

Understanding the impact of the COVID-19 pandemic on UK population and migration

UNECE Expert Group on Population and Housing Censuses

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Background

- In 2023, the National Statistician will deliver recommendations on the future of the population, migration, and social statistics system, including on the future of the census.
- To deliver these recommendations, ONS is conducting research to put administrative data at the core of our population, migration and social statistics. This includes the development of admin-based population, migration and household estimates.
- To progress this research, we need to understand the impact of the coronavirus (COVID-19) pandemic on the population and migration, as well as administrative data sources.

Impact of the COVID-19 pandemic

The importance of understanding the impact of the pandemic on population, migration and data sources has highlighted the need for:

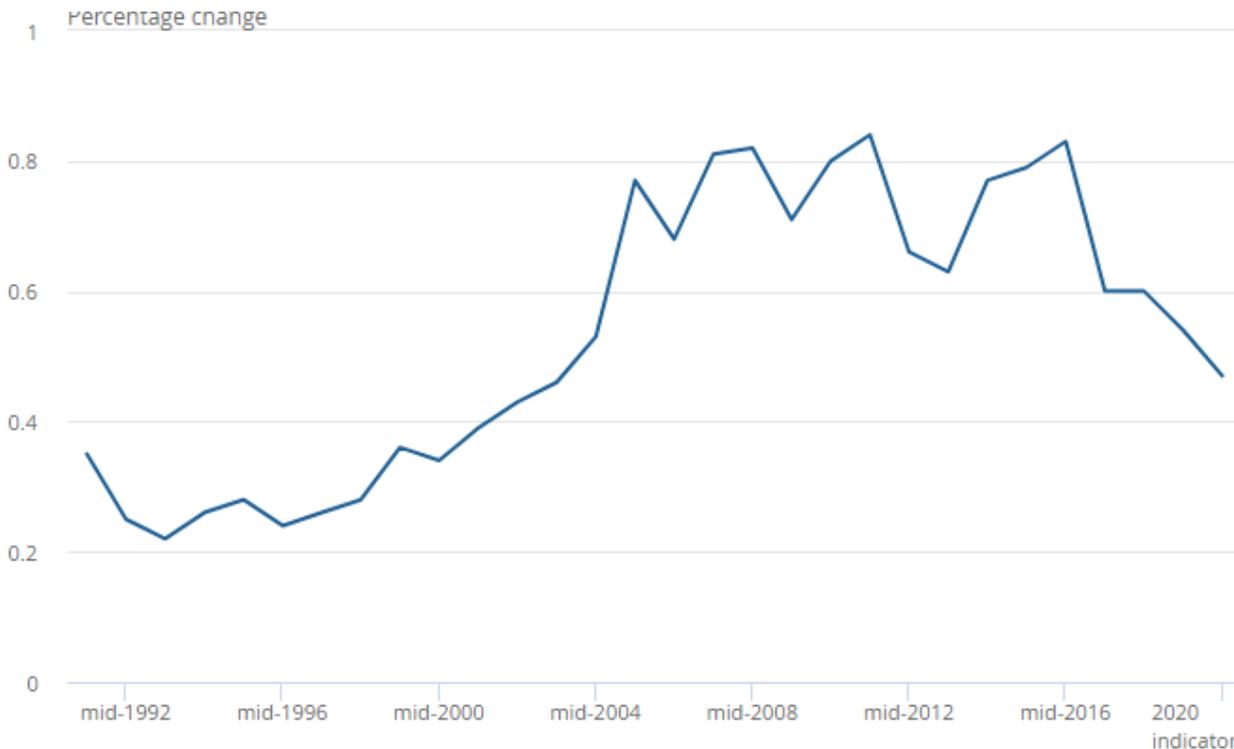
- Indicators of the population ahead of official estimates
- Contemporary evidence on migration following the suspension of the International Passenger Survey (IPS) in March 2020.
- An understanding of pandemic's impact on labour market methods and sources.
- Support to the Census 2021, particularly in estimating where mobile population groups (e.g. students) are likely to be living.

This presentation summarises some of the ways ONS is responding to these needs.

