Replication files for

Bad Times, Bad Jobs? How Recessions Affect Early Career Trajectories

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The programs in this archive rely on restricted-access data provided through the Research Data Center (FDZ) of the Institute for Employment Research (IAB). These data can be accessed for replication purposes by following the procedure outlined in this link: https://iab.de/en/facts-and-figures-2/data-access-for-replication-purposes/.

Setting up the directory structure

1. Copy the programs from the replication archive into the root folder of your project directory. The replication archive contains two subfolders:
    a. .../employers
    b. .../analysis
2. Fill in the path of the root folder in line 12 of .../employers/values_akm_master.do and .../analysis/analysis_master.do.
3. Run lines 1-38 of .../employers/vales-akm-master.do to create the requisite subfolders in the .../employers directory. Then run lines 1-42 of .../analysis/analysis_master.do to create the requisite subfolders in the .../analysis directory.

Setting up the source data inputs

The following datasets need to be copied into .../employers/data

- bhp_7519_m06_v2_1997.dta through bhp_7519_m06_v2_2019.dta (note that the files are indexed by year; these datasets are provided by the FDZ of the IAB).
- bhp_7519_m06_wgen_v2.dta (this dataset is provided by the FDZ of the IAB).

The following datasets need to be copied into .../analysis/data

- AWFP V2 data into .../analysis/data/packages-v2 (these datasets are provided by the Area Forecast and Macroeconomics Analyses (MAKRO) Department of the IAB).
- SIAB_7519_v1.dta (this dataset is provided by the FDZ of the IAB).
- SIAB_7519_v1_bhp_basis_v2.dta (this dataset is provided by the FDZ of the IAB).
- a015244auszug_ieb.dta (this dataset is provided by the DIM of the IAB).

Running the programs

Once the directory structure and source data are in place, the code needs to be run as follows:

1. First run …\employers\values_akm_master.do. Note that this program explains certain stopping points where specific Matlab files must be run. The Matlab programs are stored in …\employers\matlab.
2. Once step 1 is complete run …\analysis\analysis_master.do.

Inventory of programs called from the master files

…/employers/prog:

00_BHP_data.do <prepare establishment-level data>
01_BeH_data.do <prepare matched E-E data>
02_wage_imputation <impute top-coded earnings; calls files in /02_wage_imputation directory>
03_identify_moves_BeH.do <classify worker moves>
04_identify_moves_BeH_sample_selection.do <classify worker moves >
05_mover_inputs_BeH.do <create inputs for Sorkin model>
06_str_conn_input_BeH.do <create inputs for strongly-connected set>
07_model_inputs_BeH.do <create inputs for Sorkin model>
08_str_conn_input_BeH_skill.do <06 for firm-skill binning>
09_model_inputs_BeH_skill.do <07 for firm-skill binning>
10_AKM.do <estimate AKM>
11_AKM_skill.do <10 for firm-skill bin>
12_analyze_values_BeH.do <analyze Sorkin values>
13_analyze_values_BeH_skill.do <12 for firm-skill binning>
14_split_sample_master.do <create split-sample estimates>
14_01_identify_moves_BeH_sample_selection.do <classify moves, called in 14>
15_01_split_sample_check_3stack.do < CD, rent estimates for 3-year windows; Fig 1, Fig 2, Table F1>
15_02_split_sample_check_3stack_grand.do <CD, rent estimates for 3-year grand means windows>
15_03_split_sample_check_7stack.do <CD, rent estimates for 7-year windows>
15_04_split_sample_check_full.do <CD, rent estimates for 7-year windows>
15_05_split_sample_check_3stack_skill.do <15_01 for firm-skill binning>

16_01_3stack_summary_table.do <Table 1, Table C1, Table E3>
16_02_7stack_summary_table.do <Table E3>
16_03_variance_decomp.do <Table E3>

.../02_wage_imputation:

04_merge_basic_BHP.do
05_educ_broad.do
06_wages_assessment_ceiling.do
07_wages_marginal.do
08_wages_deflation.do
10_wages_imputation.do
master_wage_imp.do

.../employers/matlab:

estimate_model_skill_v7.m <Estimate Sorkin model for firm-skill binning>
estimate_model_skill_v7s.m <Estimate Sorkin model for firm-skill binning using split samples>
estimate_model_v7.m <Estimate Sorkin model over 3-year windows>
estimate_model_v7s_7stack.m <Estimate Sorkin model over 7-year windows>
estimate_model_v7s.m <Estimate Sorkin model over 3-year windows using split samples>
sconn_idfy2.m <Identify strongly connected set of firms>
sconn_idfy2s_7stack.m <Identify strongly connected set of firms>
sconn_idfy2_skill.m <Identify strongly connected set of firms>
sconn_idfy2s.m <Identify strongly connected set of firms>
sconn_idfy2s_skill.m <Identify strongly connected set of firms>

.../functions:

powermethod.m
scomponents.m
sparse_to_csr.m
sparse_to_csr_orig.m

.../analysis/prog:

00_BHP.do <prepare establishment-level data>
01_identify_training_end.do <identify end of training spell>
02_data_prep.do <prepare matched E-E data>
03_clean_data.do <data cleaning steps>
04_find_annual_dominant_job.do <classify dominant jobs>
05_no_drop.do <robustness check – not dropping people with less than 6 months training duration>
06_01_create_unemployment_rates_SIAB.do <compute unemployment rates>
06_02_create_unemployment_rates_SIAB_all_workers.do <compute unemployment rates>
07_high_skill.do <creates datasets used in main analyses>
08_01_dom_job_analysis_bc.do <main analysis; Tables 2-5, Figs 4-6, Table E1 Col 1 and 5, Table E2 Col 1.
08_02_dom_job_analysis_bc_using_skill-firm.do <Table E1, Col 6>
08_03_dom_job_analysis_bc_nl.do <Table E1, Col 2>
08_04_dom_job_analysis_bc_add_c.do <Table E1, Col 3>
08_05_dom_job_analysis_bc_no_drop.do <Table E1, Col 4>
08_06_dom_job_analysis_mediation.do <Table E4, Table E5>
08_07_dom_job_analysis_gender_bc.do <Table E2, Col 4-5>
08_08_dom_job_analysis_skill_bc.do <Table E2, Col 2-3>
09_AWFP.do <Table 6, Table E8>
10_ex_margin.do <Fig E3, Table E7>
11_measurement_error_check.do <Table E6>