

Migration during the pandemic

Have 1.3 million migrants really left the country?

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According to the Labour Force Survey (LFS), the number of people living in the UK but born overseas fell by approximately 1 million between the first and third quarters of 2020, while the number of UK-born UK residents in this same category band rose by 1.3 million over the same period. Some have cast doubt on these statistics, suggesting instead that the UK migrant and total populations might have both fallen with no offsetting rise in the UK-born population – with maybe 1.3 million migrants having left the country. We think that the fall in the number of migrants in the UK is more like half a million – still a huge number, and around 5 per cent of the migrants in the UK. The difference with the other estimates is due to us correcting for a decline in the proportion of overseas-born people that responded to the LFS during the pandemic.

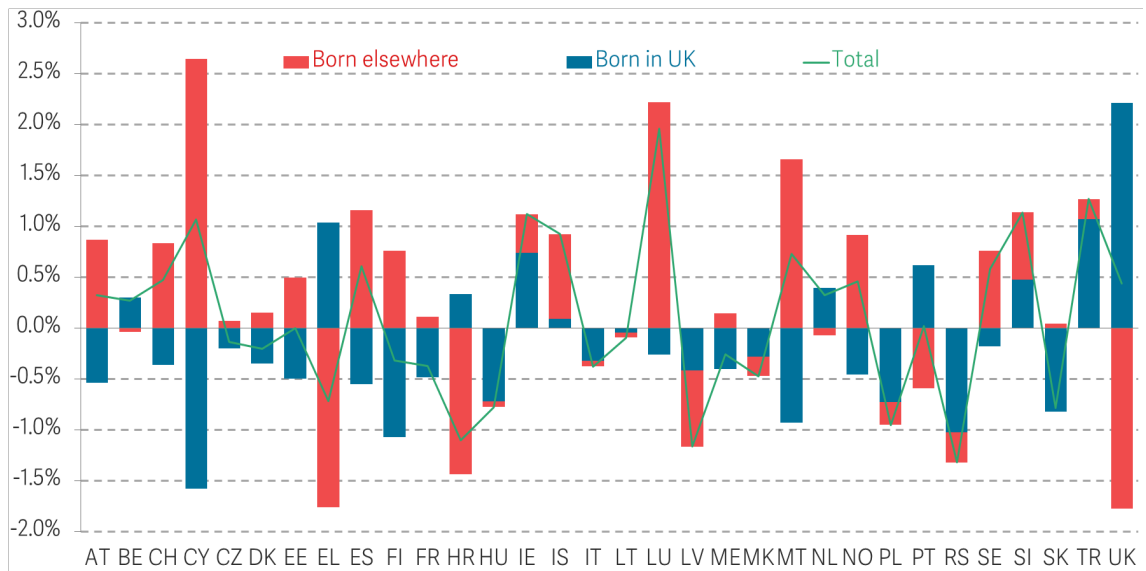
According to the Labour Force Survey (LFS), the number of people living in the UK but born overseas fell by approximately 1 million between the first and third quarters of 2020, while the number of UK-born UK residents in this same category band rose by 1.3 million over the same period.¹ [Some observers have cast doubt on these statistics](#), suggesting instead that the UK-born population has not changed, but that 1.3 million migrants have left the country.

Both of these estimates are huge numbers. There are, of course, good reasons to think that the pandemic will have affected migration flows. [Migrant-heavy sectors have been especially hard hit by the pandemic](#). Counts of workers and jobs show a sharper fall than the LFS, consistent with a fall in the UK population not reflected in the estimates used to turn LFS rates into numbers, although there are other explanations for this discrepancy.² Many foreign students will have gone home³, and fewer will have come to the UK at this time.

On the other hand, a 1.3 million total outflow of migrants maps into such large outflows in some geographical areas (including up to 700,000 or one of every five in London) that one might expect to see more corroborative evidence coming from other sources, such as media reports of falling school rolls. Furthermore, nothing like such a change can be seen in any other European countries' labour force statistics (Figure 1), many of which also suffered serious health and economic crises in 2020, albeit generally smaller than the UK's (on the other hand, in some countries (e.g. Ireland), and unlike in the UK, the pandemic-related welfare payments

were [not payable to people who were not in the country](#), which may have dissuaded some people from leaving those countries).

Figure 1 **No other European country shows a similar migration pattern to the UK's**
Contributions of domestic and foreign-born to population growth in the four quarters to Q3 2020, various European countries



Source: RF analysis of Eurostat, Migration and migrant population statistics.

