Readme

created by Alexandra de Gendre, Jan Feld and Nicolás Salamanca

This version: February 2, 2024

This OSF repository contains supplementary information for the paper "Re-examining the relationship between patience, risk-taking, and human capital investment across countries" by Alexandra de Gendre, Jan Feld, and Nicolás Salamanca.

It contains the following four Stata do-files:
- 1_timss_2
- 2_pirls_2
- 3_timsspirls_2
- DFS_Results_2

The first three files prepare the TIMSS and PIRLS data and produce the dataset for estimating our results. The fourth file replicates the main findings from Hanushek et al. (2022) (Tables 1 and 2) and produces the additional results of the paper using TIMSS and PIRLS (Table 3, Table A1 and Tables C1-C2).

It also contains the Stata log-file ""DFS_Results_2.log"" showing the results from running the "DFS_Results_2.do" do-file.

Before running the do-file DFS_Results_2, you need to download data files.

1. To produce Tables 1 and 2:
You will need to download the following Stata data files from the replication package of Hanushek et al. (2022) available at https://doi.org/10.3886/E153101V2, and adjust the path of the do-file (see comments in the do-file for more details):
- pisa_full_gps_final.dta
- pisa_full_gps_final_imcoo.dta
- country_plus_covariates.dta

2. To produce Table 3, Table A1 and Tables C1-C2:
You need to:

- Create the following subdirectories within your project directory:
  o Data
    ▪ raw
      • TIMSS
        o TIMSS 2003 etc. for each wave.
          ▪ spss
          ▪ stata
      • PIRLS
        o PIRLS 2001 etc. for each wave
          ▪ Spss
          ▪ Stata
  o Results

- Download the raw TIMSS and PIRLS data files:

- o The raw files from TIMSS international database in SPSS format, store them wave by wave in PROJECT/data/raw/TIMSS/TIMSS wave-year/spss
- o The raw files from PIRLS international database in SPSS format, store them wave by wave in PROJECT/data/raw/PIRLS/PIRLS wave-year/spss

TIMSS and PIRLS raw data files are available through the TIMSS and PIRLS international database (https://timssandpirls.bc.edu/databases-landing.html). Unfortunately, we are not allowed to provide the raw or working datasets directly.

Note that the raw TIMSS data for waves 1995 and 1999 are provided in .DAT format only, which require additional manipulation before importing. If you want to include data from these waves, you need to import the .DAT files into Stata using a data dictionary which you need to create yourself. This process is tedious.

For this process you need to
- harmonize all file names across all TIMSS and PIRLS waves to be in ALL CAPS
- create seven data dictionaries for TIMSS 1995
  - o For grade 4: one for teacher files, one for student files, one for the teacher-student linking file
  - o For Grade 8: one for math teacher files, one for science teacher files, one for student files, one for the teacher-student linking file
- create four data dictionaries for TIMSS 1999
  - o For Grade 8: one for math teacher files, one for science teacher files, one for student files, one for the teacher-student linking file
- import the .dat files into Stata (For more information see: https://www.princeton.edu/~otorres/Stata/ascii.htm and https://www.stata.com/support/faqs/data-management/reading-fixed-format-data/)
- store the resulting Stata files in the Folder Structure described above

After completing these steps, the provided do-files should reproduce all results shown in the paper.

Running the code ignoring those 2 waves should lead to qualitatively similar results.

After downloading the data, copy your paths in each of the dofiles in preamble.
- 1_timss_2 prepares the TIMSS data and appends all waves.
- 2_pirls_2 prepares the PIRLS data and appends all waves.
- 3_timsspirls_2 harmonizes TIMSS and PIRLS into a single estimation dataset.
- DFS_Results_2 runs the analyses and produces output.

*****

The folder "Old Version" contains the replication package for an earlier version of this paper called "A comment on "Patience, risk-taking, and human capital investment across countries" by Hanushek et al. (2021)"