CHAPTER 6

Migration

One of the key areas of concern for the UK with regard to opting to leave the EU has been the negative consequences of free movement of labour—part of the European Single Market four freedoms (Curtice 2017). There have been, however, warnings from business-representing groups such as CBI, FSB, BCC and IoD (CIPD 2019; Open Letter to Home Secretary 2020) that skill shortages would be exacerbated and that the economy would suffer post-Brexit, in case the government devised a too restrictive immigration system.

Migration can have a positive or negative impact for the UK as a whole and also for particular indigenous groups, depending on the economic aspect analysed. Therefore, understanding the evidence in relation to migration is important since it is a significant input into the decision regarding which form of Brexit to favour and how to design a post-Brexit migration policy in order to retain as many of the benefits as possible and reduce negative effects.

Briefly put, migrants are people who move voluntarily from a country to another country. Economic migrants are in search of better economic conditions such as a higher wage or higher living standards, and this chapter focuses on this reason for migration.

Measuring migration has been problematic in terms of tracking people or deciding whether a migrant to be included in the statistics. For example, in the UK the Office for National Statistics migration figures include economic migrants as well as overseas university students, albeit students

P. B. Whyman & A. I. Petrescu, *The Economics of Brexit*,
https://doi.org/10.1007/978-3-030-55948-9_6

could be staying in the UK for relatively short periods of study and, for various reasons, may not choose to work—thus their contribution to the UK economic system may be more volatile and even harder to evaluate. Indeed, migration data collected in the UK is less useful than otherwise desired (Migration Advisory Committee 2012: 46) and this can explain why studies (e.g. on the net cost or benefit of migration to the UK) produce differing results.

Insights into Understanding Migration, Its Motivations and Impact

What Is Migration, How Is It Analysed and Why This Matters

Economics is the quintessentially concerned with efficient use of limited resources. Its well-known famous tools for understanding concepts are **supply and demand meeting in the market to determine prices and quantities/qualities of goods and services produced**. In its simplest form, this theoretical model[1] can be applied to the market for labour: that is where the demand for labour (firms wanting workers to fill vacancies) and the supply of labour (people in a job or looking for a job) meet to determine the price of labour, that is, the equilibrium wage (Fig. 6.1)

So, typically the ***wage*** is first and foremost the focus of labour market analysis, for migration studies too. The labour market will be theoretically continually adjusting, that is the wage will fluctuate. Thus, it is assumed that it will tend to reach **labour market equilibrium,** that is, the point where all firms have filled their vacancies and all workers have found a job.

Neo-classical Theory to Understand the Labour Market and Migration

A number of simplifying assumptions are made in ***mainstream neo-classical*** theory, such as that labour is **homogenous** (meaning all workers are the same—same education, ability, age, skills, experience), information is freely and perfectly available (about jobs and about skills for example), the labour market is perfectly mobile (transition costs are null, moving

[1] A model is a way to try to understand and predict the world, usually based on formulating assumptions, for example, an assumption could be that people have all the information they need to make decisions.

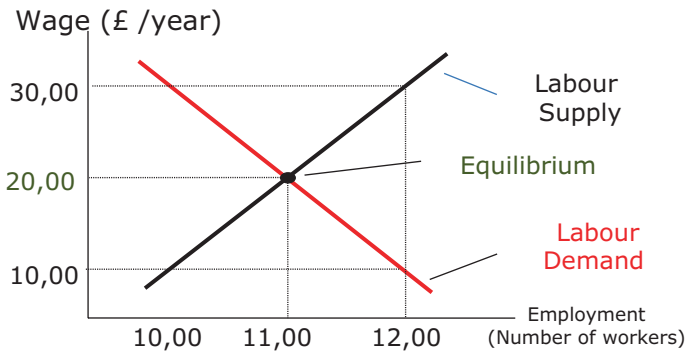


Fig. 6.1 The basic theoretical model of a labour market: Demand and supply meet and the wage as the key. *Source*: The Authors. Numbers are fictitious and only serve as examples. In this labour market, when labour supply and demand meet, the equilibrium wage is £20,000 per year and at that wage 11,000 workers are hired

from one area to another is not linked to cultural ties or barriers to movement).

Albeit simplistic and evidently unrealistic, *neo-classical migration* models remain useful for certain base-line forecasting or in analyses carried out by authors motivated in obtaining certain fast, crude predictions. In so far as they relate to a certain valid element of how labour markets could be constructed and expected to change—since they follow fundamental economic market laws of tending to equilibrium and unbounded rationality—these neo-classical models can be traced to **very many studies** that then imply a strong correlation between decreases in labour supply (if EU migration drops) and consequences to output (UK production or GDP would fall)—see for example HM Treasury, 2016: 66; Kierzenkowski et al., 2016:6.

Extensions of Neo-classical Theories Make Predictions More Real

A more realistic approach is offered in economic models of migration that assume workers to be ***heterogeneous***, that is, different by ability, skill, education and so on. These models may also relax the perfect-information assumption, or the free movement of labour assumption, in favour of a

realisation that culture, family ties or language poses barriers to labour mobility.

Since workers *are* different, varied and **multiple equilibrium wage levels** can exist at the same time, and the analysis becomes more difficult to predict, requiring more in-depth studies too. **Different equilibrium wages are a key aspect of interest in labour market theory regarding migration**. Theoretical developments of the labour market also include an expectation that markets are **segmented by skill level or region**, say the London plumbers' labour market or the Scottish labour market for engineers. At the same time, various levels of wages that 'clear' a market (all who need work, find work and there are no vacancies) and multi-equilibria are in place.

The Importance of Migration—Creating Efficiency and a Wage Leveller?

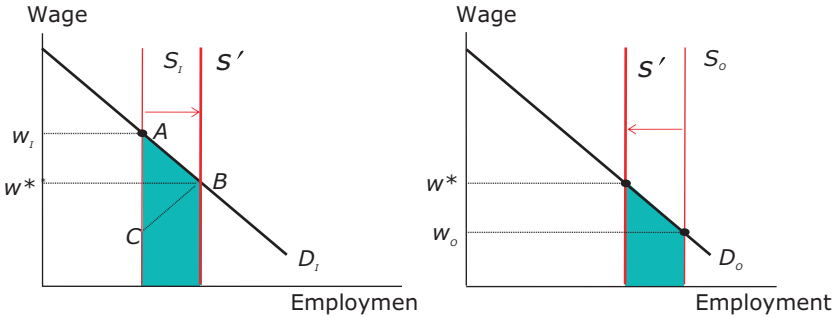
Wage inequalities, such as regional wage variations within a country or across various regions (e.g. the more prosperous Western Europe vs. the poorer Eastern European countries), are predicted to encourage migration from low-wage to high-wage areas. The theoretical expectation is that by allowing full labour market mobility (e.g. via the EU freedom of movement in labour markets), the outcome would **be the most efficient allocation of limited labour resources**: if workers would be allowed to move across areas (countries/labour markets) to best meet their job needs, then this would mean that firms would be most efficient in their hiring decisions and workers most efficient in finding the best job/wage for them.

In this sense, migration is theoretically the **key instrument for allowing labour markets to reach equilibrium** via an efficient allocation of labour market resources. For example, workers previously underpaid in a region could move to make best use of their human capital (knowledge and skills) in search of a better wage. Similarly, firms able and wishing to pay a higher wage would benefit from filling in their vacancies from an improved pool of talented job candidates.

Significantly, migration would theoretically **lead to wage convergence**, that is, the lowering of wage discrepancies. This is because of two effects. Firstly, with regard to the low-wage region, out-migration (here due to workers moving away from a low-wage area) would lead to a decrease in labour supply, while labour demand would not have changed, thus firms looking for workers in that area would then need to *increase* the wage to

attract further workers into jobs. Secondly, since migration leads to a labour supply increase in the relatively high wage economy, the theoretical expectation would be that firms in that area would have more workers than jobs to fill, thus they could (theoretically) lower the wage. Ultimately, across both regions, this could lead to wages tending to equalise. For example, migration between a lower-wage (w_O) region (e.g. net outward migration countries) and a higher-wage (w_I) region (e.g. net inward migration countries) would lead to wages being equated across the regions at wage w* (see Fig. 6.2).

Migration is also theoretically expected to **create efficiency and add value to an economy**. The shaded area ABC (Fig. 6.2. Panel A) shows the increase in the total value of output after migration has occurred, and this total value would not have been produced if labour were not allowed to move freely. Of note, though, is the expense incurred by the area losing migrants, denoted by the shaded trapezoid in Fig. 6.2 Panel B—the Northern Labour Market would lose this output since its labour supply has shrunk. Yet, if North and South are two regions part of an economic union (such as a nation or the EU), then the theoretical prediction is that migration would lead **to wage equalisation** and an overall **increase in output** (the shaded area ABC) that would not otherwise be produced



(a) The net inward migration labour markets (b) The net outward migration labour markets

Fig. 6.2 Wage convergence in two labour markets linked by migration. (a) The net inward migration labour markets. (b) The net outward migration labour markets. Source: The Authors. Note: The supply curves (S) are vertical lines here, because migration is assumed to take place in a short period of time, that is, when there is not enough time for the supply of labour to increase via more births or graduates/trained employees entering the labour market

unless migrants were allowed to move freely and if they were perfect substitutes (a migrant would be able to replace a native worker, having the exact abilities, knowledge, education, interest to work, preference for wage levels, etc.). Indeed, the model described in Fig. 6.2 is a simplistic, theoretical model for understanding migration.

One of the most important theoretical conclusions to be drawn here, even at this early point in this chapter, is that ***theoretically*** **migration is a force for good, increasing output and decreasing inequality, supporting poverty, benefiting the world by making the allocation of resources most efficient. Through free[2] migration, workers can freely use their human capital to deploy their knowledge for better pay; firms can hire the best-fit workers for the wage and job type that they need to fill**.

Explaining the (Mis)match Between Migration Model Predictions and Reality

Refining migration theory, by adding layers of complexity and changing assumptions, makes migration models more apt for being applied in practice. Significantly, that post-migration wages should necessarily decrease in high-wage areas/countries receiving migrants (as per Fig. 6.2 a) is an effect that is not that simple to observe in real life.

So it *would* be expected that, as migrants increase labour supply in the higher-wage region, and assuming labour demand remained the same, migrants would contribute to an increase in labour demand. Hence, the theoretical expectation *would be* that jobs in the region from which migrants move out, could be filled by firms after lowering the wage. Yet, lowering wages may not be possible for a variety of reasons, such as firms being perceived as discriminating (hiring new workers at lower wages and not being able to renegotiate contracts for their existing workforce), or there being a need for the level of wages to remain higher due to

[2] There is actually a strong case and surprising estimates in support of 'open borders'—the worldwide free movement of labour. Here economic modelling shows that free migration could potentially lead to a doubling of world GDP when estimating the gains from this free flow of migrants. If migration could occur freely worldwide, this could lead to the doubling of the world output and could be a significant way to reduce inequality between rich and poor countries (Moses and Letnes 2004; Open Borders). Even if worldwide free borders do not exist, economic estimates of just a 10% increase in international migration suggest it leads to an efficiency gain of US$774 (at 1998 prices) (Moses and Letnes 2004).

investments that firms need to recoup, thus firms also needing higher productivity (and so needing to pay for it).

Therefore, theoretically, it is expected that migration could lead to higher wages in the relatively low-wage countries from where migrants originate, *but findings* suggest that increase in labour supply would *not* lead to lower wages in countries where migrants arrive (unless in very small amounts in case the economy is weak and migrants are low-skilled).

Changes in wages may actually occur in an unexpected way in real life, while theory would also predict them. For example, it may even be that some firms decide specifically to offer a higher wage (known as 'efficiency-wage' theory) than the 'going wage' (the rate at which workers are usually hired), since this decision may 'buy' the company better talent, worker loyalty and productivity. The more profitable the firm, the more able it would be to potentially compete for talent via higher wages. Equally, more productive countries or regions could be able to offer relatively higher wages to attract talent. This practice of offering higher wages could create or exacerbate wage divergence and inequality, triggering migration flows going from less developed, low-wage economic sectors (or countries) towards more developed, higher-wage ones.

Similar developments and departures from the simplistic neo-classical model of the labour market concerned mainly with wages occur by virtue of **government intervention** and **labour market fluctuations or shocks**. Some governmental intervention is generally present in any labour market, for a variety of reasons such as to design a migration system; limit discrimination; introduce health-and-safety regulation; improve information about job vacancies; introduce a minimum wage; collect tax; determine minimum wages and unemployment benefits; and decide on the degree of labour market flexibility allowed (rules related to flexible working and how employers can/should behave e.g. how easy it is to hire and fire workers, unionisation, laws on paid leave or maternity/sick leave pay, working time, etc.).

Moreover, government may wish to intervene to **reduce the impact of supply and demand shocks**, such as economic crises or recessions, for example, the current furloughing of workers applied by the UK government during the COVID-19 pandemic. In relation to labour supply shocks, Europe has been suffering from decreased fertility and an ageing labour market, and thus retirement policies have been altered to encourage workers to stay in their jobs longer, while some governments (in Italy, Hungary and Germany, to name a few) have offered financial incentives

for couples to have a baby. Changes in supply of workers are felt most keenly in the short time via migration, since fertility and mortality rates take longer to have an impact. However, changes in demand for labour can be very abrupt (e.g. due to an economic recession or, like in 2020, a pandemic severely affecting economic activity globally within a matter of days); hence there is a continual re-evaluation of the theoretical underpinning of labour markets, that is, the analysis of how supply and demand meet and the related interventions (such as migration systems needed).

Why Migrate? Understanding Migration by Looking at Its Causes

There are many labour market developments in understanding migration, but there is no unifying theory of migration. In their most simpler form, migration models reflect a set of reasons, or motivations for the movement of people which are referred to as **'push and pull factors'**, whereby the attractiveness of the country of destination for a migrant is summed up by its 'pull' factors (higher wages, better jobs, etc.) while the disincentives in the country of origin are its 'push' factors (poverty, unemployment, etc.).

