What is census microdata?

Making the most of Census microdata: An introductory workshop

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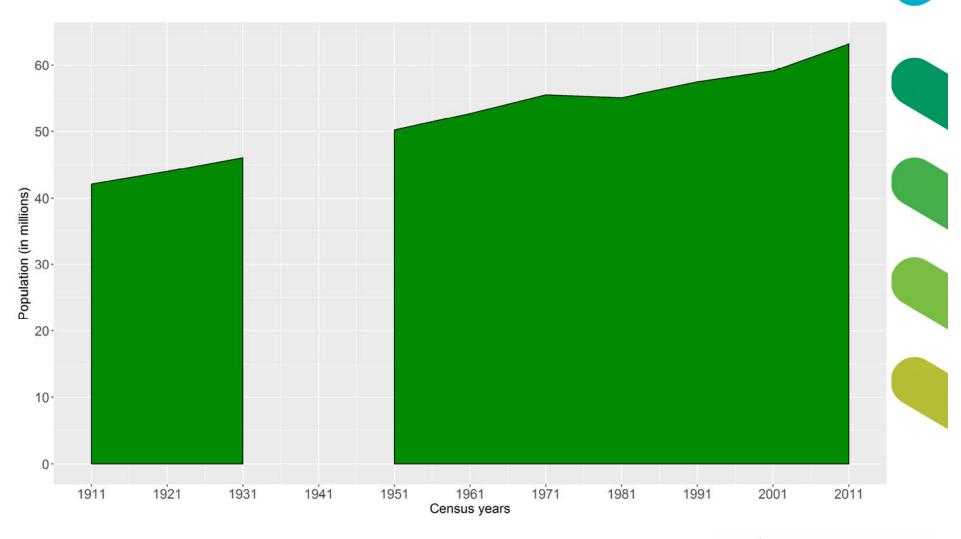


Census Data

- Census Act 1800. Enabled the first census on 1801.
- Until 1831 the census is a head count of everyone in the country on a given day.
- Nowadays it is defined as the "count of all people and households", incorporating gradually more information of the population.

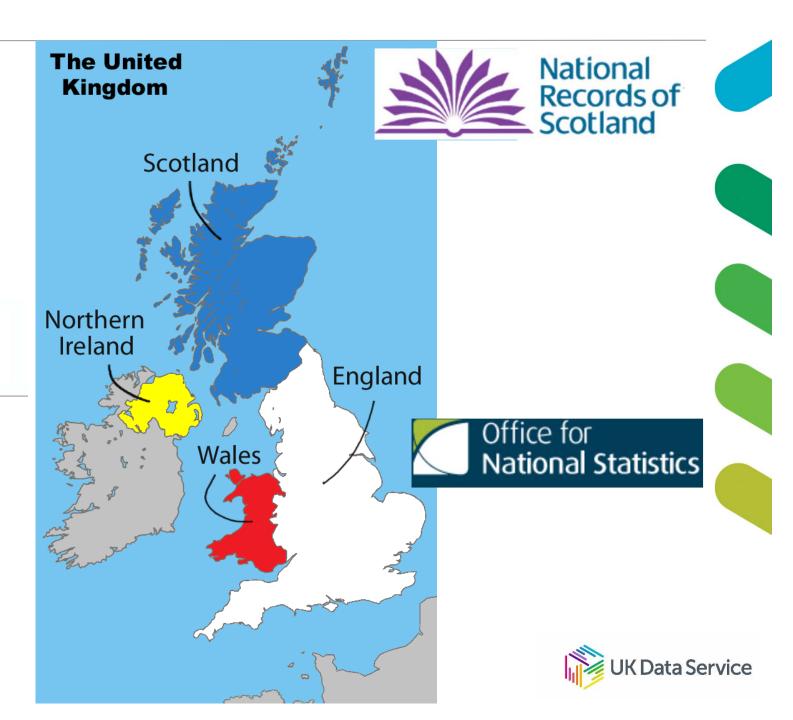


UK Population change



Source: Census - Office for National Statistics, Northern Ireland Statistics and Research Agency, National Records of Scotland







A brief description of census

- What is the census?
 - Main function to count the population at one or more locations
 - Obtain some characteristics about the population
 - Outputs for small geographies
- What is it for?
 - Informs public spending
 - Used as a basis for other statistical systems
 - Informs the public policy making process
 - Used by Central and Local Governments
 - Used by NGOs
 - Used for research purposes (to inform public policy too)



What questions were asked?