Early indicators of UK population for mid-2020

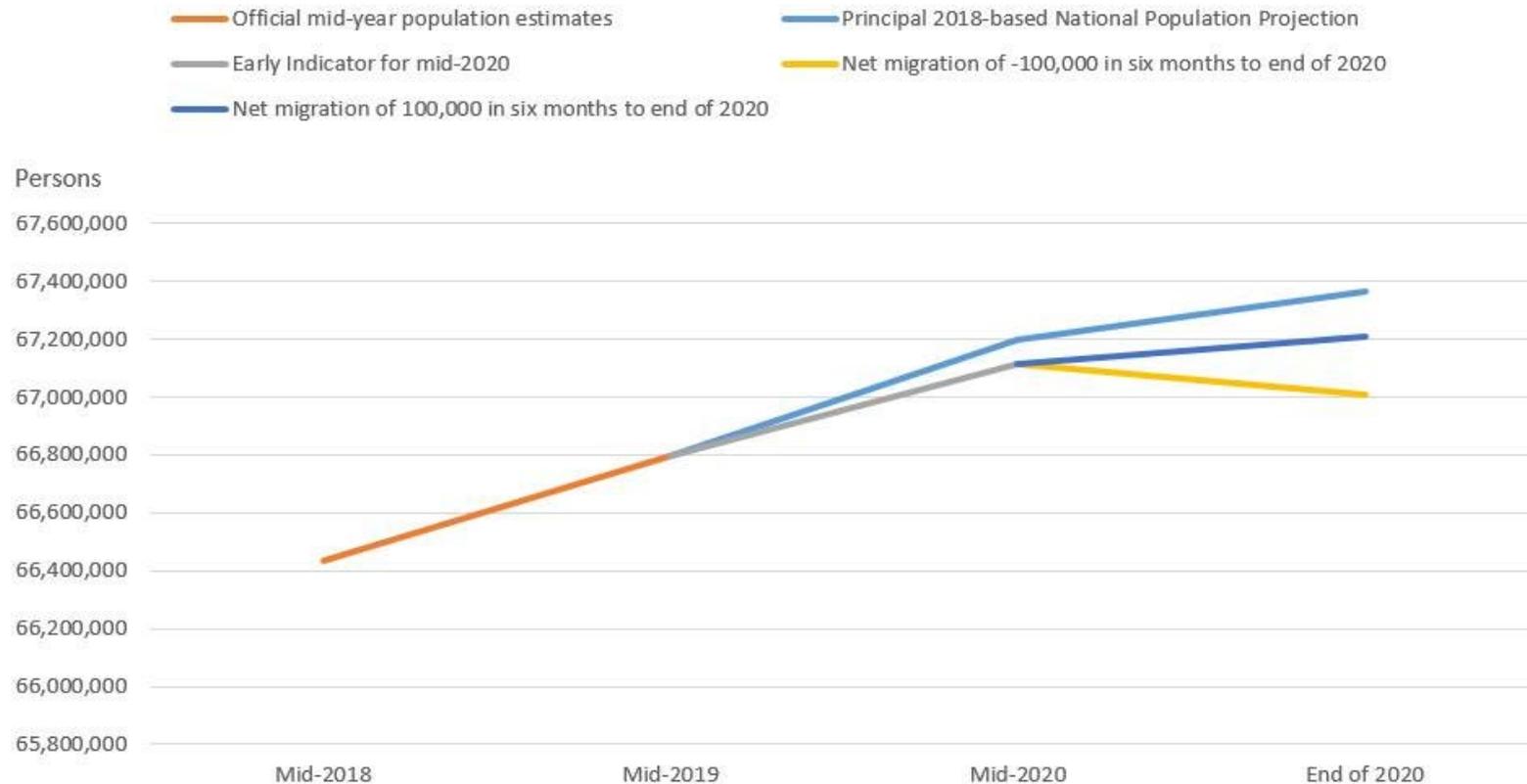
Figure 1: Preliminary data suggest the UK population continued to grow in the year to mid-2020 but at a slower rate than any year since mid-2003

