and Customs (2023), author's calculations.

sectors, non-EU origin migrants have – as a matter of deliberate government policy – helped mitigate some of the very severe workforce pressures resulting from deteriorating relative pay and conditions, and lack of training, as well as the aftereffects of the pandemic. In high skill/high pay service sectors, non-EU migrants continue to be a major source of skilled workers; although flows have increased, the basic functioning of the system remains similar. And in lower paid service sectors, the reduction in flows of EU-origin workers has been largely or wholly offset by increases in non-EU origin workers; most of whom came to the United Kingdom on other visa routes than the Skilled Work Visa.

The overall economic impact will depend on numerous factors, and we do not attempt a quantification here. Nevertheless, it is worth looking at two relevant factors: the earnings of these new entrants to the UK labour market, and the impact on broader productivity trends. On earnings, some commentators (O'Brien 2023) have expressed concern that the trends above, with a large proportion of those on skilled work visas actually working in social care, combined with the flexible nature of the Graduate Visa, may mean that the earnings of recent migrants are relatively low.

However, as yet we do not observe this in the data. Brindle et al. (2023), using the HMRC data, examine earnings trajectories for recent migrants. They find that non-EU origin employees are entering the workforce at a higher point in the wage distribution, and indeed quickly surpassing the workforce median (on average); they are also progressing somewhat faster than EU citizens. Indeed, in other words, despite the lack of selectivity on wages in some parts of the system, so far at least increases in the number of non-EU origin employees have on average been associated with higher relative wages and earnings progression rather than the reverse. However, this analysis does not yet reflect much of the recent large expansion in the number of relatively low-paid care workers, nor does it take into account self-employment.

Assessing the broader impact on productivity is much harder. These impacts could include losses resulting from the end of free movement and its replacement with a visa system, which meant the replacement of a non-bureaucratic, market-oriented, system that allowed workers to match with jobs with minimal state intervention with one where visas must be approved by the Home Office, at considerable expense and with inevitable delays and bureaucratic processes. They could, however, also include gains resulting from a system which gave much more explicit preference to those with higher salaries and working in higher-skilled occupations.

In the run-up to the new system, the Migration Advisory Committee commissioned three research projects examining the impact of migration to the United Kingdom on productivity (Migration Advisory Committee, 2018). All concluded that – consistent with the cross-country evidence – the impact of migration on productivity was large and positive, indeed – in the view of the MAC – “implausibly large”. The MAC’s view was that, on both theoretical and empirical grounds, higher skilled migration was likely to have positive productivity spillovers for the wider economy but that such impacts were hard to quantify. This conclusion, in turn, influenced the government’s decision to adopt a system that was both relatively liberal and based around skill and salary thresholds. More recently, Nam and Portes (2023) find a positive association between non-EU migration and productivity, at a region-sector level (and, possibly, a negative one with EU-origin migration).

## 8. Conclusion

The above analysis suggests that the 2016 referendum, and the subsequent introduction of the post-Brexit immigration system, did indeed mark a major turning point in UK migration trends, resulting in a very large fall in EU migration (relative to trend) and an even larger rise in non-EU migration. While it is too early to provide anything like a definitive assessment of the economic impacts of this, the early indications are broadly positive. Forecasts which assumed that net migration would fall, reducing the size of the labour force and hence GDP, were clearly incorrect. Instead, the sharp growth in non-EU migration has helped address the large workforce deficit in the health and care sectors, have supported growth in high productivity service sectors, and have largely filled the gaps resulting from the loss of EU-origin workers. While it may have been unintended, the rapid expansion in migrant workers entering on routes other than the main Skilled Work Visa, in particular the Graduate Visa and dependents on those on work and study visas, may have mitigated any negative consequences resulting from the end of free movement. Evidence so far on earnings and productivity, while necessarily very limited, is broadly positive.

Looking forward, migration, both for work and more broadly, is likely to fall substantially over the next few years, as the impact of arrivals from Hong Kong and Ukraine drops out of the figures, student emigration rises to reflect the earlier rise in student immigration, and new restrictions on dependents of students and care workers are implemented. While forecasting migration is highly uncertain, these factors alone might be expected to reduce net migration to 300,000 per year or below (Hall et al., 2023).