Demographics

Age

Sex

Country of Birth

Short-term residence

Ethnicity

Religion

Passports

Language

National identity

Household relationships

Marital status

Second residence

Migration

Household

Tenure

Accommodation type

Cars

Central heating

No. of bedrooms

Socio-economic

Health

Unpaid care

Qualifications

Economic activity

Occupation

Industry

Travel to work

FT / PT



Census Outputs

1. Supported by the UK Data Service

- Microdata
 - Anonymised samples of census records
 - Detail limited to protect confidentiality
- Aggregated data
 - Counts of combinations of characteristics for areas
- Flow data
 - Counts of migrants from origin to destination
 - Or, between first and second address
 - Or home and place of work
- Boundary data
 - Geographical Information System (GIS) formats.
 - Shape files to enable these to be mapped

2. Supported by CALLS

Longitudinal microdata for each country

UK Data Service Census Support

Aggregate data

Flow data

Microdata

Boundary data

Related data

Explore online

About Census Support

Get census data

Census > Get data

Get census data

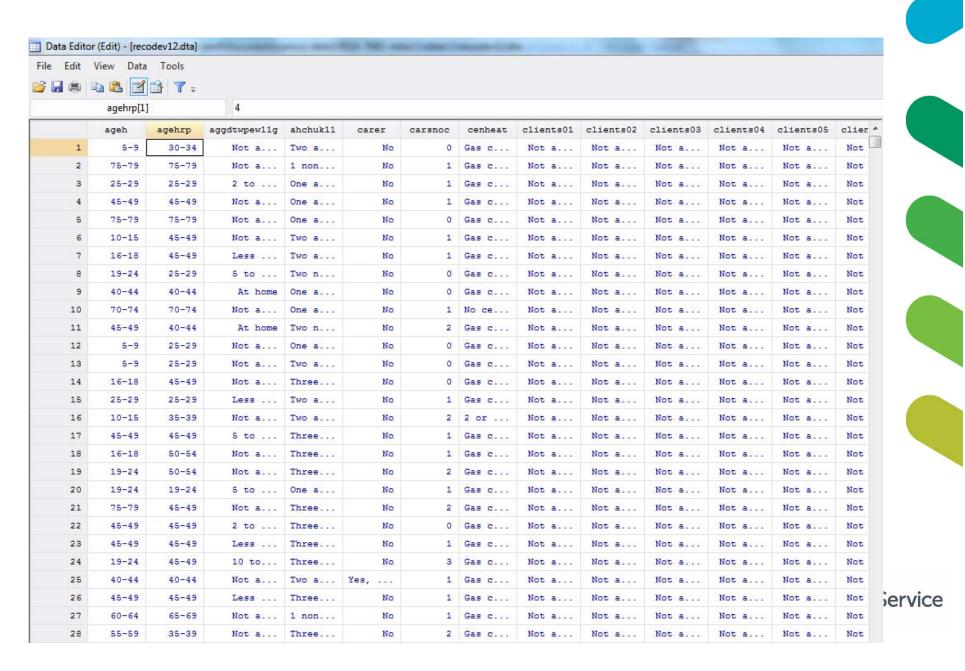


We hold a range of different types of census data, such as:

- addredate data
- flow data
- microdata
- boundary data



Inside census microdata



Types of 2011 census microdata

- Open files
 - Teaching files available from census offices and UKDS (1% regional taster file)
- Safeguarded
 - regional files (5%)
 - grouped local authorities files (5%)
- Controlled access
 - Individual files (10%) England and Wales
 - Household files (10%) England and Wales