Theoretical models, such as the seminal contribution made by Roy (1951), focus on the **relative skill level** of the migrant flow—this is the number of people migrating. If this flow is relatively higher-skilled compared to the country of origin, for instance, if it is doctors who leave their country to come to the UK, then this is termed positively selected migration. The reverse, whereby it is the relatively less-skilled workers leaving an area (e.g. cleaners from Eastern Europe) to come to the UK, is called negatively selected. Thus, in this theoretical model, there is a sense of the importance attached to the skill level, also known as human capital, accumulated by the migrant, which is brought to a country.

Various models of migration are used by researchers to try to ascertain the impact of migration on wages and employment. It has been found that theoretical implications of a migrant flow arriving in an area do not lead to a longer-term change in the wage level, even if migrant flows can be very large and concentrated within a short time span (see Table 6.1). Similar lack of, or small-size, migration effects on natives' labour market outcomes is found by more recent studies of immigration waves arriving in Germany (Pischke and Velling 1997), Israel (Friedberg 2001), the EU (Angrist and Kugler 2003) or Norway (Erling et al. 2006).

One possible cause of noticing little or no difference is that the outcomes of a migration flow depend on the skill level of the migrant relative

Table 6.1 Historical examples of mass migration with limited evidence for change in wages/employment for natives

Details of mass migration	*Impact on labour supply*
0.9 m French return in one year to France after Algerian independence in 1962[1]	2% increase in total French labour force
0.6 m Portuguese return to Portugal after it loses its colonies in mid 1970s[2]	7% increase in Portugal's population
The Mariel Boatlift: influx of 8 m Cuban people into Miami (USA) almost 'over-night' in 1980s[3]	7% increase in local population

Notes: Studies of migration effects were carried out by: [1]Hunt (1992); [2]Carrington and de Lima (1996); [3]Card (1990)

Source: The Authors

to native employee and on other factors related to the way the economy utilises and rewards this skill. There are two extreme theoretical cases of migrants, in terms of how different they are relative to native workers, judging by their education, skills, productivity, ability to work, wage and so on. In one extreme case, a migrant could be fully **substituting** a local worker, able to potentially replace them seamlessly in their job. Then, if the migrant were very similar to the local worker, and maybe agreeing to work for a lower wage, which can occur in business sectors such as low-skilled work, natives lose out. In this sense, migration will be job-destroying for natives. In the other extreme case, a migrant and a local worker could be **complementary**—for example, if a dentist migrant opens a new dental practice, this will create a need for a receptionist. Here, migration will be job-creating for natives, maybe leading to more than a 1-2-1 job creation (e.g. if a cleaner were also needed at the new dental practice). In reality, the scenarios encountered will be mixed. Migrants may not be fully substituting, nor fully complementing the local workforce—in general, they may actually be **imperfect substitutes** (e.g. this is the conclusion of a 30-year data analysis for the UK in Manacorda et al. 2010). However, for certain low-wage, low-skill workers, migration of low-skill migrants could lead to downward pressure on wages for natives who can be substituted by firms preferring to higher migrant workers.

An important theoretical conclusion is that the theoretical effect of an inflow of migrants, even if this is large or sudden, will be expected **to depend on a variety of factors (crucially, the particular characteristics of the migrants and natives, and their economies)** and be challenging

to estimate in theory and in practice too (see a large and comprehensive review of migration studies carried out by Dustman et al. 2007).

One important factor is the **skill composition** of the influx of migrants—the more skilled the influx, the less likely that these migrants are going to be able to 'replace' the natives in their jobs, and, instead of substituting low-skilled workers, so then migration would generally lead to job creation. The more willing and able to work migrants are, the more the labour market will expand, assuming a flexible, 'healthy' job market, that is, with job information provided easily, investment in jobs, lack of discrimination, government support for natives displaced by migrants via re-training/up-skilling and so on.

Positive effects from migration can arise in various ways, some of which are enumerated here. If additional labour **complements** (rather than substitutes) local labour, thereby enabling increased output (and this benefits the economy as long as remittances remain low), and increase in taxation (from more people being in work). The latter can be invested/spent by the government (to mitigate the housing and other cost pressures that migration brings).

Moreover, **the dynamic effect of migration** (effects taking time, in the longer run, to be observed) can include an increase in business innovation particularly linked to higher-skilled migration and, relatedly, an increase in the average education level and general level of productivity in an economy—ultimately leading to higher average wages. Migrants will also be spending some money in the local economy, therefore contributing to increase in aggregate demand and acting in a protecting way for the economy against adverse shocks such as recessions.

Similarly, a positive and highly desirable consequence of migration is the **access to high-skill migrants gained** by the country of destination of migrants. In most part, this education and skill has been financed by the country of origin of migrants, therefore qualifies as a 'brain drain' to it, yet it is a 'brain gain' to countries receiving migrants.

Migration theoretical models and studies will continue **to need more data**, especially with regard to dynamic effects estimations, such as longer-term analysis of various cohort groups of migrants or inter-generational (second-, third-generation) comparison of migrant outcomes (Dustman et al. 2007: 98).

UK Immigration, Its Poor Image and UK Inequality

Historically, the UK population size *decreased* due to migration up to mid-1980s when immigrants began to outweigh emigrants and the UK started to experience what is termed as positive net migration (see Fig. 6.3 Panel A). After the Second World War, when the UK faced labour shortages, migrants were encouraged to join its labour market. During the next decades, however, EU enlargements, EU treaties and free movement of labour were events triggering larger and larger net migration outcomes. Essentially, around the mid-1980s migrants started to add to the general population and this trend has increased, despite tougher policies such as from Labour Governments (1997–2010), leading to **record high net migration numbers in the recent five years** (see Fig. 6.3 Panel B). Net migration has remained above 50,000 a year since the late 1990s, peaked at over 100,000 people in 1998 for the first time, and has reached a record all-time high in 2015 at 342,000 years (see Fig. 6.3 Panel C)—notably, this is the year just before the 2016 EU Referendum. Post-Referendum, there have been decreases in net migration. These are particularly due to a very dramatic fall in migration from the EU, with **UK net migration from the EU more than halving (dipping below 100,000 for the first time in a decade**), albeit th**e opposite occurred for net UK migration from non-EU countries: it has doubled to over 200,000** (see Fig. 6.3 Panel D). Overall, net migration has decreased in 2018 to 241,000. Moving away from concentrating on net migration, a distinct and useful perspective is offered by migrant employment (see Fig. 6.3, Panel E) showing that EU-immigrants working in the UK labour market outstrip their non-EU counterparts by more than a million (ONS 2020e). EU nationals' presence in the labour market has been on a continual increase in the past two decades, reaching 2.31m (an increase of 36,000), while non-EU nationals reached 1.34m (49,000 more than the previous year) (ibid.).

The stock of migrants as a share of the UK population has also experienced a continual growth since 1951 standing currently at around 9 million or 14% of the UK's population (see Fig. 6.4 Panel A). This is comparatively high in a global context, with the UK ranking fourth highest in the top ten countries receiving migrants (see Fig. 6.4 Panel B). For an international comparison, there were 21 countries with a migrant population share higher than 10% in 2010, and in 5 countries this share was higher than 20% (Australia, Canada, Luxembourg, New Zealand and

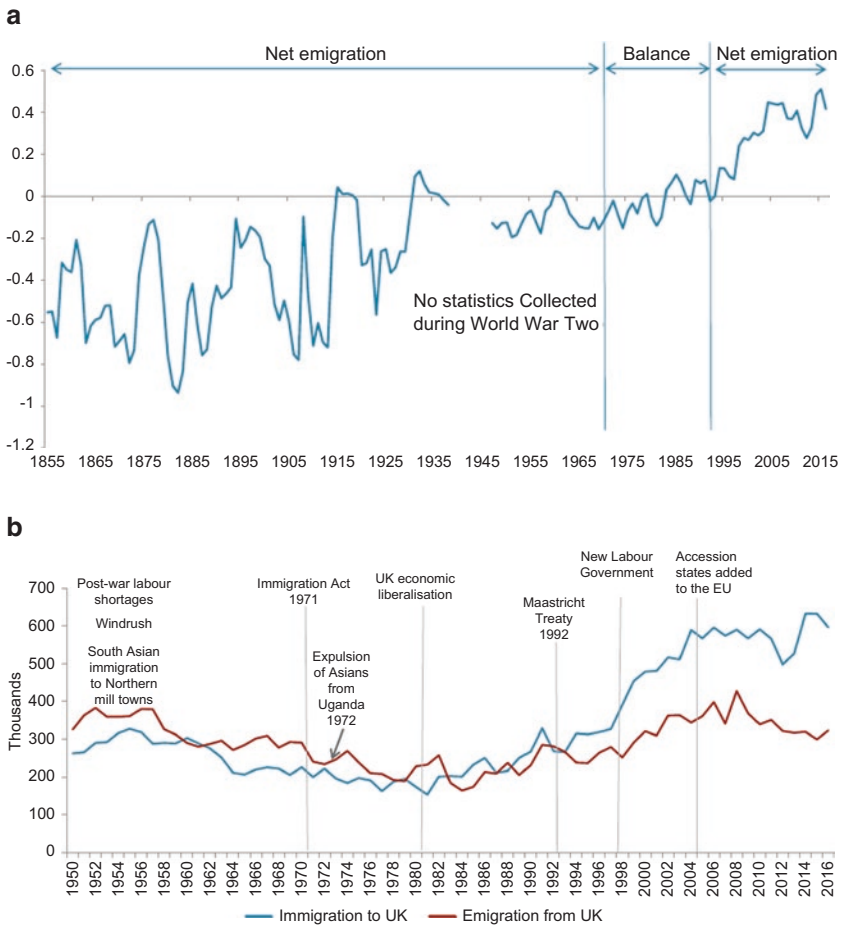
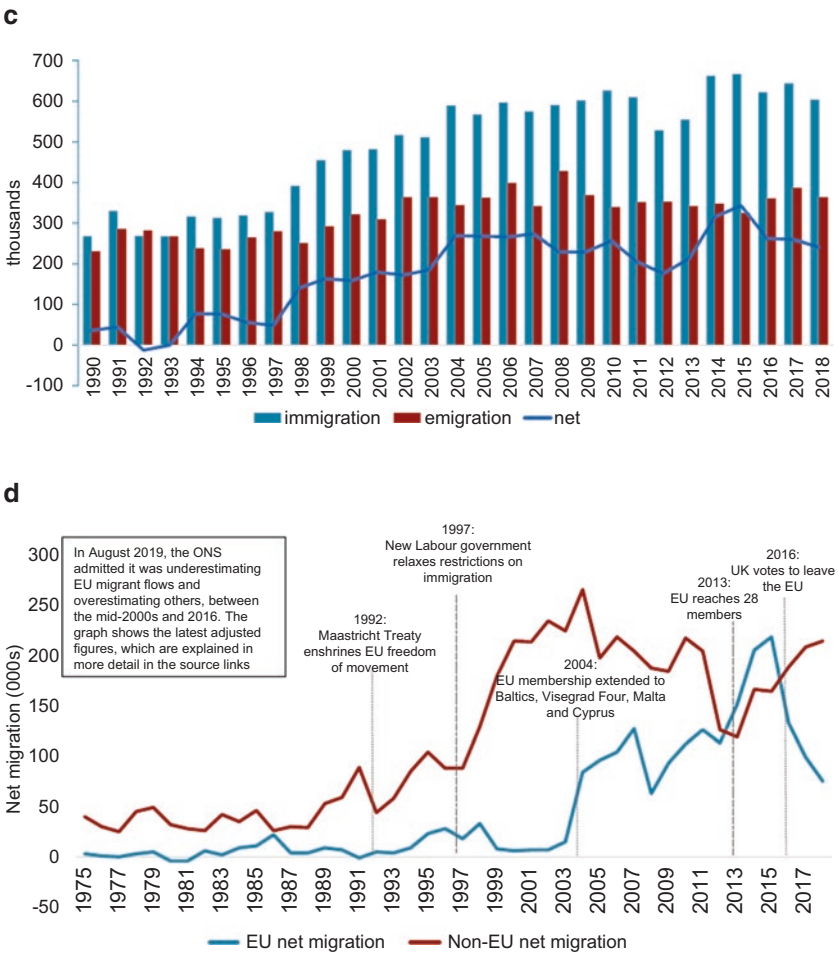


Fig. 6.3 UK net migration and labour employment. Panel A: change in net migration as % of UK population. Panel B: Events that marked changes in UK net migration. Panel C: UK net migration showing immigration and emigration. Panel D: UK net migration based on citizenship. Panel E: EU and non-EU nationals working in the UK. Sources: Panel A and Panel B: Bank of England (2017); Panel C and Panel D: BBC Briefing (2021) using ONS databases. Panel E: ONS (2020e)



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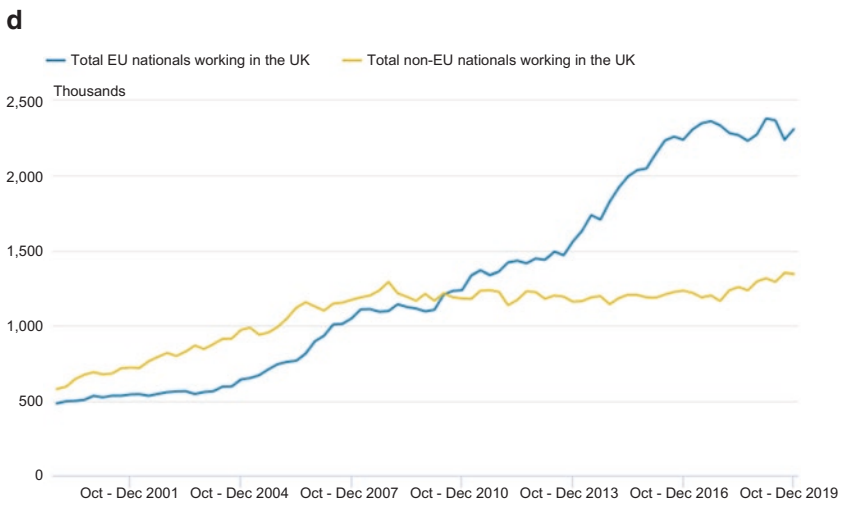
Switzerland) (Aubry et al. 2016). Our previous book (Whyman and Petrescu 2017) noted very similar trends in the past five years also shows that the UK's migrant stock figure is comparatively low when considering nations such as Australia, Canada and the USA, which have migrant stock levels of around 28%, 22% and 14% respectively (WDI 2016). Nevertheless,



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the UK has figured among countries with the highest migration stock, relative to its neighbours in west Europe (Whyman and Petrescu 2017).