We think that half a million – still a huge number, and around 5 per cent of the migrants in the UK – could be closer to the truth, with the difference with the other estimates being due to us factoring in a decline in the proportion of non-UK born people that participate in the LFS during the pandemic. This Spotlight explains our thinking in more detail.

The LFS is not designed to count the number of migrants

It is important to understand how the estimates of the composition of the UK population are derived from the LFS. The key point is that the LFS does not actually count the number of people with a certain characteristic: instead, it estimates the share of the population with that characteristic.

The LFS is a rotating panel survey of UK households: each quarter, new households are recruited and then asked a series of questions over five quarterly 'waves' covering a whole calendar year. Among other things, respondents are asked about their country of birth, and so it is easy to use the LFS to estimate the fraction of the UK population that was born overseas. To go from proportions to numbers, the ONS then multiplies this fraction by an estimate of the total UK population. Of course, the actual size of the UK population right now is not known, so this is also an estimate, based on projections of births, deaths and net migration, with the most recent projection produced in 2018. This procedure yields an estimate of the *number* of UK residents born overseas.

A crucial consequence of this process is that, because the underlying estimate of the total UK population is fixed, anything that lowers the migrant share in the LFS (that is, the proportion of respondents to the LFS who are born overseas) will automatically lower the estimate of the number of overseas-born people in total, and this has to be matched by an offsetting increase in the estimate of the number of UK-born.

And, in turn, the migrant share in the LFS (that is, the proportion of respondents to the LFS who are born overseas) can fall either if there is an actual fall in the migrant share in the population, or if there is a change in the rate at which overseas-born people participate in the LFS (over-and-above any change in the rate at which UK-born people participate in the LFS). The latter of these is measured by a response rate – this records the fraction of households contacted by the ONS that agree to take part in the LFS, and go on to provide data.

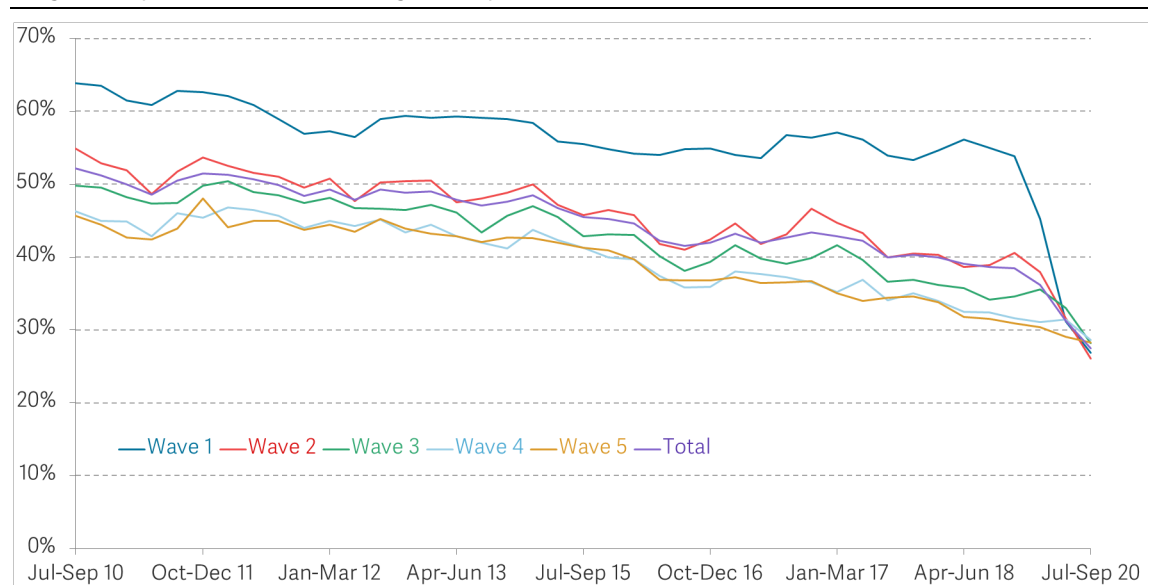
A brief guide to non-response in the LFS

Before the pandemic, the fraction of all households responding to the LFS (i.e. those households that had been contacted by the ONS, had agreed to take part in the survey, and had provided data) had been falling (see Figure 2), with the main reason for non-response being a failure for the ONS interviewer to make contact at all with the (intended) respondent (see Figure 3). Since the Covid-19 crisis began, the response rate has fallen further, with the response rate for the first wave falling to 27 per cent in Q3 2020, roughly half its level a year earlier.