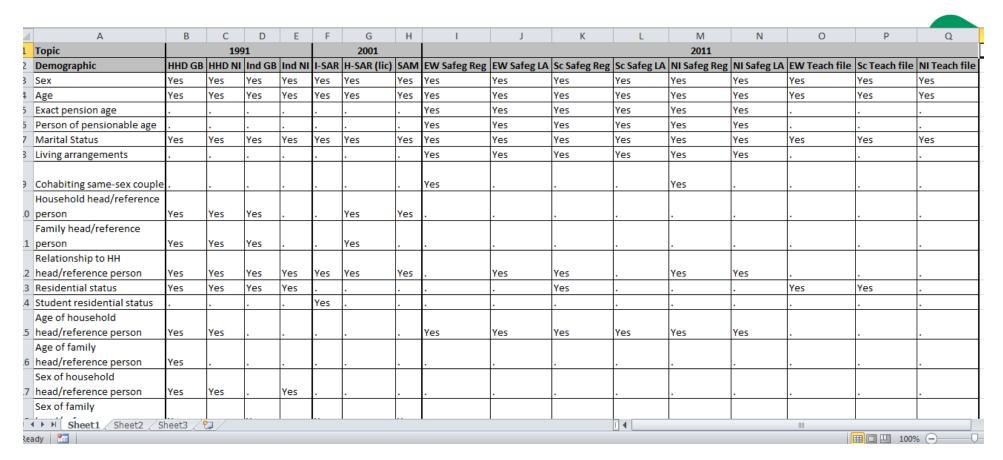


What is included in the microdata files (1991-2011)

- Demographic characteristics
- Migration
- Education
- Employment
- Health indicators
- Household condition and amenities
- Language
- Social class



Census microdata topic guide (1991-2011)



https://census.ukdataservice.ac.uk/use-data/guides/microdata



What can be done? (1)

- Can create your own tables.
- Combination of characteristics (variables) not available on ready-made released tables.
- Can define subpopulation for underrepresented groups
 - Due to the large sample size
- Can create regional and local authorities aggregated variables
 - Enhancing area level estimates
 - Relatively large samples for small areas
- Can complement survey data
 - With area level characteristics added



What can be done? (2)

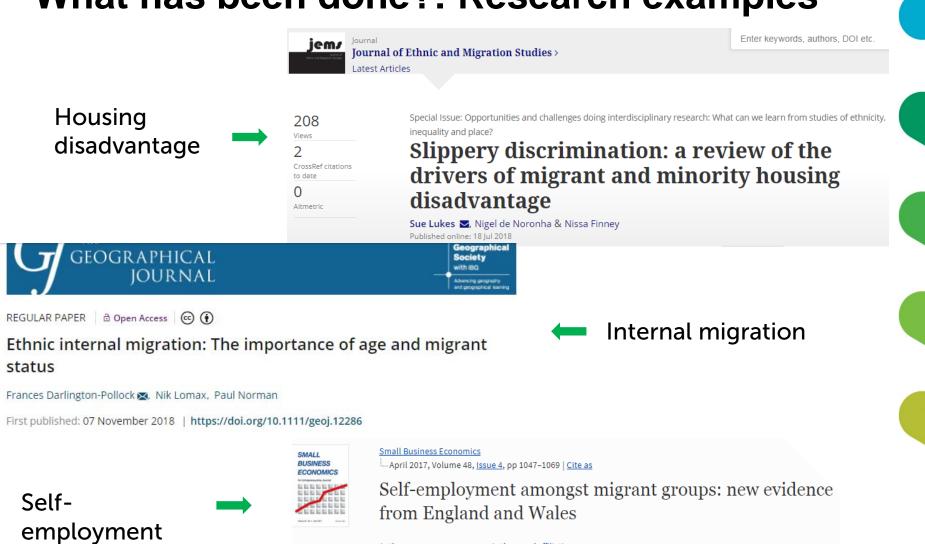
- Allows to undertake several type of statistical analysis
- Allows to visualise and analyse change and trends over the years
 - Putting area level characteristics into maps

Trade-off

- Sample data, which means that results are estimates
- Geographical detail is limited in safeguarded data



