Supporting file information for:

The welfare effects of involuntary part-time work

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Partial Unemployment Insurance

To estimate the average state-level dollar amount of Unemployment Insurance (UI) paid to unemployed and involuntary part-time workers from 1986 to 2015 (reported in Figure 1 of the paper), we retrieve data from the U.S. Department of Labor Employment and Training Administration (DOLETA), available at http://www.ows.doleta.gov/unemploy/DataDownloads.asp. Specifically, for each U.S. state we retrieve the amounts paid of "Total Unemployment" (item c46) and "All Weeks Compensated" (item c45). We combine these time series to back out the series of amounts paid in partial UI for each state.

We then divide each state-level series of the amounts paid in total UI by the respective series of the state-level number of unemployed workers from the Local Area Unemployment Statistics of the Bureau of Labor Statistics. We divide the amounts paid in partial UI by the respective series of the state-level number of involuntary part-time workers (see next paragraph for details about these time series). All time series are at a monthly frequency and have been seasonally adjusted. We express the amounts paid in total and partial UI in 2009 constant prices using the Personal Consumption Expenditures Price Index. The two final series displayed in Figure 1 are U_AMT and I_AMT included in the Stata file `series.dta`.

Short-time Compensation Scheme

We calculate the ratio of the number of claims for Short-time Compensation (STC) to the number of involuntary part-time workers in the U.S. states with STC schemes as follows. First, we obtain the number of weekly STC claims from the DOLETA, available at http://www.workforcesecurity.doleta.gov/unemploy/finance.asp. These data are only available as an aggregate of claims over the 17 U.S. states that run STC programs. Therefore, after estimating the number of involuntary part-time workers in those 17 states in the second step of our analysis, we aggregate the number

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accordingly to calculate the ratio shown in Figure 2 of the paper. This time series is R_STC provided in the Stata file `series.dta`.

The main challenge is to obtain state-level consistent time series of the number of involuntary part-time workers stretching back to 1986. As is well known, the monthly Current Population Survey (CPS) underwent a major redesign in January 1994. The measurement of involuntary part-time work was changed significantly at this point, leading to a large discontinuity in the times series computed from the monthly CPS. To overcome this problem, we construct time series of involuntary part-time workers from the annual demographic supplement files of the CPS. These series can be constructed at the level of U.S. states and, crucially, they are not subjected to a discontinuity in 1994. We use them to backcast the state-level number of involuntary part-time workers prior to 1994.

Earned Income Tax Credit

To estimate the probability to qualify for the Earned Income Tax Credit (EITC), we combine data from the annual demographic supplement files of the CPS with data on the EITC's phase-out income levels from the Congressional Research Service. Specifically, we use www.crs.gov to retrieve information on the maximum phase-out income level in each year for childless adults, for families with one child, families with two children and families with three or more children. Then, in the CPS for each group of households stratified by family structure, we compute the share of households whose income falls below the maximum phase-out income level of the EITC of the corresponding year.

This procedure delivers estimates of the probability to qualify for the EITC. We have run several checks to verify that these are consistent with the actual coverage of the EITC. For instance, we can use our estimates to predict the total number of EITC recipients in each year since 1980. The predicted numbers fit the data well: the overall R-square of the regression of the actual number of EITC recipients against our predicted time series is 93%. Our final estimates stratified by family structure are provided in the Stata file `eitc_eligible.dta`.

Finally, we combine our estimates with the monthly CPS to obtain the time series displayed in Figure 3 of the paper. We use marital status and family structure to predict, for each involuntary part-time worker, the probability that she qualifies for the EITC. The final time series is F_EITC provided in the Stata file `series.dta`.