Figure 2

Response rates to the Labour Force Survey have been falling

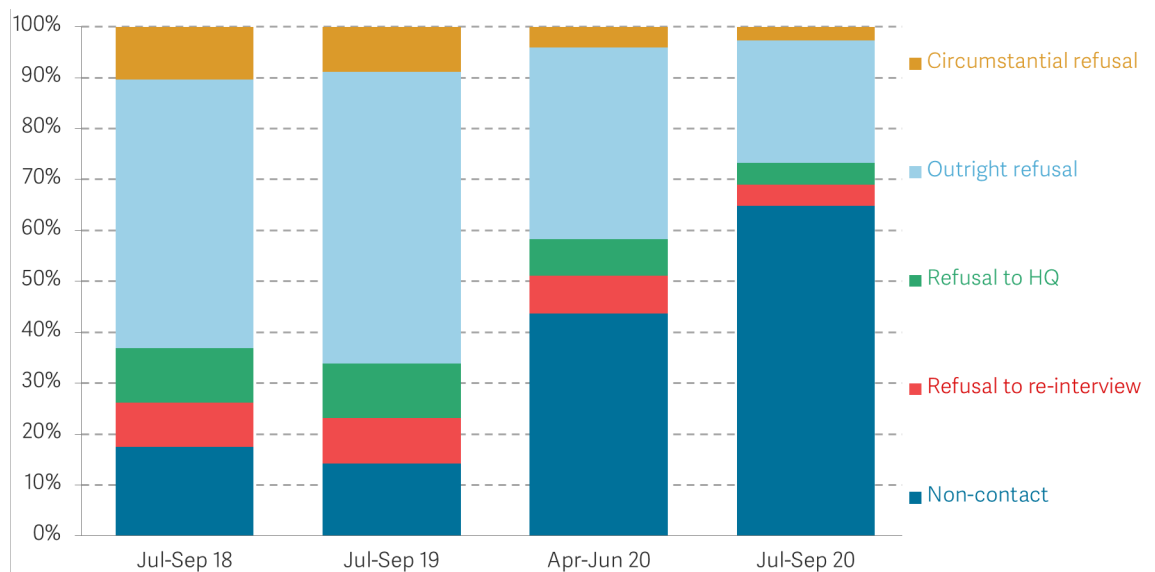
Wave-specific response rates to the LFS, excluding imputed households: Great Britain, July to September 2010 to July to September 2020



Source: RF analysis of ONS, Labour Force Survey performance and quality monitoring report.

Figure 3 **Falling response rates are mainly due to a failure to contact the respondent at all**

Composition of non-response to the Labour Force Survey, including imputed households: Great Britain, July-September of various years



Source: RF analysis of ONS, Labour Force Survey performance and quality monitoring report.

Because of the high rates of non-response, and because patterns of non-response vary across the population, responses to the LFS are weighted so that responses better reflect population shares. In other words, if men became particularly unlikely to respond to the LFS, then the ONS would increase the weights given to responses from men so that the weighted share of responses from men matched the population-level share of men in the UK (this is a large oversimplification of the process, which in reality accounts for age, sex and region and, since the summer 2020, for housing tenure, as we discuss below).

Migrants seem to have been less likely to respond to the LFS if they were first contacted after the pandemic began

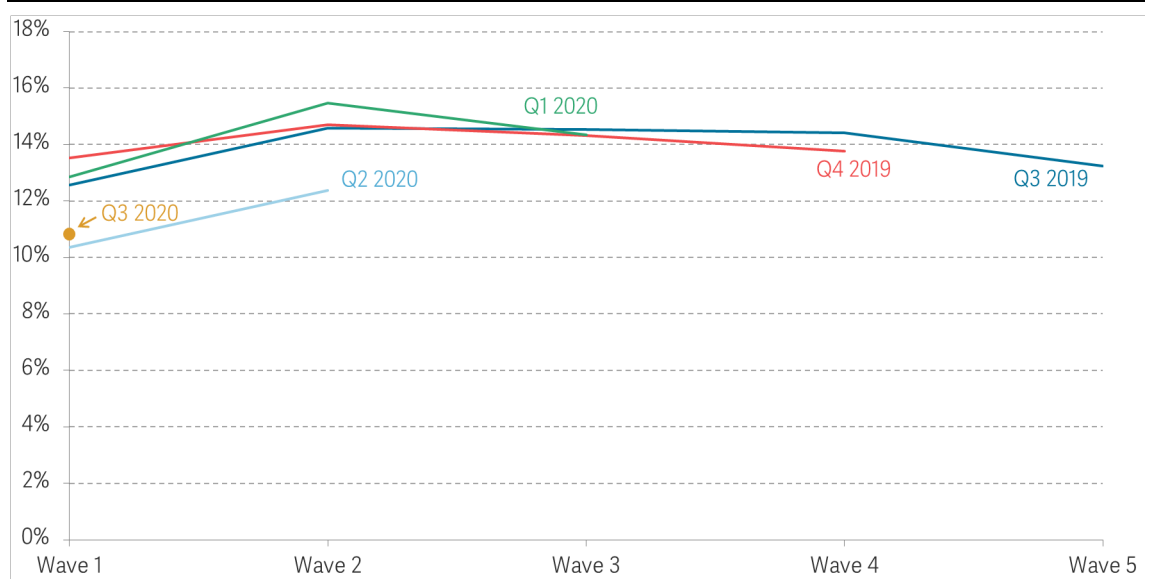
It is clear that non-response is an important and growing feature of the LFS, and one that affects waves recruited since March 2020 the most. And, as we discussed above, this is important because the fall in the overseas-born population reported by the LFS could be caused simply by a decline in the response rate of the overseas-born relative to that of the UK-born.