The most recent migration statistics, available for the year ending June 2019, show that the non-UK-born[3] population was 9.4 million and the non-British (so, here, judging by nationality[4]) population was 6.2 million, remaining similar to the year ending June 2018 (ONS 2019b). India is the most common non-UK country of birth, overtaking Poland for the first time since 2015, followed by Pakistan, Romania and the Republic of Ireland (ONS 2019b). When assessing migration by nationality (as opposed to country of birth, which offers different insights into migration), Polish migrants remain the most common, followed by Romania, India, Republic of Ireland and Italy.

Most EU migrants come to the UK to work, having a definite job, whereas most non-EU migrants come for study or due to family ties (BBC 2017).

[3] These include all Polish people but may exclude their children.

[4] These exclude, for instance, Polish people who have obtained British citizenship.

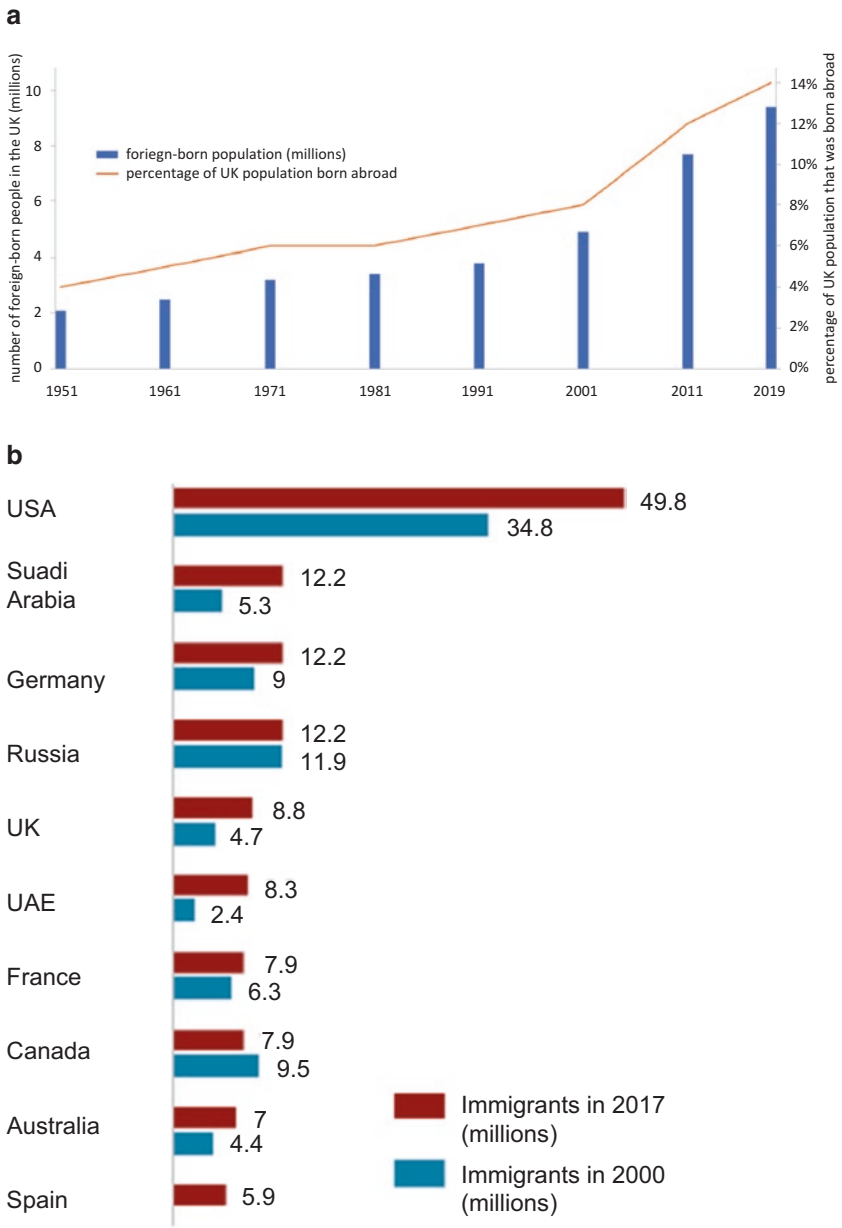
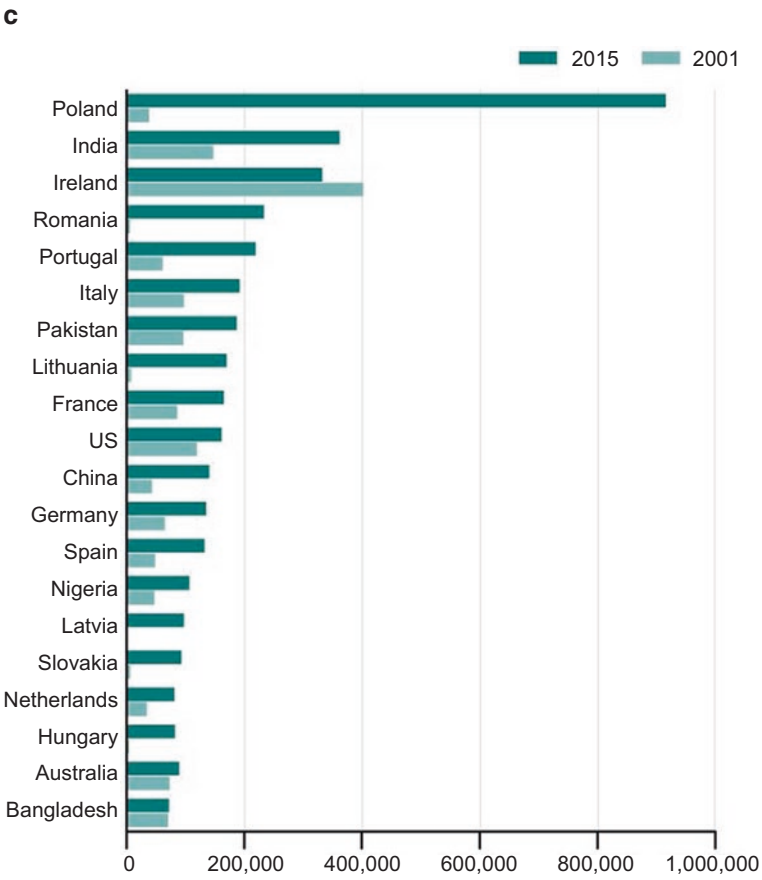


Fig. 6.4 The migrant stock (foreign-born people). Panel A. The continual increase of migrant stock in the UK. Panel B. The UK ranks fourth highest in the world for migrant stock (in million people). Panel C: The migrant stock by nationality, comparison 2001 to 2015. Source: For Panels A and B: BBC Briefing (2021). For Panel C: BBC (2017) based on ONS figures



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Migration's Poor Image in the UK

Public concern in the UK with migration had peaked in September 2015 but after the 2016 EU Referendum they have declined, being rather replaced by general EU and NHS concerns, as of July 2019 (see Fig. 6.5. Panel A). Instead, Brexit had remained the number one issue (for 60% of adults) and the biggest worry (for 47% of adults) (ibid.). This decline in immigration concern may be due to the false assumption that, once Brexit

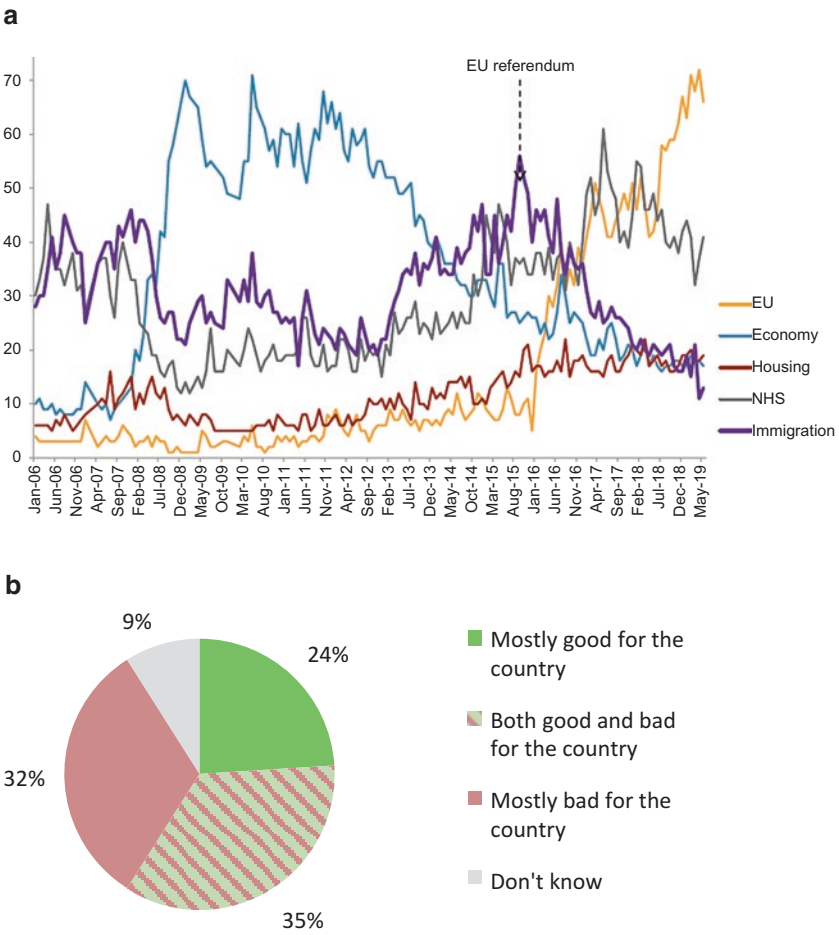
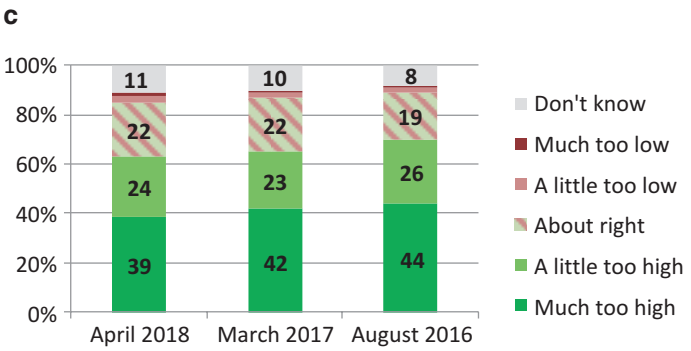


Fig. 6.5 Tracing the British public concern with immigration. Panel A: British adults mentioning important issues to Britain (%), July 2019. Source: Ipsos MORI (2019). Panel B: Public views on whether migration is good for the economy, % (April 2018). Source: Authors' interpretation of YouGov (2018). Panel C. British views on the level of immigration into Britain in the preceding decade, %. Source: Authors' interpretation of YouGov (2018)



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had been triggered, immigration would be 'solved', combined with a relatively higher level of integration of more recent (Eastern European) migrants (BBC Briefing 2020: 50). However, public perceptions of migration have continued to be misguided; for example, estimates of migrants leaving in the UK (24%) are more than twice as high as the real figure (14%) (Ipsos Mori 2018), and the general view is that the public is at best split as to whether migration is good for the country (see Fig 6.5. Panel B) with most believing that immigration levels have been too high (see Fig. 6.5. Panel C).

Inequality

At the very basics in terms of theoretical understanding of migration, it is wages that drive workers to move from one job to another and also across countries. **There is a well-known wage variation within the EU,** with higher wages in the older EU member states acting as a pull-factor (while, similarly, lower wages in newer EU member states acting as push-factors) for migration. Moreover, within the UK, there is **marked regional wage variation**, with earnings in England being consistently higher than in Wales, Scotland or Northern Ireland (see Fig. 6.6, Panel A), while London dominates the regional wage distribution (Fig. 6.6, Panel B) having wage levels half as high as the seven regions with lowest average full-time wages (North East, Yorkshire and the Humber, East Midlands, South East, South West, West Midlands, North West). The UK also suffers from a

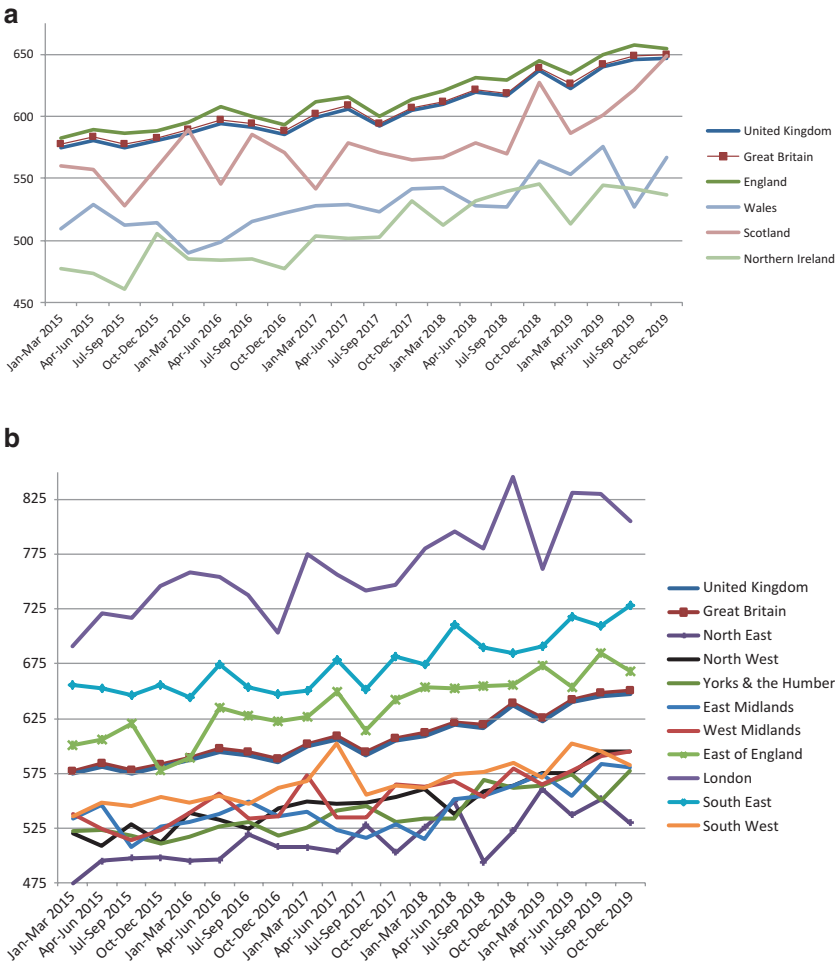

Fig. 6.6 Regional wage variation in the UK: Average gross weekly earnings of full-time employees, by region, 2015–2019. Panel A: Average full-time weekly wage (£), main UK countries. Panel B: Average full-time weekly wage (£), UK regions. Panel C: Average Gini index, selected countries from the EU, outside the EU, and A10 countries, 2000–2014. Source: ONS (2020e) for Panels A and B. For Panel C: WDI (2016). Note: The highest the Gini index, the higher the inequality

