**Readme for:**

**“The Gift of Moving: Intergenerational Consequences of a Mobility Shock”**

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## Data Availability Statement

All main results in this paper use administrative microdata from Iceland, maintained by Statistics Iceland on a secure server.

Statistics Iceland stores a diverse collection of data that meets quality requirements which can be used for scientific research purposes. The Act on Statistics Iceland states that the institute shall promote the use of its data for statistical scientific research.

All data collected by Statistics Iceland for the production of official statistics are defined as confidential data. Statistics Iceland is authorized to provide access to confidential data for scientific research in accordance with Article 13 of Act no. 163/2007. Confidentiality is a key factor in respecting privacy and therefore access is only granted to Icelandic researchers cooperating with a research institute/company which is a certified sponsor according to Statistics Iceland's criteria. Furthermore, data are not delivered but instead accessed remotely after the risk of disclosure in the data has been assessed and appropriate measures taken.

Detailed description of the procedure of applying for access to confidential data at Statistics Iceland is described here: <https://statice.is/services/data-for-scientific-research/>

## Confidential Data

In this paper we use three sets of individual level data. The first are data collected and digitized by the authors for the purpose of this paper. These are individual-level data on inhabitants of the Westman Islands before and after the eruption, data residential real estate and their characteristics and owners, and data on houses destroyed in the eruption and their owners. The second are proprietary data on intergenerational links from deCODE genetics. The third are administrative data labor market and education outcomes from Statistics Iceland. All of these datasets have been linked using individual ID numbers.

The datasets are stored at Statistics Iceland and available for ordering for replication purposes. The following lists the individual datasets:

|  |  |  |
| --- | --- | --- |
| **Nr.** | **Register/Data source** | **Description** |
| 1. | Icelandic National Registry | Inhabitants of Westman Islands on December 1, 1972. Data digitized by authors. |
| 2. | Icelandic National Registry | Inhabitants of Westman Islands on December 1, 1975. Data digitized by authors. |
| 3. | Property Registry of Iceland | Residential real estate in the Westman Island in 1970. Data digitized by authors. |
| 4. | Icelandic Disaster Relief Fund | Houses destroyed by the eruption, information about the houses and about owners. Data digitized by authors. |
| 5. | *Íslendingabók* (deCODE genetics) | Intergenerational links. See: <https://www.islendingabok.is/english> |
| 6. | *Icelandic Longitudinal Income Database - ICELID* (Statistics Iceland) | Administrative data on earnings and demographic characteristics. See: Sigurðsson and Tómasson (2008) |
| 7. | *Education Registry* (Statistics Iceland) | Educational attainment according to the ISCED-97 classification. See: Statistics Iceland (2008) |

Information from these datasets have been matched and are available to researchers in three datasets

* ”Gagnasett\_1”: This includes outcome variables, both *ICELID and Education Registry*
* ”Gagnasett\_2”: This includes information about the inhabitants of Westman Islands at the time of the eruption and their family tree. It also includes information from the Disaster Relief Fund, such as about houses that were destroyed
* ”Gagnasett\_3”: This includes information about the inhabitants of Westman Islands in 1974 and 1975.

## Open Access Data

All data that are not at the individual level, either digitized by the authors or accessible from others, are provided.

**Data References:**

Sigurðsson, E. and H. Tómasson (2008): “langsniðslíkön og langsniðsgögn við rannsóknir á tekju/launaþróun,” in *Rannsóknir í félagsvísindum; Viðskipta- og hagfræðideild*, ed. by I. Hanni- balsson, vol. IX, 101–113.

Statistics Iceland (2008): “ÍSNÁM2008 - Íslensk náms- og menntunarflokkun,” Reykjavik.

## Computational Requirements

The raw data are loaded and prepared in .csv file. The analysis has been conducted in Stata/MP 15.1 (Windows). The replication package was last tested in June 2021. Running the entire Stata code sequentially took about 1 hour (6-core Intel server with 64 GB RAM).