Unfortunately, we cannot examine this issue directly. The only way we could measure the response rate of the overseas-born to the LFS would be if we knew in advance whether a household contacted by the ONS contained people born overseas; typically, we (and the ONS) do not.

But we can get some indirect evidence on this by looking directly at the estimated migrant share in the LFS, and how that has evolved over time through the pandemic, but also according to whether respondents are in their first or subsequent wave.

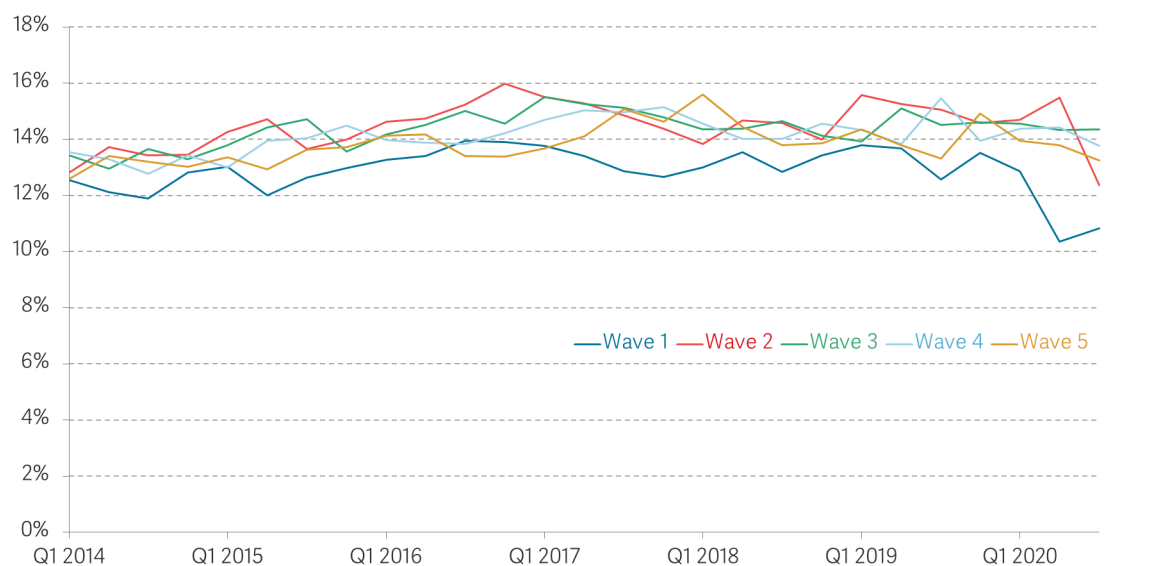
We do this in Figures 4 and 5. This shows that, although the estimated migrant share in the LFS is always lower for households who have been newly-contacted by the LFS than it is for those in their second or subsequent interview (i.e., it is lower for wave 1 than for other waves), the gap between wave 1 and the other waves has become considerably larger since the Covid-19 pandemic began. ⁴

Figure 4 Waves recruited before the pandemic have higher migrant shares
Fraction of respondents born outside the UK in different LFS waves, by wave recruitment date: 2019-2020



Notes: the labels denote the date of the first wave.
Source: RF analysis of ONS, Labour Force Survey.

Figure 5 Waves recruited before the pandemic have higher migrant shares
Fraction of respondents born outside the UK in different LFS waves, by wave and time



Source: RF analysis of ONS, Labour Force Survey.