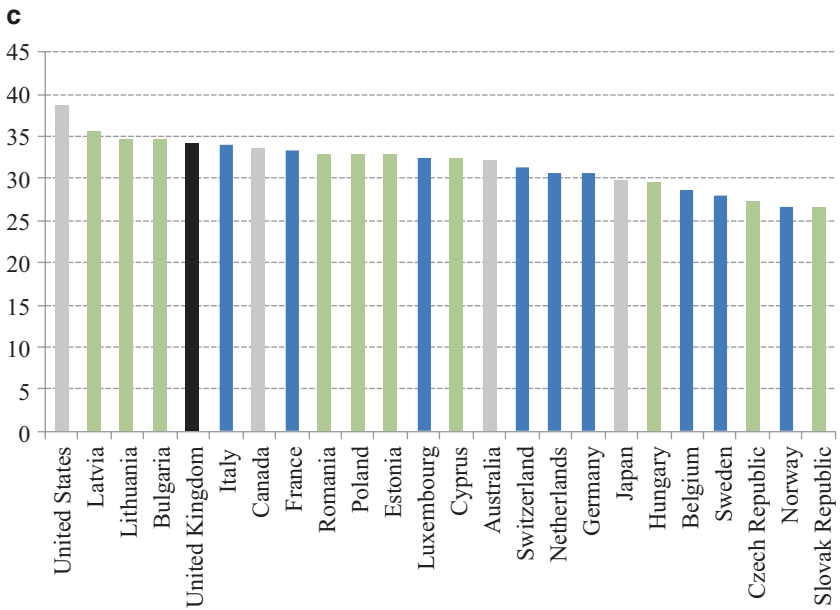

Fig. 6.6 (continued)

relatively high level of inequality (Fig. 6.6, Panel C), alongside a persistent gender pay gap (World Bank, 2016).

Furthermore, even before the EU referendum, there have been intensifying c**alls for the government spending policy to address the long-standing North-South divide in the UK,** with the North suffering from low growth, productivity gaps, poor transport connectivity, lack of investment and even with the Treasury spending policy being heavily biased in favour of spending in the South or South East of the UK—for example, the BBC (2019) reported on expected Treasury spending policy changes intended to favour increasing investment in the North. The new government that came to power in December 2019 was elected partly on the promise to deliver growth and a rebalancing of the economy in the North.

Certain areas in the North of UK have already **suffered prolonged periods of lower productivity, lagging behind** other more prosperous South areas. For instance, in Lancashire (a North West English county with about 1.1m people, of which 0.7m workers) there has been lower

business growth and marked reduced productivity, with calls for policy makers and business to increase regional investment (Smith et al. 2018).

Certain regions in the North West too are marked by **economically disadvantageous elements**, such as in Lancashire, where there is a 4% lower median wage between the county and the wider North West region of England and a nearly 20% productivity gap between Lancashire and the England average gross value added per hour (Whyman and Petrescu 2019). As a consequence, Lancashire is estimated to suffer from **skills drain** worth billions of pounds yearly, due to factors such as one in seven of its workforce commuting to work outside Lancashire (losing thus £4.3b a year), graduates leaving for better-paying jobs (a loss of 0.6b per year to the region) and, most worryingly, via the region suffering for poor investment in high-skill jobs: a mismatch of skills and jobs in Lancashire can lead to £7 b yearly lost by the county's economy (ibid.).

This imbalance in economic growth and other economic aspects is exacerbated by the UK suffering **from a mismatch in skills, with too few high-skill jobs created,** but also a more generally, **unbalanced job creation across regions**. For example, 33% of the population (or 1.8m) live in London and the South East area where a significantly larger share of jobs (47%) in England were created in the past ten years; in contrast 13% of the country's population (or 0.4m) live in the North West where only 11% of the new jobs were created in the past decade (Raikes et al. 2019). Skill imbalances, due to lower availability of highly paid highly skilled jobs in certain regions, lead to internal displacement of workers, and skills drain away from regions that have too few high-skill jobs (see Whyman and Petrescu 2019). This is, in turn, linked to lower productivity and loss of output in regions struck by loss of workforce, via internal migration depleting their pool of talent, or via migrants choosing to also work away from these lower-economic growth areas—a vicious circle and a poverty trap may form, of poor growth and lower productivity.

Indeed, the UK suffers fro**m inequality in regional growth,** with the southern areas having higher quarterly and annual growth rates (see Fig. 6.7). Most recent figures indicate inequality persists in inter-regional growth rates, with London remaining the fastest growing area at a rate of 3.3%, whereas other regions have a much lower than the UK average growth—Northern Ireland only grew by 1.1% in 2019 and 0.9% in 2018 (ESCoE 2020). The weak growth in Northern Ireland seems to showcase the unease with which the region has experienced the upheaval of

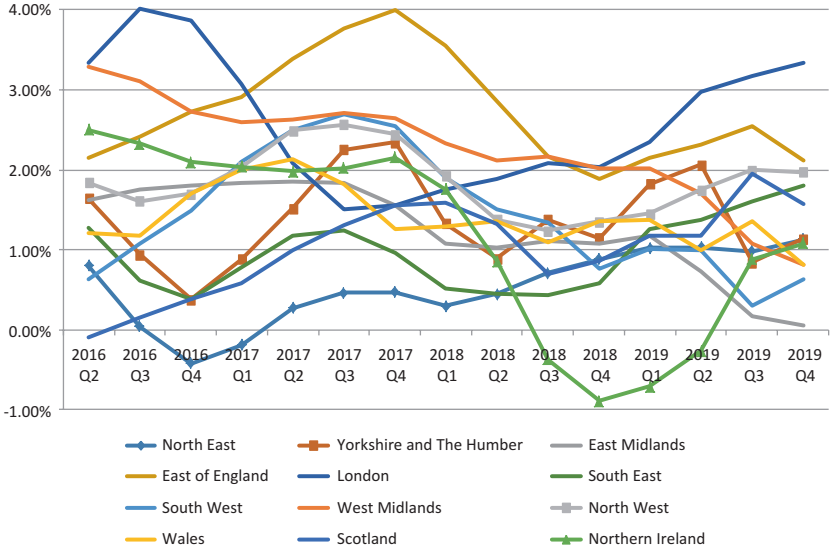

Fig. 6.7 Regional growth inequality in the UK: Growth rates are higher in the southern regions. Source: Authors' interpretation of data available from ESCoE (2020)

regulations and uncertainties post-Referendum 2016, whereas London and the South East have continued to experience the fastest growth in the country.

In the period of five years or more before Brexit, the within-UK (internal) regional migration impact has varied, with **certain UK areas receiving considerably higher numbers of migrants**. Indeed, as predicted by theory, the regions attracting higher numbers of migrants (see Fig. 6.8 Panels A and B), particularly London, are also the ones with relatively higher wages (see Fig. 6.6 on wages).

Migration is a tool that, when managed wisely, may act as an equaliser force. Already it can be noted that most migrants go to live to areas which have previously lower share of migrants in the local population (see earlier in this chapter, subsection on Migration Data). It has been estimated that migration worldwide could significantly reduce inequality and poverty (Moses and Letnes 2004). The literature seems here to suggest the continued opportunity for the UK to utilise migration as a force for good, to the extent that it could help address its unequal regional wage, growth,

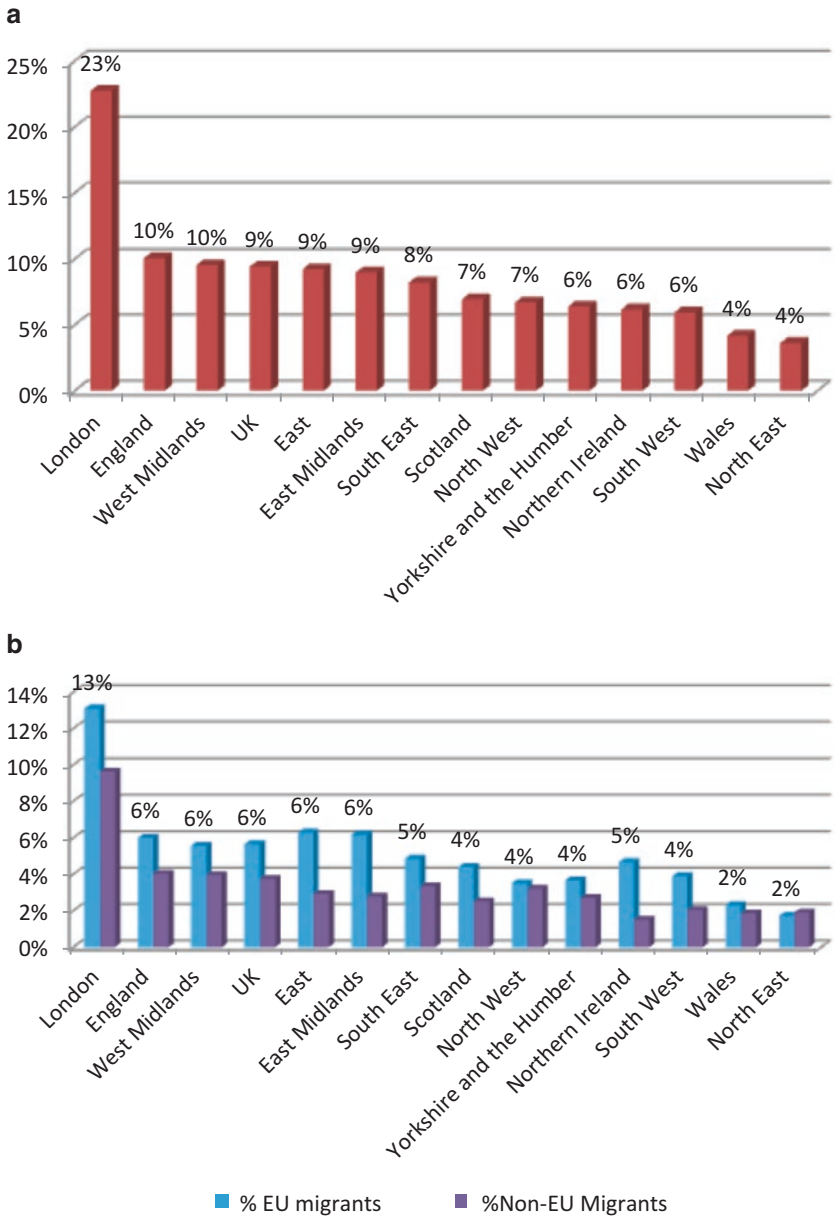

Fig. 6.8 Inequality in UK immigration, by region. Panel A: Non-British migrants, as % of local population. Panel B: EU and non-EU migrants, as % of local population. Source: Authors' calculations based on ONS (2019a) for the period June 2018–July 2019

investment, job creation, skill distribution and other economic imbalance. These are commented upon in the next section.

What Effect Does Migration Have Upon the UK Economy?

Understanding the impact of migration is a more complex, multiple-factor matter as opposed to merely pointing out the gross UK population size increase by 7 million in the past two decades (see Fig. 6.9 Panel A). When assessed in more detail (Fig. 6.9 Panel B), it is apparent that since the late 1990s it was **net migration as the main driving source of this population increase**, adding in the recent year more than twice the people added by natural change (expressed as births minus deaths).

An increase in a country's population, including migrants, is not *per se* a positive or a negative outcome. If it translates into a more efficient allocation of resources, which is the intrinsic goal of economic behaviour analysis, then this increase could lead to more jobs, higher productivity, lower inequality, more output, more government revenue from taxation and so on.

The UK's immigration system did not impose temporary labour market restrictions to immigrants from newer EU member states after the 2004 and 2007 EU enlargements. For these new EU citizens, the British labour market was open, offering the opportunity of earning higher wages and taking advantage of better jobs and livelihoods (Galgoczi et al. 2016). As a result, the UK received a record-high inflow of foreign labour in 2015.

The immigration system is but one facet in a larger picture, one that notably includes **demographic issues needing** to be solved, such as the UK's (and, incidentally European-wide) relatively higher proportions of older people, a lower fertility rate and a problematic 'productivity-puzzle'—the UK's productivity has not increased (see Chap. 7 in this book).

