Data Instructions

In this document we describe: (i) the steps one has to follow to obtain the micro-level dataset from the American Time Use Survey (ATUS) used in Aguiar, Hurst and Karabarbounis (2012); (ii) the generation of the state-level datasets; (iii) instructions how to replicate the paper's results.

1. Main Data Files

a) "**all_atus.dta**": contains the merged 2003-2010 micro-level dataset from the American Time Use Survey (ATUS). Section 2 describes how to obtain the dataset and the time use categories.

b) "**state_datasets.xls**": contains all the time use categories aggregated at the state-period level. Depending on the specific way we have aggregated the samples and the definitions of the samples we take various versions of the state-level dataset. These versions are described in detail in Section 3.

General Note: In some cases you have to alter the directory paths used in our codes so that you can match the directory paths in your computer.

2. Getting the Micro Data and Creating the "all_atus.dta" Dataset

The process below leads to a data file which we call "all_atus.dta".

1) Go to the American Time Use Survey (ATUS) website. Click the tab "ATUS Data Files." Select a year, e.g. 2010 (http://www.bls.gov/tus/datafiles_2010.htm).

2) For each "year", where year = 2003, 2004, …, 2010, download the 5 do files and the 5 dat files. The do files are: "atusact_year.do", "atuscps_year.do", "atusresp_year.do", "atusrost_year.do", and "atuswho_year.do". The dat files are: "atusact_year.dat", "atuscps_year.dat", "atusresp_year.dat", "atusrost_year.dat", and "atuswho_year.dat".

3) For each year, save the do files in a folder called "Basic Do Files" and save the dat files in a folder called "Basic Original Data Files". If you use alternative names for these folders, then you will need to make some minor modifications to the directory paths relative to those we have used in our codes.

4) For each year, create two additional folders. The one folder is called "Data Creation" and contains the do file "format_year.do" that extracts the micro data and codes the time use categories. The other is called "Basic Transformed Data Files". This is the folder where all dta files will be saved.

5) For each year run the 5 do files contained in the "Basic Do Files" folder. To run these you have to modify the 5 do files so that the directories where the do files are located and the directories where the created dta files will be placed match the directories in your computer. This process will generate 5 corresponding dta files, which will be saved in the "Basic Transformed Data Files" folder.

6) Run the "format_year.do" file located in the "Data Creation" folder. Again, modify the do file in order to match the directories in your computer. This will give you a "year_subset.dta" file. All the time use categories defined in the Appendix of the paper are called "timeuse_paper" in our codes. For example, the leisure variable is called "leisure_paper."

7) Place all the "year_subset.dta" files in one folder (in our codes this folder is called ALL). Run the merge.do file located in the ALL directory to merge all years in one dataset.

8) The output of this process is a merged 2003-2010 file called "all_atus.dta". You can reproduce all results below starting from the "all_atus.dta" dataset.

3. Getting the State-Level Dataset

Our results can be reproduced using the "all_atus.dta" that was created from the underlying micro-level ATUS dataset (see Section 2). All the state-level datasets are placed in an excel file

called "state_datasets.xls". Depending on the specific way we have aggregated the samples and the definitions of the samples we take various versions of the state-level dataset. Each version of the dataset corresponds to a different spreadsheet in the "state_datasets.xls" file. Each spreadsheet also has a corresponding dta file. For example, the dataset "1865_base" is located in the first spreadsheet of the "state_datasets.xls" file and we have also created the corresponding STATA data file called "state_1865_base.dta". The datasets and the codes to create these datasets are given below:

1) "state_1865_base.dta": This is our base dataset. To create this dataset we use the "all_atus.dta" dataset and we run the program "generator_1865_base.do".

2) "state_1865_employed.dta": This is the dataset of the employed only. To create this dataset we have used the "all_atus.dta" dataset and we run the program "generator_1865_employed.do".

3) "state_1865_unempADJ.dta": This is the dataset in which we have re-weighted the micro-level observations in order to reproduce the official BLS unemployment rates at the state-period level. To obtain this dataset, run "generator_1865_unempADJ.do". The program uses the "all_atus.dta" dataset and the "urate2.dta" dataset.

4) "state_1865_men.dta": This is the dataset where the aggregation at the state level is constructed based only on the sample of men. To obtain the dataset, run the code "generator_1865_men.do". The program uses the "all_atus.dta" dataset.

5) "state_1865_women.dta": This is the dataset where the aggregation at the state level is constructed based only on the sample of women. To obtain the dataset, run the code "generator_1865_women.do". The program uses the "all_atus.dta" dataset.

6) "state_1865_married.dta": This is the dataset where the aggregation at the state level is constructed based only on the sample of married. To obtain the dataset, run the code "generator_1865_married.do". The program uses the "all_atus.dta" dataset.