It is hard to think that this could be caused by a change in the share of migrants in the population: if there had been an exodus of overseas-born since the pandemic began, then this should have affected those migrants who lived in properties newly-selected by the ONS to be in the LFS (i.e. the wave 1 households) just as much as it affects those in properties selected six to nine months earlier by the ONS to be in the LFS (i.e. the wave 2 to 5 households).

But the patterns in Figures 4 and 5 could be consistent with a fall in the response rates among those overseas-born who are first contacted by the ONS to join the LFS after the pandemic began. And this could have been caused by changes to the way the LFS operated during the pandemic: in March 2020, [the ONS moved from face-to-face to telephone-based interviews](#) for all interviews, including the initial one (subsequent interviews were already done by telephone). One consequence of this had already been observed: in mid-2020, the ONS noticed a large fall in the fraction of respondents who rent their houses, having seen relatively little change over the past two years, and this led the ONS [to change the way that it reweights the survey data to give more weight to renters](#), using past estimates of the share of households who rent. But if the move to initial telephone-based interviews caused a fall in the response rate of the overseas-born over-and-above any impact for renter households, then this will also lead to the sort of pattern shown in Figure 4.

Other interpretations of these data are nonetheless possible. For example, if foreign-born respondents in a given wave are much more likely to leave the country than UK-born respondents, then early waves will essentially be providing an out-of-date, biased snapshot of the fraction of the initial respondents who are still in the country.⁵

Making an allowance for a decline in response rates lowers the estimate of the fall in the overseas-born population to half a million

The original estimates from the LFS were that the number of overseas-born people in the UK fell by approximately 1 million between the first and third quarters of 2020. What was less plausible was that the LFS, at face value, also suggested that the number of UK-born UK residents had risen by 1.3 million over the same period. As we said earlier, anything that lowers the estimate from the LFS of the number of overseas-born people in the UK will in turn automatically increase the number of UK-born reported in the LFS, because the estimate of the total UK population remains unchanged.

[A recent report took a different approach](#), allowing the total UK population to change but assuming that the UK-born population has not changed, and this led to an estimate that 1.3 million migrants have left the country during the pandemic.

We have taken an alternative approach in which we assume, as an illustrative estimate, that the UK-born population has remained constant over the first three quarters of 2020 but that the waves recruited before the pandemic began are a more reliable guide to migrant share of the population than the waves recruited after.⁶ This set of assumptions implies that the overseas-born population has fallen by around half a million (and this is line with [analysis from](#)

[the Migration Observatory](#)). Such a fall would still be large: it is roughly equivalent to three-quarters of the 613,000 estimated gross inflow of overseas-born residents in 2019, or a tripling of the estimated 229,000 estimated gross outflow in that year.

The implications of such a large change in the size and composition of the workforce are immense and will depend in part on whether these migrants return as the economic and health situations normalise. The estimated number of migrants in the UK is under active review by the ONS and will be heavily informed by the 2021 Census.

1 The numbers are approximate, given that the LFS excludes people living in institutional settings.

2 See Chart 2.24 in the February 2021 Bank of England Monetary Policy Report, for example.

3 Although the LFS, as a household survey, does not include communal establishments such as university halls.

4 Econometric analysis confirms that this gap between waves is unusual.

5 Consider a hypothetical wave of the LFS with no non-response and in which 20 per cent of people say they are migrants. Suppose 10 per cent of the wave moves house before the next survey. If everyone who moves stays in the country then the respondent and true fraction are both still 20 per cent. But suppose that all of the migrants leave the country, and none of the UK-born households do. Then the respondent fraction is still 20 per cent, but the true fraction would be $(0.9 \times 20\% + 0.1 \times 0\%) / (1 - 0.1 \times 20\%) = 18.4\%$. This lower fraction would be picked up in later waves even if there is no differential non-response. This possibly theoretical problem could be bigger in the pandemic, for two reasons. Firstly, the attrition due to moving house could be bigger. Secondly, the propensity for migrants to move abroad conditional on moving house could also be bigger. The example above assumed very starkly that all migrants moving house move abroad, while no UK-born households do, and of course the truth will be more nuanced than this, but it could change over time.

6 Migration could also have a large impact on this figure. In 2019, an estimated 139,000 gross outflow of UK-born residents was partially offset by a gross inflow of 68,000. The World Bank estimates that, in 2017, there were roughly 4.8 million UK-born people living overseas, many of whom could have postponed or accelerated plans to return to the UK.