One of the largest impacts of UK migration is most evidently felt in the **increase in the UK labour market**. Migrants have tended to change the UK's demographic for the better, since they tend to be younger (90% are under 45 vs. 60% of the UK population) and have located in areas with previously lower non-UK-born people such as Scotland (experiencing a 138% increase in its migrant population whereas London has experienced only a 51% increase—see ONS, 2019a). The latter leads, thus, to growth

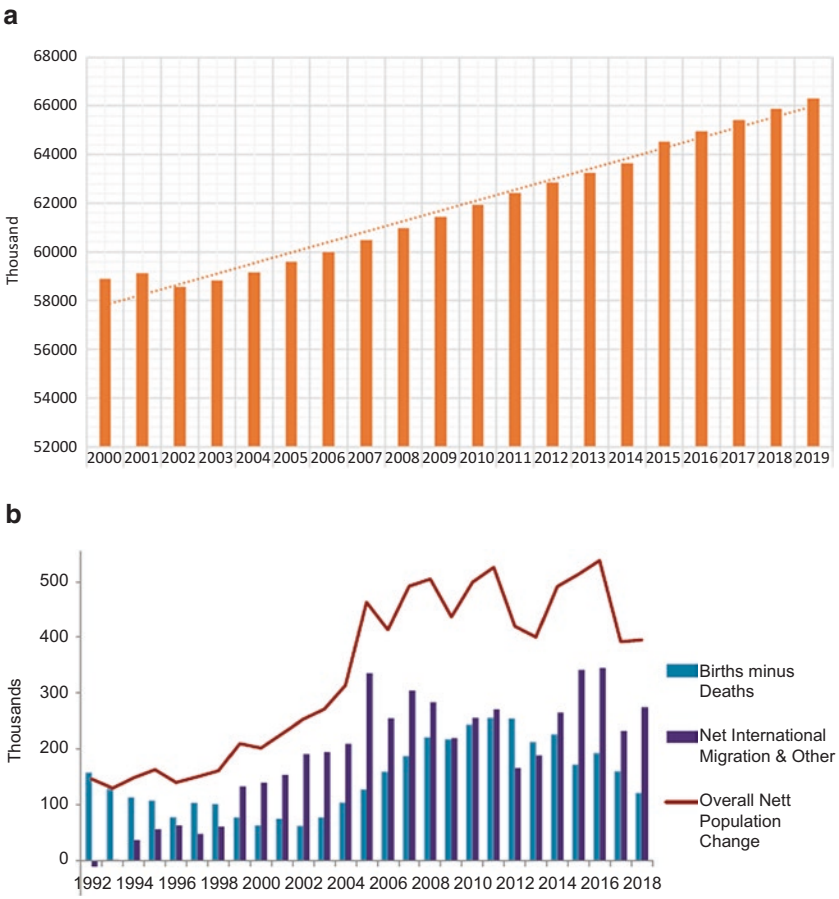

Fig. 6.9 UK population size increase. Panel A. Overall population increase, 2000–2019. Panel B. Overall population change presented alongside net international migration and natural population changes. Source: Panel A: OECD (2020); Panel B: ONS (2019a)

in population numbers in areas where previously there were fewer people, hence boosting growth—**evidence of free migration acting as a balancing force to** distribute access to migrants more equally across the UK.

Business groups have indeed welcomed the addition of migrants to the UK's labour market where about 17% of people employed in 2018

were migrants (Migration Observatory 2019). **Migrants' participation rate in the labour market is the same as the rate of UK nationals** (e.g. Bank of England 2014: 27), which has reached recently historical high levels (above 75% participation rates), hence positive net migration figures translate directly in increases in UK labour market supply. In more detail, based on estimates from a recent survey of 2000 organisation, it appears that migrants (be it from the EU or outside the EU) are working for one in seven employers (CIPD 2019: 6), and are significantly more likely to work in the public sector, relative to the public sector (see Fig. 6.10). It is also apparent that the bulk of migrants employed in the UK are from the EU as opposed to originating from outside the EU.

Certain UK economic sectors rely more significantly on migrant workers than others. A view of the top ten EU-migrant employing sectors, and the top ten non-EU migrant employment sectors, ranked by share of EU migrants that they employ, shows that *Low-skill factory and construction work* is the largest employer of EU migrants when ranked by share of EU migrants in its workforce (at 21%), while the *Low-skill administration and service sector* employs the largest number of EU migrants (nearly 350,000) (see Fig. 6.11). In contrast, for non-EU workers, the sector where they represent the largest share of workforce is *Health professionals* (17%).

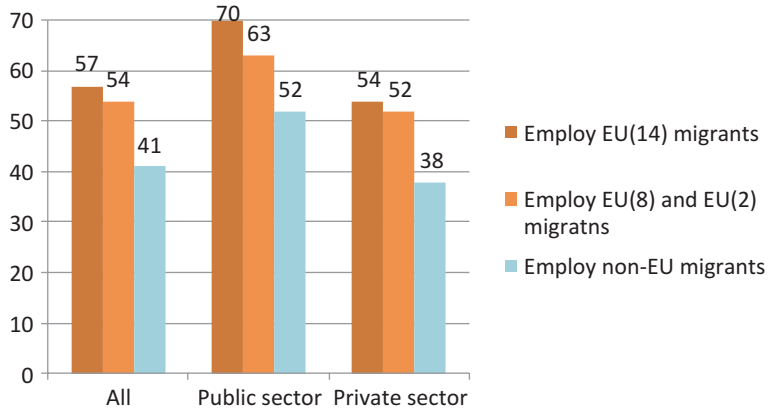

Fig. 6.10 Survey of firms in relation to employment of migrants: percentage of firms employing migrant workers, by sector. Source: The Authors, based on figures from CIPD (2019: 7) from a survey of 2182 firms in the UK

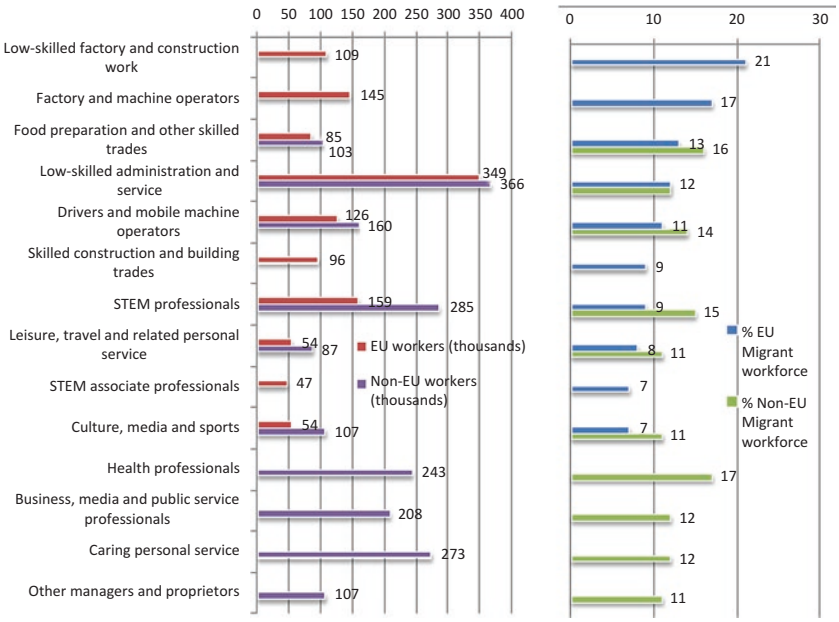

Fig. 6.11 Share of EU and non-EU migrants in the ten highest employing economic sectors. Panel A. Migrant employees (in thousands). Panel B. Share (%) of migrant employees in sector's total workforce. Note: Figures are only provided for the top ten EU-migrant employing sectors and for the top ten non-EU migrant employment sectors, ranked (in Panel B) by their share of EU-migrant workforce and secondarily by share of non-EU migrants. For example, STEM associate professionals ranks as the seventh highest sector by share of EU migrants in its workforce, and it also happens to be among the top ten sectors for employing non-EU migrants, so numbers are provided in the table for non-EU migrants too. However, Caring personal service is a sector which only has figures in the top ten non-EU migrant employers, and hence no figures are provided for EU migrants in this sector. Source: Authors' calculations based on the Migration Observatory (2019)

While some sectors rely heavily on both EU and non-EU migrants, such as *Low-skill administration and service sector*, there are still **important differences in the way EU migrants are represented in the UK labour force**. For instance, migrant workers from EU(14) are **more likely to work in high-skilled jobs than UK-born workers**, while EU workers from newer EU member states are more likely to be in low-skilled work

(Migration Observatory 2019). In detail, prospects of working in a lower job are higher for newer EEA migrants: a larger share, 30% of EEA post-2004 workers are in lower-skilled jobs versus 10% of pre-2004 EEA migrants (ibid.). It is not clear why this discrepancy exists, and it could potentially lead to a reduction in beneficial impact of having migrant workers as part of the UK labour market.

Despite a larger share of migrants from both European Economic Area (EEA) countries and non-EEA countries being high-skilled, when compared to UK-born workers (see Fig. 6.12), **migrants fare less well in their job prospects with regard to utilising their skills**.

More than half of the highly educated EU workers were **mismatched in their jobs**, being employed in low-skill occupation, as opposed to 23% of UK-born workers (ibid.). The latter is evidence **of under-utilisation of labour market resources** and would need to be addressed, such as by measures of increasing employee awareness of job availability and reducing restrictions on migrants' employment requirements imposed by some visa regimes (e.g. whereby a worker must remain employed for a period of time in a particular region/job/company). The reduction of the mismatch would be to the benefit of the UK labour market output, growth and productivity. It could also reduce potential discrimination faced by

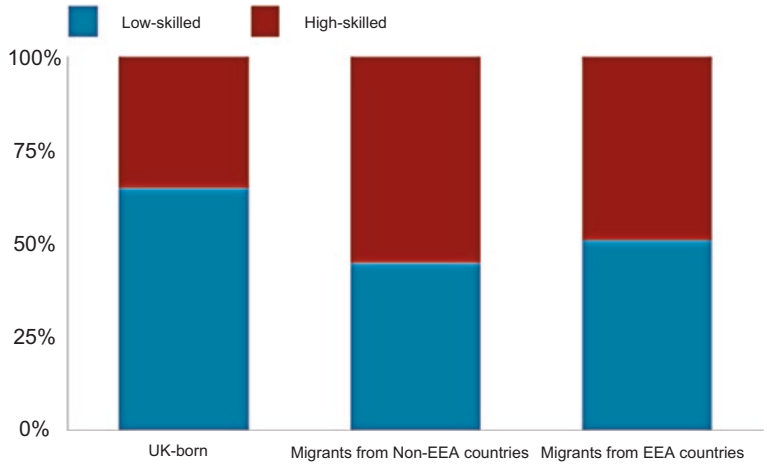

Fig. 6.12 Comparative view of low-skilled and high-skilled share of workers in the UK, by nationality. Source: Migration Observatory (2019)

migrants with regard to job opportunities available, evidenced for instance in findings that migrants suffer from higher involuntary part-time employment, differ in their flexible work patterns, are more likely to work during night shifts and be in non-permanent jobs than the UK born (ibid.; Whyman and Petrescu 2014).

Increases in the stock of migrants in the labour market would have been **helpful to the UK economy** in a variety of ways: **reducing skills bottlenecks**, allowing firms an ample pool of workers for hiring low-skill employees (see Fig. 6.13 Panel A), **keeping labour costs down** (at least in the decade post the 2004 EU enlargement—see Fig. 6.13 Panel B), mitigating the effect of an ageing workforce and **contributing to an increase in output**—which are all welcome by employers (see Fig. 6.9).

Beneficial outcomes include **higher value employment** and increased labour market participation being enabled by the availability of a less skilled migrant workforce. These migrants can, for instance, help support (e.g. via cleaning or childcare services) the higher-paid in their quest for jobs and better labour market participation (MAC 2018).

Similar to the theoretical point of migration (especially open borders) increasing output—point made in the earlier part of this chapter—**empirical studies show that migration flows could be beneficial to a**

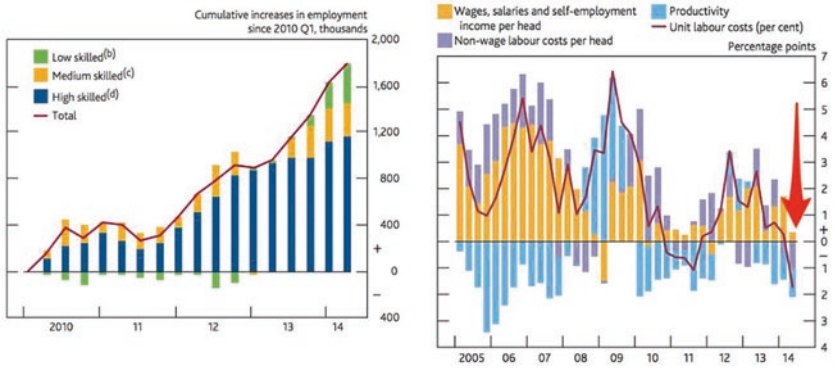

Fig. 6.13 Unit costs have been kept low and job growth was hinged on low-skill jobs. Panel A. Employment growth, by skill level—a large part of the UK's job growth is attributable to low-skilled jobs. Panel B. Unit labour costs decreasing (see red arrow below)—showing decomposition of changes in unit labour costs. Source: Bank of England (2014)

country's GDP/output. The benefit could be felt by more than two-thirds of non-migrant OECD population, benefiting with more than four-fifths of the 22 richest OECD countries' non-migrant population (Aubry et al. 2016). The migration winners are already in countries *receiving* migrants traditionally and countries which benefit from non-OECD migrants' arrival, and the clearest benefit is to consumers who have access to a larger variety of goods (ibid.). Freeing migration into rich countries is also estimated to reduce global poverty by 40–60% (Bradford 2012).

UK's **gross domestic product** (GDP) has increased due to immigration, thus boosting economic prosperity, albeit marginally at individual level (GDP/capita), as found in a number of studies. For example, a 1% in UK GDP per capita increase was estimated for the seven-year period 2010–2016 as being attributable to net migration; or, similarly, a long-run increase of 0.2% in UK GDP per capita was considered to be the result of the A8 countries joining the EU in 2004 (CEP 2018).