The following additional Stata packages are required for running our code:

* splagvar: available from SSC, see more here: <https://ideas.repec.org/c/boc/bocode/s457112.html>
* spatwmat: from the sppack available from SSC
* spatgsa: from the sppack available from SSC
* ivreg2: available from SSC
* ivqte: available from SSC

### File Directory

Code, data, and output results are saved in the following folders

* Code, data, and output results are organized in three sets:
  + “Inhabitants” includes code and data to conduct all analysis of the inhabitants of Westman Islands in 1973. This uses confidential data.
  + “Descentants” includes code and data to conduct all analysis of the descendants the inhabitants of Westman Islands in 1973. This uses confidential data.
  + “OpenAccess” includes code and data to conduct all analysis using open-access data.
* Within each set the file structure is the same with three folders: “Data”, “Programs”, and “Output”.
* Data are located and saved in “Data”. This includes the open-access data which are provided. To run analysis using confidential data put those files in this folder.
  + The program dataprep\_inhabitants.do prepares the data to be used for the analysis of inhabitants.
  + The program dataprep\_descendants.do prepares the data to be used for the analysis of descendants.
* In “Programs” there is a master dofile that runs all code within that set. For example master\_inhabitants.do runs all code for inhabitants.
* Output files, such as result tables and figures, are saved in “Output”.
* The program big\_master.do runs all the code from beginning to end

## List of figures and programs that generate them

|  |  |
| --- | --- |
| **Figure #:** | **Generated in program (or dataset):** |
| Figure 1 | Map created by Ragnar Heidar Thrastarson based on data from the Icelandic Disaster Relief Fund (Viðlagasjóður Íslands) and the National Land Survey of Iceland (Landmælingar Íslands). |
| Figure 2 | population\_by\_year.do |
| Figure 3 | inhabitants\_profiles.do |
| Figure 4 | inhabitants\_quantiles.do |
| Figure 5 | inhabitants\_profiles.do |
| Figure 6 | inhabitants\_earnings\_treatment\_age.do |
| Figure 7 | earnings\_by\_location.do |
| Figure D.1 | spatial\_correlation.do |
| Figure F.2 | prices.do |
| Figure F.3 | prices.do |
| Figure A.1 | fish\_catch.do |
| Figure A.2 | inhabitants\_quantiles.do |
| Figure A.3 (a) and (b) | inhabitants\_earnings\_age.do |
| Figure A.4 | inhabitants\_earnings.do |
| Figure A.5 | inhabitants\_quantiles.do |
| Figure A.6 | standardized\_test\_scores.do |

## List of tables and programs that generate them

|  |  |
| --- | --- |
| **Table nr.:** | **Generated in program:** |
| Table 1 | Dataprep\_descendants.do |
| Table 2 | inhabitants\_firststage.do |
| Table 3 | inhabitants\_summary\_balance.do |
| Table 4 | inhabitants\_firststage.do  descendants\_first\_stage.do |
| Table 5 | inhabitants\_earnings.do |
| Table 6 | inhabitants\_earnings.do |
| Table 7 | inhabitants\_earnings.do |
| Table 8 | inhabitants\_earnings.do |
| Table 9 | inhabitants\_education.do  descendants\_education.do |
| Table 10 | inhabitants\_education.do |
| Table 11 | inhabitants\_education.do |
| Table 12 | Table\_12.xlsx |
| Table 13 | inhabitants\_complier\_characteristics.do |
| Table 14 | inhabitants\_other\_outcomes.do |
| Table A.1 | inhabitants\_firststage.do  descendants\_first\_stage.do |
| Table A.2 | inhabitants\_earnings\_logs\_collapse.do |
| Table A.3 | descendants\_earnings.do |
| Table A.4 | inhabitants\_other\_outcomes.do |
| Table A.5 | inhabitants\_earnings.do |
| Table A.6 | sector\_shares.do |