Annual population percentage change, mid-1991 to mid-2020, UK



- [Early indicators of UK population](#) at mid-2020 created from latest (model-based) estimates of net international migration, and provisional births and deaths data, ahead of official mid-year estimates to be published in Summer 2021
- Net international migration for the year to mid-2020 (from IPS to Feb 2020 and modelled estimates from March to June 2020) was 282,000
- The early indicator of total population growth in the year to mid-2020 was 316,000 (0.5%)
- This marks lower population growth than in recent years

Scenario-based approach for assessing end-2020 population



- The early indicator of the total UK population for mid-2020 67.1 million
- This is 0.12% lower than was projected in the 2018-based national population projections
- If the age and sex distribution assumed in the 2018-based projections continued to end of 2020, the total population would be:

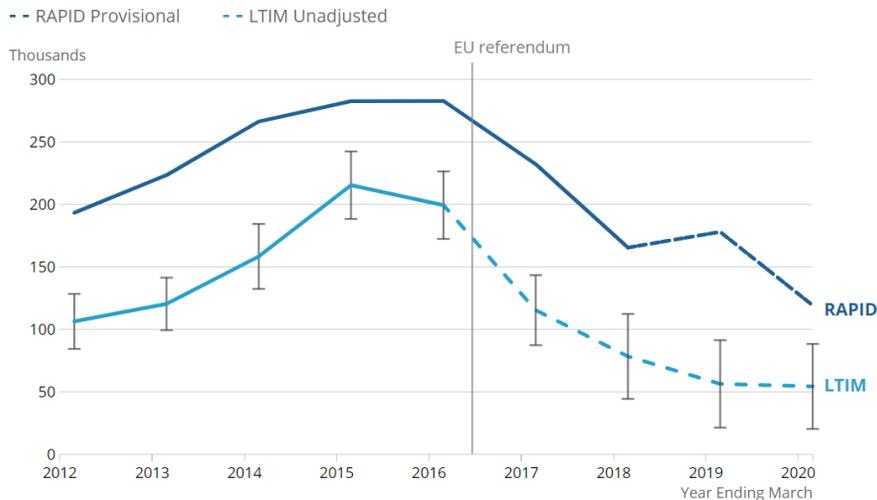
67.0m	-100,000 net migration scenario
67.2m	100,000 net migration scenario

Admin-based Migration Estimates (ABME)

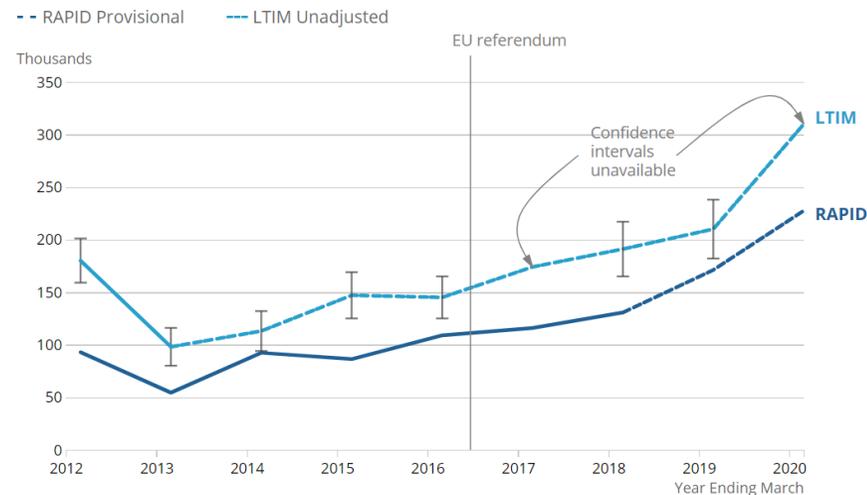
[Research report published 16 April 2021](#) presents early findings from work to develop ABME from two main admin data sources - Department for Work and Pensions (DWP) Registration and Population Interaction Database (RAPID) and border data from Home Office

Findings include comparisons against current series of long-term international migration (LTIM) statistics based on International Passenger Survey (IPS) data.