While migration has risen (back) up the political agenda as the numbers have increased, this reduction should allow the government the space to adopt a more considered approach to economic migration, in particular those coming to work and study. The most recent changes, announced in December 2023, are unlikely to have a major impact on those coming through the Skilled Work Visa route, but there is a risk of unintended consequences on both the care and university sectors; early indications are that the number of international students applying to UK universities has already fallen substantially (Universities UK, 2024) with potentially very serious implications for university finances, and hence for both research and UK-origin students.

Given this, from an economic perspective, the priority – rather than further radical changes – should be certainty and stability for both business and migrant workers, as well as for international students and universities. The uncertainty resulting from frequent policy change over the last few years has undermined business confidence and investment in the United Kingdom, on everything from HS2 to net zero.

The same applies to immigration. Rather than making sweeping changes to the migration system, it would be wise for any government to pledge to do the opposite, so that businesses can plan on the basis that the broad contours of the system will remain in place for the foreseeable future.

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## ANNEX A – DATA ON UK MIGRANT WORKERS<sup>2</sup>

Existing empirical analysis in the UK on the labour market impacts of migration has almost exclusively made use of the Labour Force Survey (LFS) and/or the related Annual Population Survey (APS), the main regular UK household survey used for labour market analysis, and the source of official figures on employment. The LFS includes a question on country of birth, enabling the identification of migrants.

However, while the LFS is the standard data source for this type of analysis over a range of labour market issues, sample sizes are not large when it come to migrants, in particular outside London. This issue is particularly acute when looking at region-sector data, where some region-sectors outside London will have very few migrants in any given quarterly (or even annual) sample.

Moreover, the quality of the LFS has deteriorated significantly in recent years, with a continued downward trend in response rates, exacerbated by the pandemic, but with no subsequent recovery.

Falling response rates are an issue not just because they increase sampling error (which is at least known) but because, to the extent to which non-response varies between different groups, they increase sample selection error (which is unknown). The ONS, as is standard practice, attempts to correct for this by reweighting LFS responses to ensure that the LFS sample reflects the known characteristics of the population by geographical location, age and gender. However, this does not necessarily correct for differential non-response by migrants.

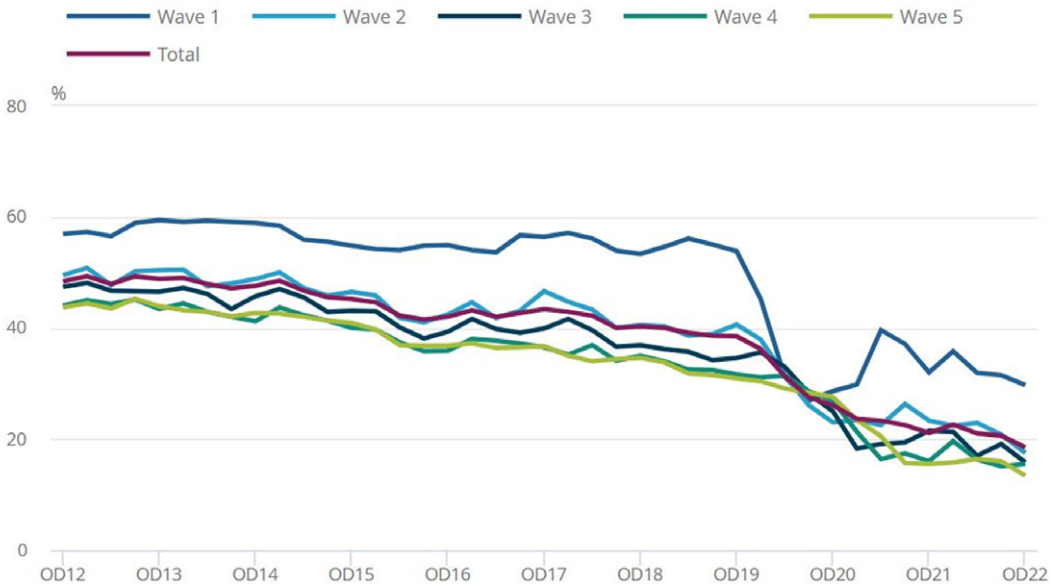
There is good reason to believe that this issue is particularly serious when it comes to the analysis of the impact of migration. Even before the pandemic, there were reasons to believe that non-response was higher among migrants, particularly recent migrants, than for non-migrants, and that the LFS weighting scheme did not accurately correct for this. In particular, LFS/APS-based estimates of the number of EU citizens resident in the UK eligible for the EU Settlement Scheme proved to be a substantial underestimate, and while this was in part accounted for by short-term residents and return migration, even after taking account of these factors a substantial unexplained undercount remained. This discrepancy, and the unreliability of the LFS, was confirmed by the results of the 2021 Census, which showed that the number of EU citizens resident in the UK was indeed significantly higher than that estimated from the LFS, suggesting significant non-response.

