

# AGGREGATE DEMAND, IDLE TIME, AND UNEMPLOYMENT: DESCRIPTION OF DATA AND PROGRAMS

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## DATA

There are two Microsoft Excel workbooks.

- `data.xlsx` contains the raw data used in the paper, along with descriptions of the data sources. This workbook contains five sheets.
  - `unused_capacity` contains data on the rates of idleness and unemployment in the US.
  - `occupations` contains data on the number of workers in recruiting and purchasing occupations in the US.
  - `long-term_relationships` contains data on the prevalence of long-term customer and employment relationships in 11 countries, including the US.
  - `quarterly_data` contains quarterly macroeconomic data for the US (capacity utilization rate in manufacturing from the Survey of Plant Capacity, employment level, real output, operating rate in non-manufacturing sectors from the Institute for Supply Management).
  - `monthly_data` contains monthly macroeconomic data for the US (unemployment level, vacancy index, unemployment rate, employment level in manufacturing).
- `cyclical_components.xlsx` contains the cyclical components of product market tightness, labor market tightness, output, and employment for the US. The cyclical components are computed by the program `construct_cyclical_components.m` from the raw data in `data.xlsx`. Our exploration of the sources of unemployment fluctuations in the US relies on these cyclical components. This workbook contains two sheets.

- 1973--2013 contains the cyclical components of labor market tightness, output, and employment. It also contains the proxy for the cyclical component of product market tightness constructed using the capacity utilization rate in the manufacturing sector measured by the Census Bureau from the Survey of Plant Capacity. These four cyclical components are available at quarterly frequency from 1973:Q4 to 2013:Q2.
- 1999--2013 contains the cyclical components of labor market tightness, output, and employment. It also contains the proxy for the cyclical component of product market tightness constructed using the capacity utilization rate in the manufacturing sector measured by the Census Bureau from the Survey of Plant Capacity. Last, it contains the proxy for the cyclical component of product market tightness constructed using the operating rate in non-manufacturing sectors measured by the Institute for Supply Management. These five cyclical components are available at quarterly frequency from 1999:Q4 to 2013:Q2.

## PROGRAMS

There are three programs written for MATLAB (release R2014b).

- `construct_cyclical_components.m` uses the raw data in `data.xlsx` to produce the cyclical components of product market tightness, labor market tightness, output, and employment. The resulting cyclical components are stored in `cyclical_components.xlsx`.
- `plot_figures.m` uses the data in `data.xlsx` and `cyclical_components.xlsx` to produce Figures II, VIII, IX, and X in the paper and Figures A2 and A3 in the online appendix.
- `quarter.m` is a function that transforms a monthly time series into a quarterly time series.