The net fiscal contribution (taxes and contributions paid less benefits and public services consumed) has been found to be overall positive for migrants assessed via a static analysis (one year 1999–2000) and valued at £2.5b (Gott and Johnston 2002). It is important to denote the expectation that this estimate could be on over-estimate due to factors such as weaker UK economy than in 1999–2000 (which was a particularly good year), or the analysis being repeated to take into account the life-cycle of migrants (at the time migrants were mostly young, but in time they may have children or retire, thus exist the labour market). Dustmann and Frattini (2014) similarly reported positive fiscal contributions for migrants, while a more recent report for 2016–2017 introduces a welcome disaggregated analysis and finds variation by migrants' nationality: EEA migrants contribute a net of £ 4.7b (£160 per head if originating in the A8 countries, Cyprus or Malta; but a much larger £2870 per head if coming from the rest of the EEA countries); non-EEA migrants receive £9b a year (their labour participation rates are lower, as are their wages since the visa regime has not required them to be highly paid); with UK-born, by comparison, being the highest recipients of government support, receiving the £41.4 (£970 per head) (MAC 2018—Oxford Economics analysis). In a study that does take into account dynamic effects, assuming that patterns of public services use for migrants and UK-born are the same, estimates for the 515,000 migrant wave in 2016 are for a lifetime net contribution of £27b (£78,000 per head for EEA migrants and £28000 per head for non-EEA migrants) (MAC 2018). Children (age 0–19) start with a

negative net contribution that turns positive as they enter the labour market; adults close to retirement or retired (age 50 and over) have a negative net contribution, while adults aged 20–49 have a positive contribution until they too retire (ibid.; see Fig. 6.14)

Yet, there are also less desirable macroeconomic effects from the way the UK has seemingly relied on utilising cheap sources of migration, such as resulting **lower wage inflation, that is,** the rate of wage growth (Bank of England 2014). Despite the UK rise in employment rate to 76.5%, and despite the decrease in unemployment rate below 4%, both figures reaching historically high (respectively low) levels (not seen since the early 1970s), real wage growth has been very slow. It has only reached pre-2008 crisis levels in February 2020, more than a painful, austerity decade later (see Fig. 6.15).

Worryingly too, **job vacancies have remained historically high, reaching a record peak of** 861,000 in during November 2018–January 2019; for December 2019–February 2020 the number of vacancies in the UK was 817,000 only lower by 43,000 or 5% compared to its peak (ONS 2020d). These were the periods of time coinciding with a pronounced

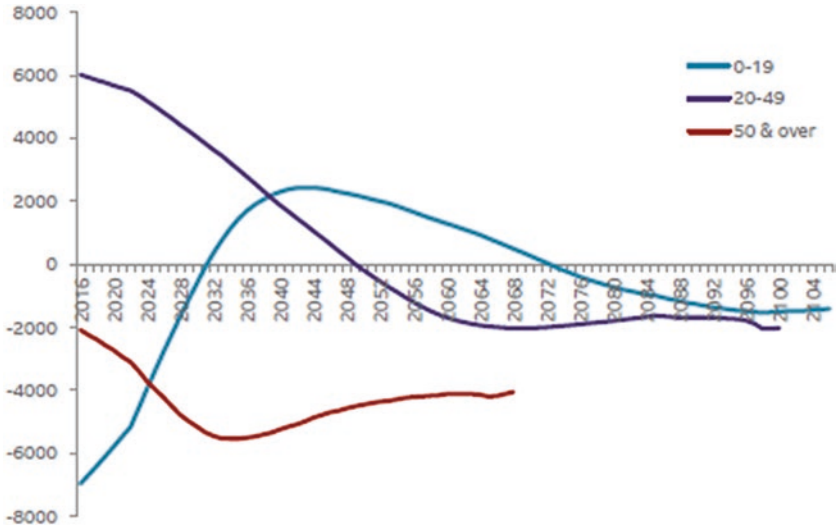

Fig. 6.14 Estimated lifetime annual net fiscal contribution per head for UK migrants arriving in 2016, in £. Source: MAC 2018

Fig. 6.15 Real wages reach pre-2008 crisis levels—showing average weekly wages (inflation adjusted). Source: ONS (2020c)

reduction in EU net migration. In particular, *Human health services and social work services* remained for the ninth consecutive quarter the sector with the largest reported vacancies (136,000 for December 2019 to February 2020) recording one in six (16.6%) of all UK vacancies (ONS 2020a)—echoing fears in the UK that the National Health Service has an increasing gap of doctors, nurses and medical staff, especially in certain regions. Compared to a national average of 2.7 job vacancies in 100 jobs, the highest vacancies rates were recorded for *Accommodation and food service* industries (4 vacancies in 100 jobs). It needs to also be mentioned that the economy experienced an increase (by 67,000) in the number of total jobs available, reaching a record high 35.8m in December 2019 (ibid.). This job growth is apparently on the backbone of a growth in business confidence and recruitment activates post-2019 December election (ONS 2020b) and it has already been severely dented by the current COVID-19 unprecedented economic pressures. Yet, the equally record high job vacancies demonstrate that **employers still clearly demand workers and cannot find them, particularly in certain skill sectors,**

which themselves recorded record high levels of job vacancies (ONS 2020a).

Moreover, this slow economic recovery post-financial crisis appears to be linked particularly to **job growth occurring among lower-paid workers**. Hence, this explains, partly, the weak pressure on wages from this sort of low-pay increase in labour demand (Bank of England 2014). There is worldwide concern that this trend leads to labour market segmentation, also referred to as polarisation, between professional job (with better pay, job security and work conditions) and low-skill jobs (having the opposite characteristics) (see a discussion of economy structural changes in OECD 1989 and a most recent view of job polarisation in OECD 2019).

It is conceivable that, had UK employers faced a **tight** labour market, for example, with harder access to cheap (migrant but also local) work, there would have been investment into automation and a smoother transition into replacing workers with capital, conducive to higher productivity. As things stand, **UK job growth has concentrated on young and low-skilled** (Bank of England 2020), **so this has reduced average pay growth, depressed productivity levels, lead to reduction in tax collected from workers' wages, all the while under-utilising the migrant (and UK-born) skilled workers** (there is a rise in over-qualification). Even if post-Brexit referendum developments (see Fig. 6.16) show increased unit costs, wage growth remains low, and firms are not able to pass this unit cost increase to the consumer as they face competition and pressure on margins, for example, the share of profits in GDP has fallen (Bank of England 2020: 23). Notably, **productivity too remains low and problematic**.

Furthermore, **labour market growth based on low-pay jobs presents challenges** in terms of ensuring decent work, equality of opportunities and exacerbation of the poor outcomes of low-pay trapped workers (be it migrants or UK-born) such as higher risk of in-work poverty, job insecurity or precarious job contracts (zero-hour contracts). In terms of inducing wage inequality, the effects of migration are small, but migration has been found to lower wages at the bottom earnings scale and raise them at the top (Dustman et al. 2007; Nickell and Saleheen 2015; MAC 2018). The magnitude of these changes was estimated to show decreases of 0.6–0.2% in wages for the 5% lowest-paid workers and between 0.3 and 0.7% increase for the highest paid workers (ibid.). Interestingly, it is also found that migrant workers themselves are the ones most likely to feel the effect of lower-wage decreases, in particular for university-educated

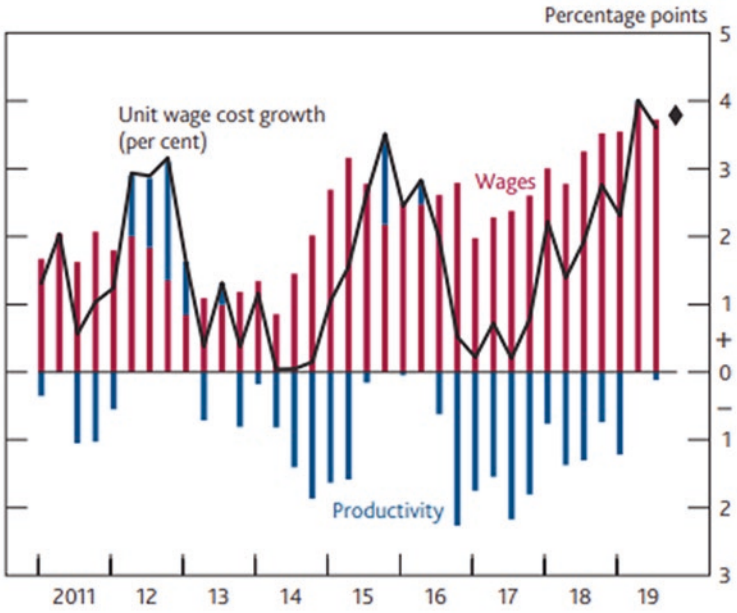

Fig. 6.16 Unit wage cost growth has increased in the late 2010s. Source: Bank of England 2020: 24

immigrants, whereas there is little effect on UK-born workers' wages (Manacorda et al. 2010).

Rises in net migration have added to the strain felt on public resources (education, schooling, housing, health services) in the UK, in particular over the last decade of UK government self-imposed austerity, when growth in public spending per head has been purposely reduced. For instance, migrants tend to have higher fertility rates, to be younger, and, as a result, migrant children and their families have added pressures on schooling, housing and health services particularly in areas of higher migration. Yet, migrants are also over-represented in school workforce with 12% of schools' staff in England being migrant, while, in comparison, 10% of the larger English population are migrant as per MAC (2018); and migrants, overall, make large, positive contributions to the health service (see two paragraphs below).

With regard to house prices, **net migration has contributed to housing inflation**. The UK average house price has increased from £54,000 to £206,000, a 284% increase; or, in real terms, an increase of 137% has occurred which would represent a £70,000 increase in real terms over the 25-year period 1991–2016. This change is estimated to comprise in real terms a 21% (or £11,000) increase directly attributable to net international migration (MHCLG 2018: 7). More than seven times bigger house price changes had been fuelled by incomes rising (150% or £80,000 in real terms). Still, housing supply led to a 40% average house price reduction (£21,000 lower price) in real terms (ibid.). Thus, merely by building houses, that is, increasing housing supply, there has been a reversal of more than twice the magnitude of the price hike effect due to net migration.

Nevertheless, it is important to highlight that net estimates of migrants' health services use have found that on average, due to being younger (and younger people need health services less often and are less costly), **migrants contribute 'much' more to the health service than they consume** (MAC 2018). It is worth pointing out that while migrants represent 9% of the UK population and 10% of the UK population, (see Fig. 6.4), fully 23% of NHS doctors in England are non-British and fully 18% of social care workers are also non-British (NHS 2019; Skills for Care 2018).

A critique of cost-benefit analyses of migration is that they tend to remain limited in their coverage and assessment of the larger economic aspects. They undoubtedly offer a useful view of the implications for the UK of having larger net migration figures, on a number of economic outcomes, such as housing or education. Nevertheless, these studies tend to remain quite restrictive, with application limited to a few sectors (such as concentrating on housing or on education), and thus it is usually necessary to widen the analysis and consider more economic factors at play.

Wages and Jobs

The UK **has relied on low-skilled low-wage EU workers** for quite a significant proportion of its workforce, in particular in low-wage industries. For example, in 2017 (the year just after the EU Referendum) an estimated 500,000 EU-born low-skilled migrants were working in the UK (Sumption and Fernandez Reino 2018) in low-wage jobs such as cleaning, processing food or as waiters.

One of the most intensely felt fears for the British public has been that migrants come to the UK and replace jobs, increasing local

unemployment, particularly in areas where more migrants settle, and depressing local wages. One of the key reasons for voting Leave in the EU Referendum was the fear of high level of migration, used by anti-EU politicians to obtain support in the Referendum, with more than half of voters surveyed wanting migration levels to fall post-Brexit (Curtice 2017). After 2016, these fears continued to be amplified by politicians and tabloids when referring to immigrants as taking locals' jobs, or to employers' practice of keeping wages low via access to "unlimited pools of labour from other countries" (Boris Johnson's January 2019 JCB headquarters speech, BBC Briefing 2020 :128).

However, **there has been ample and weak evidence on the link between migration and the general wage level**, similarly between **migration and employment (number of jobs).** There is actually an emerging consensus that there is little or no impact on jobs for UK-born workers (see a review by BIS 2014, or MAC 2018), with the UK experiencing historically low levels of unemployment (reaching 4%, lowest since the early 1970s) despite relatively high levels of immigration. This resonates well with the general theoretical view that there is no zero-sum game for the level of jobs available in a country; that is, the arrival of a migrant does not lead necessarily to the direct replacement of a native in the labour market (CEP 2018).

The impact of migration on the labour market is more likely to be felt with respect **to giving rise to market segmentation**, whereby some labour market aspects notice different outcomes (MAC, 2014). Dual or segmented labour markets have been noticed in some low-wage labour markets (e.g. tourism and hospitality, care, food, manufacturing) where migrants represented a high proportion of seasonal or temporary workers. However, this is not true of all EU immigrants, since, for example in London and the South East, there are EU immigrants in higher-paid financial and business sectors, and thus these are highly skilled and earn high wages.

With regard to market segmentation as a consequence of migration, of specific interest is the low-skilled wage market segment. Here, some small negative impact on wage levels has been noticed for the period 1997–2005 (Dustmann and Frattini 2013). This effect was only measurable for the lowest 20% of the wage earners, whose wages were depressed by a small amount, while for the rest of the labour market immigration lead to a higher wage. The relationship found was that for every 1% rise in the foreign-to-native population, the average wage increased by between 0.1 and 0.3% (ibid.).

Similarly, in a more recent study of overall immigration impact since 2004 (the largest EU enlargement) on semi-skilled and unskilled workers' wages, there are estimates that native wages would have reduced by 1% (Nickell and Saleheen 2015), which is relatively small compared to the impact of the National Minimum/Living Wage, taxation or other factors.

In the UK, it seems that there is no displacement of workers by migrants except for times when the economy **is weak,** such as during economic recessions, when there are job security fears and some employees are prepared to work for lower wage. One size estimate of this replacement concluded that there was a loss of 1 native job for every 13 jobs that were added by total EU and non-EU migrants to the UK economy between 1995 and 2010 (MAC 2012: 2). This was further disaggregated into noting that there was a reduction of 23 jobs for a one-off increase of 100 in the inflow of working-age *non-EU*-born migrants over the period 1995–2010. However, there was no impact on native employment from inflows of working-age EU migrants during 1995–2010—thus no impact of EU enlargement migration into the UK on natives' employment, a statistical finding consistent among other studies too (Gilpin et al. 2006; MAC 2012: 63; Lemos and Portes 2008; Lemos 2010).