7) "state_1865_marriedANDspouseemp.dta": This is the dataset where the aggregation at the state level is constructed based only on the sample of married with an employed

spouse. To obtain the dataset, run the file "generator_1865_marriedANDspouseemp.do". The program uses the "all_atus.dta" dataset.

8) "state_1865_singles.dta": This is the dataset where the aggregation at the state level is constructed based only on the sample of singles. To obtain the dataset, run the code "generator_1865_singles.do". The program uses the "all_atus.dta" dataset.

9) "state_1865_oneyear.dta": This is the dataset in which we aggregate at the year-state level (instead of the two-year level). To obtain this dataset, we use the "all_atus.dta" dataset and we run "generator_1865_oneyear.do".

10) "state_all_base.dta": This is the dataset in which we aggregate at the state-period level using all respondents, including those aged 15-17 and 65-85, except for respondents with unclassified answers. To obtain this dataset, we use the "all_atus.dta" dataset and we run "generator_all_base.do".

11) "state_allunclass_base.dta": This is the dataset in which we aggregate at the state-period level using all respondents, including those respondents with unclassified answers. To obtain this dataset, we use the "all_atus.dta" dataset and we run "generator_allunclass_base.do".

12) "state_1865_demo.dta": This is the dataset that adjusts individual time use for demographic variables and then aggregates at the state-period level. To create this dataset we have used the "all_atus.dta" dataset and we run the program "generator_1865_demo.do".

4. Reproducing the Results of the Paper

Table 1 (Columns 1-5): Run the file "table1_aggregatetrendsall.do". This program uses the "all_atus.dta" file. See below for Column 6 of Table 1.

Table 2 (Columns 1-5): Run the file "table1_aggregatetrendsmen.do". This program uses the "all_atus.dta" file. See below for Column 6 of Table 2.

Table 3: For column 1, divide each time use category in column 1 of the Appendix Table B.1 by (168-31.62). For columns 2-8, run the file "table3_baseresults.do". This program uses the "state_1865_base.dta" dataset.

Table 4: Run the file "table4_decomposition.do". For column 5, the program uses the "state_1865_employed.dta" dataset. For columns 2-4 and 7-8, run the program "Table4.m". Column 6 is derived using equation (10) in the text.

Table 5: Run the file "table5_measurement.do". For columns 1-2 the program uses the "state_1865_unempADJ.dta" dataset. For columns 3-4 the program uses the "state_1865_base.dta" dataset.

Table 6: Run the file "table6_subperiods.do". The program uses the "state_1865_base.dta" dataset.

Table 7: Run the file "table7_robustness.do". The program uses the "state_1865_base.dta" dataset, the "state_1865_men.dta" dataset, the "state_1865_women.dta" dataset, the "state_1865_married.dta" dataset, the "state_1865_marriedANDspouseemp.dta" dataset, and the "state_1865_singles.dta" dataset.

Table B.1: Run the file "tableB1_summarystats.do". This program uses the "all_atus.dta" file.

Table B.2: Run the codes used to reproduce Table 1 ("table1_aggregatetrendsall.do") and Table 2 ("table1_aggregatetrendsmen.do").

Table B.3: Run the file "tableB3_summaryWork.do". This program uses the "state_1865_base.dta" dataset.

Table B.4: Run the file "tableB4_summaryurate.do". This program uses the "state_1865_base.dta" dataset.

Table B.5: Run the file "tableB5_summaryHomeLeisureChange.do". This program uses the "state_1865_base.dta" dataset.

Table B.6: Run the file "tableB6_standarderrors.do". The program uses the "state_1865_base.dta" dataset.

Table B.7: Run the code "tableB7_robustness.do". The code uses the datasets "state_1865_base.dta", "state_all_base.dta", "state_allunclass_base.dta" and "state_1865_oneyear.dta".

Table B.8: Run the code "tableB8_demoresults.do". The code uses the datasets "state_1865_base.dta" and "state_1865_demo.dta".

Figures 1-3: Run the file "Figures1to3.m". The file uses the "aggregate_trends.xls" file. The "aggregate_trends.xls" file can be constructed by running the do file called "figures1to4_aggregatetrends.do". In turn, the "figures1to4_aggregatetrends.do" uses the "all_atus.dta" dataset.

Figure 4 and Columns 6 of Tables 1-2: Run the file "Figure4_Column6Table1to2.m". The file uses the "aggregate_trends.xls" file. The "aggregate_trends.xls" file can be constructed by running the do file called "figures1to4_aggregatetrends.do". In turn, the "figures1to4_aggregatetrends.do" uses the "all_atus.dta" dataset.

Figures 5 and 6: Run the program "figures5and6.do". The program uses the "state_1865_base.dta" dataset.