What has been done?: Research examples



Authors and affiliations

Ken Clark, Stephen Drinkwater , Catherine Robinson



Accessing census data

- Full information on the census microdata web page on UK Data Service
- Open data available in spreadsheet format (csv files) from census offices. Also available as SPSS/Stata/Nesstar format from UK Data Service without registration
- Safeguarded data: From 1961 to 2011, available from the UK Data Service, requires online registration
- Controlled data via census offices only



How to access

UK Data Service home Site Search FAQ Help

UK Data Service Census Support



Aggregate data

Flow data

 Microdata Boundary data

Related data

Explore online

About Census Support

Census > Get data > Microdata

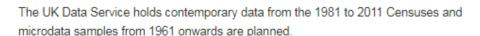
Get census data

Use census data

Census news and events

Census microdata

We provide access to cross-sectional census microdata, these are anonymised individual level records sampled from a single census. They are large individual level files which resemble the sort of data that might be collected directly from a questionnaire. Because individual records contain a wide range of individual and household

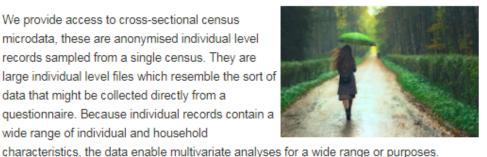


Guide to census microdata

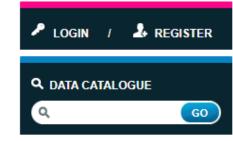
Microdata files are available at four levels, two of which can currently be accessed through the UK Data Service in the same manner as survey data.

ACCESS CENSUS MICRODATA VIA THE UK DATA SERVICE

End User Licence data are available to registered users who have agreed to the licence conditions. Overseas applications must be approved by the data depositors.



SHARE <



RELATED LINKS

Census and Administrative data Longitudinal Studies Hub Centre for Longitudinal Study Information & User Support Scottish Longitudinal Study Development & Support Unit Northern Ireland Longitudinal Study Research Support Unit The Integrated Census Microdata (I-CeM)



Online access through Nesstar

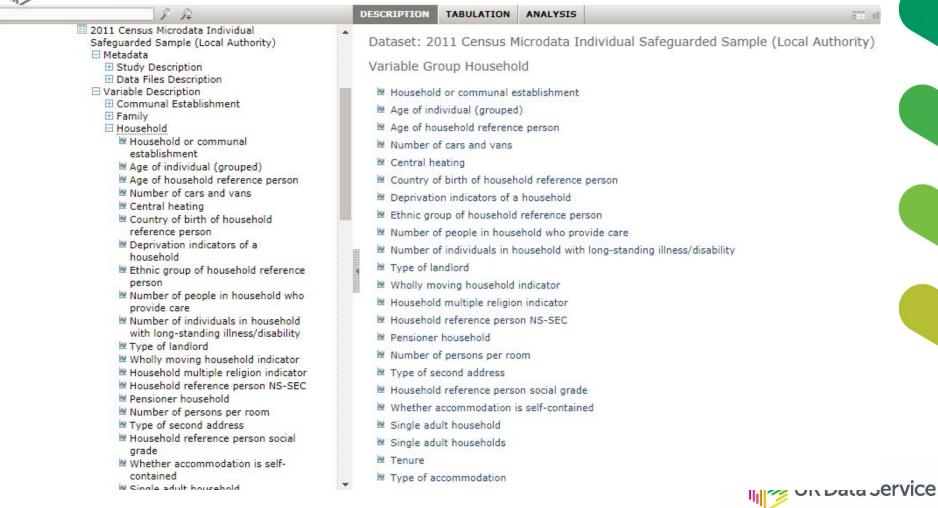
- Access to teaching files
 - no registration required
- Access to safeguarded files
 - Can explore variables and run frequency tables
 - requires registration for more advances analysis
- Registered users access with their login details
- If student or member of staff at a UK institution of higher or further education, login with their university username and password

Nesstar

UK Data Service



Delivering quality social and economic data resources



Temporary access for today's session



Password:



Questions?