Flexibility and Productivity

Flexible work has been firmly linked to increases in productivity, in terms of higher business performance, reduced labour turnover and lower absenteeism (Whyman et al. 2015). **A flexible labour market has been linked to general economic benefits** for a nation such as job creation, increased foreign direct investment, business productivity and employee well-being (CBI 2016; Whyman and Baimbridge 2006). Flexible work is ever more popular with the workforce too. Nearly a third (30%) of the UK population, as per a recent UK representative survey (conducted just pre-COVID-19), would prefer flexible work over pay, and a fifth (22%) have already switched to flexible work for a better work/life balance, feeling happier as a result (Theta Financial Reporting 2020).

The UK productivity has stalled since the 2008 crisis (see Chap. 7 in this book) and at its core could be labour market issues related to the poor management of the workforce, such as some employers' rigidity for tradition's sake when considering flexible work requests from their employees; lower investment into skills and training; a counter-productive long-hours culture; and, generally, a less-than-efficient use of human

resources—inclusive of the 'gift' presented to the UK economy by **access to the rich pool of skills, high motivation and talent offered by its migrant labour**. There is evidence, for instance, that high-skilled migrants have **boosted UK innovation** (MAC 2018). For instance, highly skilled migrants from the EEA have spurred the UK's research and development activities to levels above G8 and EU averages (ibid.).

Migration is a factor supporting productivity and rises in per-capita income, its contribution ranking even higher than trade openness (Ortega and Peri 2016). A culturally varied workforce, measured via birthplace diversity, is linked to higher levels of productivity, economic output and economic growth, specifically when linked to immigration (Alesina et al. 2016). The richer and more culturally close the immigration flow, the higher its productivity effects at macroeconomic level, increasing performance (Alesina et al. 2016).

In the UK, an increase of 50% in net migration's share of the working-age population would be triggering an increase of 0.32% in GDP per capita in the short term and 2.23% in the long term (Boubtane et al. 2016). This is similar to the estimates obtained for advanced economies, whereby a 1% increase in migrants' share in the adult population is associated with a 2% rise in GDP per capita and productivity (Jaumotte et al. 2016). In line with these estimates too, when focusing on the UK service sector, an increase in immigrants' concentration in local labour markets is found to give rise to an increase by 2–3% in labour productivity (Ottaviano et al. 2015).

High-skill migration in the UK is also found to have a positive impact on productivity in a larger sense, such as having a positive and statistically significant effect on native workers' training when measured in UK-based studies (Campo et al., 2018). Similarly, high-skill migration appears to intensify the local population's desire to increase their own human capital and educational attainment (Campo et al., 2018; Hunt and Gauthier-Loiselle 2010; Kerr and Lincoln 2010).

Migration could be linked to productivity when there is evidence of migrants being **complements** to the local workers, thereby the more migrants there are, the more likely it would be that locals would also be in employment. In this sense, further expectations that migration could raise productivity relate to the mere presence **of low-skill migrants** increasing labour force participation for natives, and this link was found to work for native women's labour market participation (Barone and Moretti 2011), as well as for the wages of low-skilled workers (Foged and Peri 2016).

Designing a Post-Brexit Migration System

A key decision for the UK government has been whether to opt for a form of Brexit which retains a close relationship with the EU or not. If choosing the former, then a close relationship required implicitly a continued acceptance of the four freedoms. If choosing the latter, then a more independent relationship meant the UK could design its own migration system which would not necessarily include unrestricted free movement of people from EU member states. The rest of this chapter examines some of the work that has been done on the migration system already.

A major concern for the UK has been the impact of migration on the UK economy, both for business where firms consistently voiced fears for being unable to fill vacancies, but especially when considering the public's perceived risk of the level of local unemployment rising or wages falling. Thus, intense debate has focused on assessing the impact of migration in terms of the **skill-structure of potential immigrant workforce** and its impact on the local economy.

The preference of the public is clearly in favour of encouraging high-skill migration and discouraging low-skill migration. A majority of the public in the UK (57%) would like to see especially fewer or no low-skilled immigration; in contrast, over 70% would be happy with the same or higher levels of skilled immigration (YouGov 2018).

Mirroring this view on skill preferences for migrants, the government has **published its most recent, newly designed migration policy and has regulated that from 1 January 2021,** with a summary presented in Fig. 6.17.

The new migration system aims to discourage UK firms' reliance on 'cheap labour', incentivising instead a mixture of investing in automation, hiring local workforce (including from the 8m economically inactive population—albeit fewer than 2m of these would like to have a job as per BBC 2020 reporting) and (re)training/up-skilling programmes. Yet, it has been met with scepticism and fear by certain business sectors, in particular the health system and social care where job vacancies remain high and where foreign workers represent a large share of the workforce—for example, one in six of the 840,000 social care workers is foreign, 13% of the NHS workers are foreign (and nearly one in 10 doctors is from the EU).

- **Free movement will end**
- A points-based system for visas will be introduced, with points are assigned to specific skills and qualifications, salaries and shortage occupations)
- Visas will be given only to those who meet or exceed 70 points
- There is lowered £25,600 salary threshold (albeit certain characteristics could be traded for an even lower salary). The UK had previously used a £30,000 (so a higher) salary threshold for non-EU migrants
- The definition of a skilled worker would include not just graduates but also those educated to A-level (Scottish Highers) standard. This definition would exclude skill acquired on the job such as in construction work, putting an emphasis on formal qualifications.
- A PhD in a STEM subject would earn 20 points
- The ability to 'speak English' would be given 10 points
- Having a job offer' before arrival to the UK would be given 20 points
- If the job is at appropriate skill level this would gain 20 points
- **Low-skill migration flows will stop.**
- The list of 'specific shortage occupations' would be revised in time to meet the UK's needs and, at the time of writing, it included: nursing, civil engineering, psychology and ballet dancing, among other occupations.
- Certain parts of the workforce, such as seasonal workers in agriculture, saw their visa scheme quadruple from 2,500 to 10,000 workers per year, while 20,000 young people could come to the UK under the 'youth mobility arrangement' scheme.
- It may be that a specific occupational category could be allowed to deviate, temporarily, from applying this visa system, but these discussions would need to be formalised and the need for work would need to be justified at the time.
- An entrepreneurial route will allow people with start-up ideas, under certain conditions, to have a two-year visa.
- All EU citizens currently in the UK will have to register for an EU Settlement Scheme if they want to stay in the UK after 30 Jun 2021
- The cap on the number of skilled workers arriving in the UK shall be removed, in a change to UK's previous migration system position.
- It is unclear whether students will be allowed to work while studying, a right that currently EU students hold, but they shall be allowed to work in the UK for two years after graduation
- A 'fast-track' route would be available for those deemed to have 'global talent', in an effort to position the UK competitively in the labour market for research and education staff.

Fig. 6.17 A summative list of the main elements in the UK's new points-based immigration system to be enforced from 1 January 2021. Source: The Authors compilation of information available from various governmental notifications inclusive of UK Visas and Immigration 2020

Low-paid sectors, such as retail, nursing, catering and farming,[5] where employers have been facing hard-to-fill vacancies, have also found the new visa system worryingly ill-suited to their labour needs (CIPD 2017b).

It is difficult to see how restricting migration numbers will not impact negatively on certain business sectors. Most of the migrants arriving into the UK are coming here for work (70% of EU migrants) and a very large share of EU(8) and EU(2) migrants are actually low-skilled (see Fig. 6.18).

With expectations of detrimental worker shortages, in particular for 'key workers' (as determined by the government during the COVID-19 pandemic), there have been renewed voices for the government to revise

[5] The farming sector mentions 70,000 seasonal workers are needed, while the government would allow entry to only a seventh of this number.

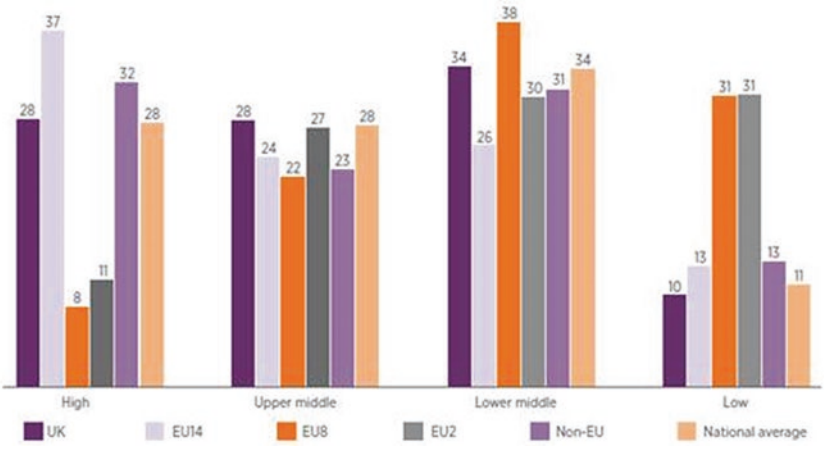

Fig. 6.18 Distribution of workers by nationality and skill level, in per cent, 2016. Source: CIPD 2017b: 19, based on figures from the Annual Population Survey and the Office for National Statistics

is immigration plans by making it more flexible and accommodating business requirements in particular sectors of activity such as health and social care, nursing, agriculture (fruit and vegetable pickers), tourism, hospitality, catering, food processing or transport (CIPD 2017b; People Management 2020).

A New Points-Based Immigration System

A new system of migration has been passed by the UK Parliament in spring 2020 (19 May), in the midst of the COVID-19 pandemic (see Gov.UK 2020). It can be described as being 'off-the-peg': **it has borrowed some elements from other points-based systems across the world** but it is centred on Tier 2 (general work visa) **sponsorship routes** as opposed to having at its core the much-anticipated Australian-style visa system (People Management 2020). The main difference is that the current Tier 2 system of migration will be 'given a makeover' whereby employers need to first be licensed as sponsors, before they can hire European Economic Area workers (ibid.). It is hard to see how the issue of employers needing to apply to be sponsors, and the current pandemic crisis, will be reconciled in the short time until 31 December 2020. Under these rules, only agricultural

labourers would be allowed to enter the UK as 'low-skilled' workers, while momentum is gathering for further flexibility.[6]

Nevertheless, lessons need to be learned from Australia, Canada and New Zealand, countries which have a richer past of having adopted points-based migration systems—whereby a specified number of points is given to specific migrant characteristics, and visa are only awarded to individuals accumulating a particular minimum points threshold. In fact, the UK's low-skill immigration ban can be traced as far away as in Japan's immigration system, where unskilled workers only enter the country if they are trainees (BBC Briefing 2020: 179), but the most common comparison has been between the UK's and Australia's visa regimes.

The main difference between the UK and other migration systems is that it **concentrates more narrowly on migrants' skills and less on other migrant characteristics**. For example, unlike the Australian system, the UK does not award points for age, while in Australia being between 25 and 32 years old means obtaining 30 points, or nearly half out of the 65 points required (see Table 6.2).

Similar to Australia's migration policy, a UK immigrant will gain points for having an occupation listed among those with labour shortages in the country or need to be sponsored by employers. So, akin to the Australian, but also Canadian, US and Swiss system of migration, there is a need for UK migrants to show that they are **financially secure** to some degree, such as by having a job offer, a wage above a certain minimum threshold (25,600 a year), or, for students, showing that they have a sponsor, albeit the UK's new visa system seems to be more employer-led when compared to Australia's more government, centrally driven system (Sumption and Fernandez Reino 2018).

Financial security is a widely applied migration system requirement, across various countries, for at least three reasons. Firstly and most evidently, it ensures the UK public finance and government spending/benefit schemes **do not have to worry about providing financial support** to migrants. Secondly, **a higher-pay migration threshold** is an advantageous selection filter for high-skill and most likely high-productivity workers, which again presents an advantage to the migrant-receiving UK areas which can use these migrants to increase their ability to grow their own

[6] As of 21 May 2020, the UK government announced, for instance, that bereaved families of migrants who worked in the NHS, during the COVID-19 pandemic, will not need to apply for indefinite leave to remain, being in effect automatically allowed to stay in the UK.

Table 6.2 The Australian points-based system

Elements given points in the Australian visa system for skilled migration visa
Age: 18–24 (25 points); 25–32 (30 points); 33–39 (25 points); 40–44 (15 points); >45 (no points). No migration for >50.
Nominated occupation (in use only up to July 2011)
Nomination or sponsorship by an Australian state or Territory (up to 10 points)
Skilled employment/occupation—chosen from an Australian government list—by length of employment. If within Australia: 1 year (y) at 5 points (pts); 3y at 10pts; 5y at 15pts; 8y at 20pts. If outside Australia: 3y at 5pts; 5y at 10pts; 8y at 15pts. Points can be cumulated up to a maximum of 20 points.
Professional year (completed on in Australia in past 4 years—5 points)
English language ability: superior IELTS (20 points); proficient (10 points); other (no points)
Australian educational qualification
Qualification: PhD (20 points); BA or Master (15 points); Australian Diploma or Trade qualification (10 points); Award or qualification recognised by assessing authority (10 points)
Work experience
Australian work experience
Spoken language
Spouse/partner skills and qualifications (meeting basic requirements: 5 points)

Source: Summative information presented by the Authors

productivity—and cheaply too, as the migrants' education had been done at the expense of a different country. Thirdly, a certain higher ability to earn implies a higher ability to spend. This latter effect then sets in motion a potentially highly advantageous economic mechanism in the UK, economically described via the concept of **a multiplier-effect**: as more affluent (higher-earners) move into an area, they are seen as a start point encouraging a cycle of more consumption, more spending, followed by more output in the area and thus the size of the (local) economy increases, such as via job creation, investment, business start-ups and so on. However, notably Australia's system does not use a wage threshold for its points-based visa system, while in the UK this feature has caused high concern that it is a poor proxy of skill, it neglects the added-value of certain key occupations and it is too narrowly focused since wages depend on much more than skill level. In the long run, if wages do converge across the EU, having a wage threshold would also imply an expectation of reduced

migration from the EU newer member states, on which many UK sectors rely.[7]

There are further flexibility differences between the British and Australian systems: Australia enforces a cap on temporary migrants (inclusive of students and workers) and a cap on skilled workers and family-tied immigration, while the UK has not mentioned the introduction of this sort of number cap.

