Read me file for replication of tables and figures in "Understanding per-capita income growth in preindustrial Europe"

Before running any of the files mentioned below, you must rename the current directory in accordance with where you place the folder CollectMalthusWavesCodesJanuary2018. For example, if you put it directly under your C:\ drive, then you should set the current directory to C:\CollectMalthusWavesCodesJanuary2018.

To generate the simulated data run the Matlab file AnnualDynamics_January_2018_1. Change the variables "x"_alt to choose what extension is considered, For example, setting Start=Start_alt gives a different start year for the simulations (1560). Given the settings, the Matlab code saves the relevant dataset in csv format, using self-explanatory names.

The file AnnualDynamics_January_2018_1 also calls some files (in csv and other formats) containing Swedish data, located in the folder DataJan2018. It also uses randomly generated variables which are contained in some Matlab files saved in the folder Shocks-Jan2018.

To generate a new set of shocks, one can run the Matlab code ConsolidatedShockCodes_Save_February_2018_1, and then replace the existing shocks by hand. This avoids inadvertently overwriting the older shocks.

To simulate the model with marriage, set marriage=1, which calls the Matlab file MarriageRatesCode_January_2018_1 to load data.

Tables and figures in the paper

The numbers in Table 2 are contained in the matrix Numbers_for_Table_2, produced when running the Matlab file AnnualDynamics_January_2018_1. The first column contains age, and the second contains the expected survival rate. The sources for the raw data are in the paper and the Online Appendix.

The numbers in Table 3 are contained in the matrix Numbers_for_Table_3, produced when running the Matlab file AnnualDynamics_January_2018_1. The first column contains period of life (j), and the second and third contain the values for β_j and γ_j.

To preplicate the numbers in Table 4, and Figures 1, 3, and 5, run the Stata do file MergedDataCodeBenchmark_Save_January2018_1.

To replicate Figure 2, run the Stata do file AgeProfilesBenchmark_Save_January_2018_1.

To replicate Figure 4 run the Stata do file ExamplesSimPaths_Save_February_2018.

To replicate Figures 6 and 7, and Table 5, run the Stata do file Histograms_Save_January_2018_1. For Panel A, run with benchmark settings (all alt settings set to 0). For Panel B, choose relevant alt settings. The code MergedDataCodeBenchmark_Save_January2018_1 can be run

to reaplicate the moments in the data, saved to FB_for_moments_calc_December_2017_1.dta. For alt start date, first run MergeNormalize1560_1800_Save_January_2018_1 to save FB_for_moments_calc_Dec_2017_alt1560_1800_1.dta.

To replicate Figure 8, run the Matlab file Eigenvalues_April_2018_1.