RAPID estimates higher EU net migration figures than LTIM



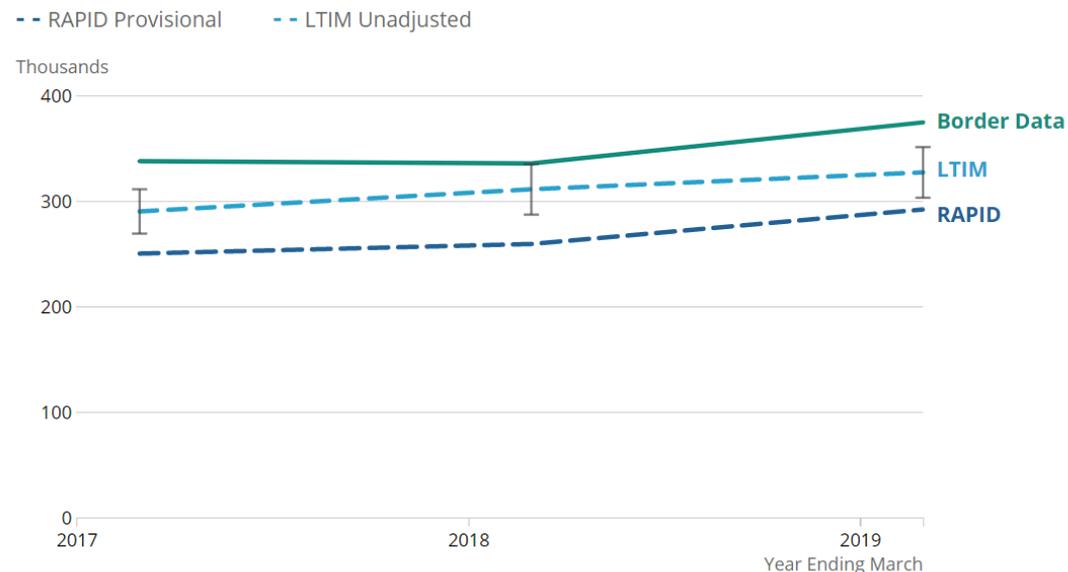
RAPID estimates lower non-EU net migration than LTIM



- RAPID trends broadly mirror those estimated by the IPS, but show different pattern for EU and non-EU migrants
- Differences for EU may be due to IPS difficulty in measuring migration patterns for groups with uncertain intentions
- Non-EU differences may be due to measurement of students in RAPID

Admin-based Migration Estimates (ABME)

Indicative immigration estimates for non-EEA nationals derived from Home Office border data compared with RAPID and IPS-based LTIM estimates



- Home Office border data only covers non-EEA nationals.
- At this stage of the research, only able to present findings for immigration over a short time-series.
- Estimates are higher than given by LTIM and RAPID, but do follow a broadly similar trend
- Differences believed to be result of how migrants are defined and identified in border data and measurement of students compared to RAPID

This research is ongoing with further updates expected to be published in Autumn 2021. A first set of ABME statistics is planned for release in early 2022, covering the period up to March 2021.

Understanding the impact of COVID-19 on administrative data sources

To understand the impact of the pandemic on admin data, we have identified several steps we need to take:

- Build a comprehensive pre-pandemic picture of our data sources
- Identify any operational changes to our data sources
- Explore new data sources available as a result of the pandemic, such as NHS vaccination data
- Build a UK wide & regional restrictions timeline
- Where available, compare data collected throughout pandemic with pre-pandemic data
- Consider the impact any changes in the admin data could have on our admin data products e.g. 2020 Admin-Based Population Estimate

Early findings

- We have started analysing the pre-pandemic data in preparation for when we get access to data that covers the pandemic time period
- Health datasets supplied by the NHS are some of the only datasets that currently cover the pandemic
- We are looking at activity and absence indicators to compare pre-pandemic and during the pandemic
- Early analysis shows the pandemic has had an affect with interactions falling below pre-pandemic years during 2020
- We are exploring patterns of university student interactions with health data sources to provide intelligence to support Census 2021

Challenges and discussion points

This work has highlighted the following main challenges in understanding the impact of COVID-19 on population and migration:

- Timeliness of data source availability
- Low level of interaction with health data sources for young adults
- Tension between pursuing tactical solutions to address immediate issues and the longer-term transformation of population and migration statistics

Have other countries faced similar challenges? How have you responded?