Data file for "Breaks in the Phillips Curve: Evidence from Panel Data"

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Draft: October 18, 2024

1. Data

"USINDUSTRYPCEINFLATION.csv" contains the quarterly Personal Consumption Expenditures price indexes (PCE) for 16 industry components (columns) from 1959:Q3 through 2022:Q3 (rows), sourced from the Bureau of Economic Analysis (BEA). We construct annualized quarterly inflation rates as $log(PCE_{i,t}/PCE_{i,t-1}) \times 400$. These are used as the dependent variable in Equation (3) in the main paper. Independent variables in this regression include the aggregate U.S. unemployment rate gap. We use the end-of-quarter monthly aggregate unemployment gap, measured as the difference between the unemployment rate from the U.S. Bureau of Labor Statistics (BLS) and the NAIRU estimate (from the Congressional Budget Office). These two variables are available in the files "USAGGUNRATE.csv" and "USAGGNROU.csv". These data begin in January 1949 and end in September 2022. We only use the data sample that corresponds to the availability of the inflation data (1959). Another independent variable in this regression is the four-quarter-ahead Consumer Price Index (CPI) inflation expectations that we source from Blue Chip Economic Indicators. These data go back to 1985. Between 1980 and 1985, we use Producer Price Index (PPI) inflation expectations from the same source. Before 1980, we use data from Livingston which is only updated every six months and so we simply repeat observations in the two corresponding quarters, effectively assuming that inflation expectations remain the same in each 6-month period. These data are private and so are not included in our data file.

For the MSA-level Phillips curve in Equation (1) of the main paper, we source monthly total CPIs for 22 MSAs from the BLS. We construct annual levels as the average of all monthly observations in the corresponding year and compute annual inflation rates as $log(CPI_{it}/CPI_{it-1}) \times 100$ in which CPI_{it} denotes the level for the *i*th MSA in year t. Our sample for these 22 MSAs (columns) begins in 1980 and ends in 2022 (rows), but for many MSAs the data only start in 1990. These data are in the file "USMSAINFLATION.csv". This regression uses the annual unemployment rate data from 1980 to 2022 (rows) for these 22 MSAs (columns) sourced from the BLS which are in the file "USMSAURATE.csv".

For the EU-level Phillips curve displayed in Equation (2) of the main paper, we source headline (as well as total goods and total services) annual inflation rates for our 28 countries (the 27 current members and the UK) from the ECB statistical warehouse. Our sample begins in 1986 and ends in 2021. These data are in the file "EUINFL.csv". The inflation for goods and services are available in the files "EUGOODSINFL.csv" and "EUSERVS-INFL.csv". The slack term on the right hand side of this regression is the unemployment rate gap which is computed as the difference between the unemployment rate and the NAIRU estimate in each country. We source the annual country-level unemployment rate and NAIRU estimates for the 28 EU member countries (the current 27 plus the UK which was a member until recently), and hence the unemployment gaps, for the sample period 1965-2021 from the DG ECFIN/AMECO—the European Commission's macroeconomic database. The unemployment rate data are in the file "EUURATE.csv". The NAIRU estimates are not available to the public and hence are not included in our files.

For our US wage Phillips curve, we compute average hourly earnings (AHE) for each of the 50 states and the District of Columbia using the latest (2019) CEPR uniform extract from the Current Population Survey (CPS)². Aggregating from monthly data, we construct quarterly data from 1980:Q1 through 2019:Q4. These data are available in the file "USSTATEWAGE.csv". From these data, we construct quarterly annualized wage inflation. On the right hand side of this regression, we use the end of quarter monthly unemployment rate for all 51 states (including the District of Columbia), sourced from the BLS. These data – available in the file "USSTATEUNRATE.csv" – cover the same sample period.

²The data are available from https://ceprdata.org/cps-uniform-data-extracts/.

¹Data for all but a few MSAs are collected only in either odd or even months. See https://www.bls.gov/opub/hom/cpi/pdf/cpi.pdf for details of the complete methodology and https://www.bls.gov/cpi/additional-resources/geographic-sample.htm. for the geographic definitions.