The pandemic seriously exacerbated this issue, with the LFS suggesting an implausibly large fall in the number of non-UK born residents. Further analysis (CITE Sumption 2021) suggested that while the pandemic had reduced response rates across the board, rates for migrants had fallen much more sharply than for the UK-born.

<sup>2</sup>See also discussions of the data issues in Brindle, Portes and Sumption (2023) and Nam and Portes (2023), both of which also use the data used in this paper.



## Great Britain, excluding imputed households, October to December 2012, to October to December 2022



Source: ONS Labour Force Survey Performance Quality Monitoring Report, January to March 2023, <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/labourforcesurveyperformancequalitymonitoringreport>.

### HMRC PAYE data

Partly as a response to the increased unreliability of survey data during the pandemic, in March 2021 ONS and HMRC published for the first time data from the HMRC Real Time Information System combined with the HMRC Migrant Worker Scan. This data for this release come from HM Revenue and Customs' (HMRC's) Pay As You Earn (PAYE) Real Time Information (RTI) system. Unlike the LFS, it covers the whole population rather than a sample; it is based on a count of all payrolled employee jobs that were active in a given month using HMRC's PAYE RTI data.

This information is then combined with the HMRC Migrant Worker Scan (MWS). This uses input from the Department for Work and Pensions (DWP) which registers National Insurance numbers for those aged over 16 years through its adult registration process, which usually includes an interview to verify identity and right to residency in the UK. Combining this information allows the data to be disaggregated between those who were either born in the UK or arrived here before the age of 16, and those who were registered as adults. Within that, the published data disaggregates between those who are of EU origin and those from outside the EU. It therefore provides an alternative measure of migrant penetration in the (employee) workforce.

This data confirmed that even prior to the pandemic, the LFS was significantly underestimating the number of EU-born workers resident in the UK. In the last quarter of 2019, the PAYE data showed that there were approximately 2.5 million EU-origin employees in the UK labour force: by contrast the LFS estimate was about 2 million. It also showed clearly that, during the pandemic, this problem had become much worse, to the point where the LFS was no longer a credible source for estimating the migrant workforce.

As a stopgap measure, therefore, ONS responded by reweighting the LFS to ensure that the total non-UK born population (disaggregated between EU and non-EU) matched estimates derived from the



PAYE data. However, while this produced overall LFS totals for the migrant and non-migrant population that appear more credible, this reweighting actually rendered the LFS even less usable for detailed analysis of migration. This arises because the effect of the reweighting is to give greater weight to those migrants who do still respond to the LFS – and such migrants are not representative of the broader migrant population, being more likely to be resident in the UK for longer, and to come from specific countries (Germany rather than Romania, for example). More recently (in October 2023) the ONS has, in effect, discontinued entirely the use of the LFS, although the earlier published LFS estimates remain current.

In summary, then, the LFS is no longer (and has not been for some years – certainly since the pandemic, and arguably for several years before that) a suitable data source for analysing the labour market impacts of migration. While this does not invalidate the conclusions of previous research that used LFS data, it means we cannot simply replicate it when analysing more recent years. The ONS is planning major changes to the data collection and methodology of the LFS (the “Transformed LFS” project) but data from this is not yet available.