The overall result in Australia's points-based system and other similar systems has been that the number of economic migrants has continued to increase overtime,[8] with a flow being skewed towards skilled migrants in occupations favoured by the respective governments. Under realistic assumptions that workers are different from each other, the latter is expected in most studies to lead to a rise in productivity (measured via GDP/capita for instance).

However, even a points-based system, therefore, cannot be said to be a panacea for controlling, or in particular, reducing migration. In Australia and in other countries, added flexibilities were necessary and this has been most clearly and evidently conveyed by **temporary permits, youth mobility schemes, low-skilled work-permit schemes and/or exceptions for particular sectors**—they are common as supplementary, 'back-door', policy instruments to re-dress otherwise detrimental imbalances created by restrictive visa policies (Sumption and Fernandez Reino 2018). The most recent and key proposals for the UK government include a two-year mobility scheme for all EU citizens, to allow low-skilled EU employment (since a Youth Mobility Scheme or a 12-month temporary visa is feared to be inadequate), and a more flexible salary threshold for some jobs on shortage occupations lists (CIPD 2019).

The UK government has already announced the potential extension to EU countries of its Youth Mobility Scheme already in place for countries

[7] UK employers have expressed high concerns about losing access to EEA migrants, who are a key source of labour based on being described as more likely to take work thought less appealing or working evenings and nights, being better educated than their UK counterparts, more likely to work in high-skilled jobs and generally having a higher motivation to work (MAC 2018). It is estimated that 500,000 EU-born workers are employed in low-wage sectors in the UK (Sumption and Fernandez Reino 2018) and already before January 2020 many UK employers had hard-to-fill vacancies having 'exhausted' the local employment opportunities (CIPD 2019).

[8] As a share of the country's population, more than twice (29%) as many people in Australia are born abroad, versus 14% in the UK (Sumption and Fernandez Reino 2018).

including Australia, New Zealand and Canada (HM Government 2018). This would involve allowing workers of any skill level to take jobs, but numbers could be capped and the scheme may run for a shorter period of time, that is, a temporary scheme. It is estimated that over half of the EU migrants arriving in the UK from the EU in recent years would have been able to come via a youth migration scheme, simply by virtue of their age being 18–30 years old, and some sectors such as hospitality would rely more heavily on this immigrant flow (Sumption and Fernandez Reino 2018). Work-permit schemes, in comparison to youth mobility schemes, can target certain occupations and sectors more specifically, but bring a risk of worker exploitation—wage and working conditions may be abused by employers when workers are dependent on employers, for example, restricted to employment with a particular employer sponsor (e.g. Parliament of Australia 2016).

The skill-filter is clearly put in place in the UK visa system, associated with the desire to assert a better use of control by the UK of the type of migrant who is allowed to come and work here, with low-skill migrants being purposefully denied access to the economy—with the exception of certain occupations or sectors such as in agriculture. The UK government intends to use this opportunity **to wean UK companies from relying on cheap migrant labour**, instead moving towards **automation, using more of the local, native workforce (via training, re-skilling, increasing local supply of jobs**) or using non-EU countries as more main sources of labour[9] (CIPD 2019).

It is hard to predict a priori the level of immigration change post-Brexit. Neo-classical models of migration would also expect a different result in terms of the post-Brexit trade policy impact on the size of the EU immigrant flow. So all migration impact studies, neo-classical or otherwise, could be improved by taking into account whether the UK negotiated an FTA with the EU, or traded according to WTO rules (e.g. see Arregui and Chen, 2018: 16). It is understandable that these factors would introduce a large amount of variety in the post-Brexit migration landscape that the UK would face.

[9] Respondents have indicated non-EU countries that would become main sources of labour would be mainly Australia and New Zealand (for 37% of survey respondents), South Asia (35%) and North America (26%), while the occupations for migrant recruitment would be chefs, IT, scientists, teachers, doctors, nurses and engineers (CIPD 2019: 20)

Yet, even estimates for neo-classical assumption-based studies could have large variations, when mentioning, for example, an expected yearly reduction by 50,000 (Hantzsche et al., 2018: F35: 15-17; Hantzsche and Young, 2019: F35), or triple that, so a reduction by 150,000 (BoE 2017). The more realistic, heterogeneous labour models, too, expected a negative impact on UK productivity (Menon et al., 2018: 9-12; Nickell and Saleheen 2015; Portes and Forte 2016: 17).

In fact, the overall outcome of a more restrictive migration policy cannot be judged *a priori* to mean a reduction in GDP. If post-Brexit there shall be a lower number of unskilled migrant workers while there would continue to be increases of skilled immigrants, this should lead in time to a proportional increase (skew in favour) of skilled migrants in the UK's overall migrant workforce. Therefore, the expectation is that UK productivity, *ceteris paribus*, should increase, because skilled workers are more productive, and **the ultimate impact on GDP growth would depend on whether the labour supply (quantity) or productivity (quality) effect predominates.**

A highly skilled migrant flow is, in theory and in practice, crucial to generating much-needed rising productivity. The UK's need for skilled work and the presence of hard-to-fill vacancies contributes to the aggravation of UK's low productivity, also slowing growth due to lower development of the digital sector (EIB 2020: 120). Or, a country's pro-active approach to supporting the development of its digital sector *could* bring faster growth, more productivity and higher wages (EIB 2020). Yet, worryingly, the UK lags behind the USA and most EU countries (fifth from the last) in its digitalisation[10] of the economy (EIB 2020: 9). Moreover, it is mainly due to lack of available staff, and especially so in digital firms, that the UK fares so negatively with regard to investment and development of its digital sector (ibid.; CIPD 2017a). Thus, it is expected that immigration, particularly if skewed in favour of having a higher proportion of migrants being high-skilled, would be helping the UK start to catch-up with other countries, obtain economic growth, supporting an increase in productivity and wages. Organisations know that attracting, developing

[10]The Digitalisation Index, on which EU and US inter-country comparisons are made in the EIB (2020) report, measures the following five components: "digital intensity; digital infrastructure; investment in software and data; investments in organisational and business process improvements; and strategic monitoring system" (EIB 2020: 9).

and retaining high-skilled staff is an important strategy, leading to innovation, productivity and competitiveness.

Reaction and Consequences to the Announced Immigration System

The business reaction to this new immigration system has been mixed. For example, the CBI, collectively representing the UK's business voice, has welcomed the lowering of the salary threshold but echoed concerns about how mid-skilled workers (such as LGV drivers, joiners and technicians) would be allowed entry in particular if they have a lower wage than £25,600 (CBI 2020). For businesses, the two most celebrated aspects were: the removal of the cap on numbers entering the UK, with 26% of employers considering that it shall have a positive impact on UK organisations, alongside the perceived reduction in the bureaucracy of the sponsorship system (welcomed by 25% of organisations) (CIPD 2019).

The design of a well-managed migration system *could* counteract some of the negative effects of inequality within the UK, such as economic growth, skills and regional wage inequality, thereby helping to redress these imbalances. As mentioned in the theory section of this chapter, the theoretical **expectation is that, via migration, a more efficient distribution and use of labour market resources could be achieved, leading to wage convergence**, whereby, in time, with labour mobility being allowed and/or enabled, regional wage variation would decrease.

Taking the example of region wage disparities in the UK, a **regional approach to immigration policy** has already been discussed at the point before deciding the UK's future migration system **salary threshold.** It was found that Scotland would be most interested in this, albeit Scottish employers were also the ones to be most in favour of a national migration policy (CIPD 2019: 17). The point to make is that, depending on extant regional wages, London employers would be, for example, more able to receive migrants, whereas areas with lower regional wages could be negatively affected in two compound ways: firstly, regionally their employment prospects are seen as less desirable by the native population; secondly, they would be less likely to attract migrants since the nation-wide wage threshold would be too high for the respective region. In the event, it remains to be seen how the current policy migration of having a fixed nation-wide wage threshold would affect each region.

The design and application of the final new UK migration policy would need to take into account, at the very least, some of the EU migration policy approaches that it would be wise to mirror, to the extent that the UK would then want to have its citizens treated by the EU in a similar favourable way. Thus, **some degree of regulatory compliance of UK migration policy with its EU counterpart may still be desirable, such as** with respect to: mutual agreements of visa regulations, student mobility, mobile communication fees, healthcare access or currency transfer for holiday makers, pensions and time limits, alongside, more generally, the treatment of each other's' nationals with regard to living in a foreign country, their access to various services, welfare or benefits, and ultimately to citizenship. The amount of ease (or difficulty) that the new UK system will allow our officials to show to EU citizens whilst in the UK could be mirrored by EU officials when UK citizens travel or intend to live there. Based on this rational expectation, it would be natural to hope that the UK would consider carefully every detail in the design and implementation of its new migration system.

Currently there is a dearth of post-Brexit analyses of GDP and UK growth that take into account of the impact of UK's visa regime, since it is indeed a very recent development. To the extent that trade-based methodology is useful and relevant, a study of the impact of reduced migration from the EU to the UK (carried out pre-Brexit) estimated decreases in GDP, GDP per capita and low-skilled wage levels, albeit modest (see Table 6.3).

In terms of the macroeconomic impact of a skilled-based migration system, if it is assumed that labour is homogenous (workers are similar to each other), a restriction in migration would be expected to cause a direct drop in labour input and inevitably a predicted fall in GDP, but the

Table 6.3 Estimates of the impact of immigration reduction from the EU to the UK by 2030, cumulative, in %

	Scenario	*GDP*	*GDP per capita*	*Wages*
Model 1	Central	2.73	0.92	0.507
	Extreme	4.35	1.53	0.8198
Model 2	Central	5.19	3.38	0.507
	Extreme	8.18	5.36	0.8198

Source: Portes and Forte (2016), Table 9.1

assumptions of homogenous labour are unrealistic (see discussion at the beginning of this chapter, on neo-classical models of migration). Instead, when varying this unrealistic assumption, that is, allowing for the real-world example of heterogeneous labour (by exception, to date, this is done by Gudgin et al. 2017[11]), the analysis of the macroeconomic impact becomes complex and its expected impact less clear. This is because higher-skilled individuals tend to have higher productivity, so fewer but more skilled migrants can have an indeterminate effect upon GDP growth, depending upon which effect predominates (i.e. lower quantity of labour effect vs. higher productivity of labour). Certainly, the expectation is that an increase in the average level of skills amongst the migrant group (and their effect upon the UK population as a whole) would increase GDP-per head. Maybe only time will tell.

Therefore, the UK's new migration system reflects the renewed attempts made by the UK government to strike a better balance between migration and the country's best perceived interest. The expectation is that this new immigration system will allow the government to finally ascertain a degree of control, in line with the Leave Campaign (during the 2016 EU referendum) supporters' mantra of 'taking back control over our borders'. The extent to which this system will also be fit for purpose, satisfying the needs of reducing migration within 'controllable' limits, as well as allowing business to continue to flourish, offering a better way of distributing the benefits and sharing the costs of migration, making best use of limited resources, all these are key question that can only be answered after a period of time of trialling out this system.

Conclusion

Migration policy is one of the key areas for the UK government to develop before the end of the transition period, currently lasting until 1 January 2021. The problems with migration are, however, the entrenched negative perception of migrants, such the view that they are stealing natives' jobs, lowering wages and so on.

Migration's poor image problem lies especially in a skewed perception of its benefits versus cost and governments' inability or lack of will to make

[11] Estimates here are of lower post-Brexit migration flows (leading to an overall prediction of the UK population reducing by 86,000—OECD), but higher per capita GDP by 2030 (Gudgin et al. 2017).

their voters more conscious of the former, whereas costs usually speak for themselves albeit louder than they should. Migration's benefits tend to be spread to the wide population of a country and hence are almost unseen or barely perceptible, mainly to statisticians, for example, marginally lower prices at the level of a nation, higher variety in goods (for the latter, see Aubry et al. 2016) and easier availability of goods (e.g. if fruit is picked by migrants). Wages and jobs do not tend to be lowered by migrants, except for weaker economic periods, for low-skilled workers and for very small wage changes. In contrast, fears of job loss and wage cuts persist, and some of the negative consequences of migration, such as traffic congestion or increased pressures on health and education systems, are much easily picked up by the media and felt by a local economy.

Migration's image could be redressed by government's design of migration policy that could mitigate better the balance between winners and losers of migration. Otherwise countries are at risk of being too strongly influenced by a negative perception of migration, with too few being the pro-migration advocates. Politicians could be listening too much to parts of their electorate harking back to times when globalisation was slower, harbouring anti-migration biased views, thereby favouring stricter border regulation and the introduction of rather nationalistic-driven migration systems (e.g. Trump's wall to Mexico; the EU's insistence that it helps only Syrian refugees in preference to the 'economic' migrant; resurgence of nationalistic political parties such as in Austria or Hungary). This would risk killing the golden-egg laying goose.

Migrant labour can make positive contributions to our nation in terms of productivity, growth, avoiding skills bottlenecks, reducing inequality and various other labour market and economy-wide aspects. However, costs, such as stresses upon public services (e.g. health, education, transport and housing), need to be recognised.

As a solution, part of the additional income generated for the country as a whole could be invested to alleviate these problems. Indeed, if migration is a net benefit, as many studies suggest, then the issue might be the distribution of this benefit and the associated costs between the likely beneficiaries of migration (largely, firms but the public too) and those who lose out (e.g. people in regions with relatively high migration rates, who need more public services, living in crowded areas, or those workers whose wages might be dampened).

A skills-based migration system could, if designed correctly, enhance productivity, although its net effect on GDP would depend upon whether reduced labour supply predominated over any productivity effect.

Moreover, certain economic sectors will require focused attention to address sector-specific labour supply issues. It may be that short-term or longer-term exemptions from certain migration regulations apply to these sectors, or that seasonal worker schemes or assistance is provided to employers to transform production through introducing more mechanisation where this proves feasible.

The preferred solution based on economic theory, rationale and evidence, one that would offer much needed PR support to migration's image, would be for government, business and the research community to work together to help design a migration policy appropriate to our country's needs, for example, adapted to our country's evolving economic profile of jobs/sectorial occupations and vacancies (be it a service-based economy, a knowledge-based economy, etc.), encouraging higher-skill job creation and investment in training and skilling of its workforce, younger age migration, and with flexibility to adapt its migration policy in time.

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