

# Data Employed in Our Empirical Analysis

## Outline

In our empirical analysis, we employ nine [.csv](#) files for each of the US and Japan. Initially, the model specified in equation (7) of our paper is estimated with Bayesian methods, based on the monthly time series data described in Section 2. The set of observables includes (1) the inflation rates of domestic price indices  $P_{it}$ , (2) import price indices  $P_{mt}^*$ , and (3) wage indices  $W_{it}$  for each sector, as listed in Table 1. In addition, we employ the input-output linkages, denoted by (4)  $\Omega$ , (5)  $\Omega^*$ , and (6)  $\Omega_w$ .

After estimating the model, we analyze the IRFs of aggregate and sectoral inflation to various types of shocks. In this analysis, we employ three types of weights to aggregate sectoral results: (7) total output, (8) final demand, and (9) personal consumption expenditure.

The following section provides an overview of each file containing the data entries numbered (1) through (9). All equations and tables referenced in the descriptions follow those presented in the main text and appendix of the paper.

## Files

### 1. Domestic price indices

- US data: [IOPrices\\_CxCXTable\\_US\\_Domestic\\_Aggregated\\_OurCode\\_seasonalX13.csv](#)
- Japanese data: [IOPrices\\_Domestic\\_Aggregated\\_Level6\\_seasonalX13.csv](#)

These files contain monthly time series of domestic price indices for each sector. The first row of each file serves as a header indicating the sector codes listed in Table 1. The first column provides the monthly dates, while the remaining columns report the monthly price index values for each sector. All indices are seasonally adjusted.

### 2. Import price indices

- US data: [IOPrices\\_CxCXTable\\_US\\_Import\\_Aggregated\\_OurCode\\_seasonalX13.csv](#)
- Japanese data: [IOPrices\\_Import\\_Aggregated\\_Level6\\_seasonalX13.csv](#)

These files contain monthly time series of import price indices for each sector. The first row of each file serves as a header indicating the sector codes listed in Table 1. The first column provides the monthly dates, while the remaining columns report the monthly price index values for each sector. All indices are seasonally adjusted.

### 3. Wage indices

- US data: [IOWage\\_US\\_Domestic\\_datatype03\\_Aggregated\\_OurCode.csv](#)
- Japanese data: [IOWage\\_Jikyukansan\\_Domestic\\_Aggregated\\_Level6.csv](#)

These files contain monthly time series of wage indices for each sector. The first row of each file serves as a header indicating the sector codes listed in Table 1. The first column provides the monthly dates, while the remaining columns report the monthly price index values for each sector. All indices are seasonally adjusted.

### 4. Input-output linkages for domestically produced goods and services

- US data: [IOWage\\_CxCXTable\\_US\\_Domestic\\_Aggregated\\_OurCode.csv](#)
- Japanese data: [IOWage\\_Domestic\\_Aggregated\\_Level6.csv](#)

These files contain the input-output matrix for domestically produced goods and services,  $X_{N' \times N'}^d = (x_{ij}^d)_{1 \leq i, j \leq N'}$ , as presented in Appendix B.6. The IO linkage parameter  $\Omega$  is computed from this matrix according to equation (B.22). The first row and column of each file serves as a header indicating the sector codes listed in Table 1. All entries from the second row and second column onward correspond to  $x_{ij}^d$ .

#### 5. Input-output linkages for imported goods and services

- US data: [IOTable\\_CxCXTable\\_US\\_Import\\_Aggregated\\_OurCode.csv](#)
- Japanese data: [IOTable\\_Import\\_Aggregated\\_Level6.csv.csv](#)

These files contain the import input-output matrix for imported goods and services,  $X_{N' \times N'}^* = (x_{ij}^*)_{1 \leq i, j \leq N'}$ , as presented in Appendix B.6. The IO linkage parameter  $\Omega^*$  is computed from this matrix according to equation (B.23). The first row and column of each file serves as a header indicating the sector codes listed in Table 1. All entries from the second row and second column onward correspond to  $x_{ij}^*$ .

#### 6. Input-output linkages for labor input.

- US data: [CompensationofEmployees\\_US\\_Domestic\\_Aggregated\\_OurCode.csv](#)
- Japanese data: [KoyoshaShotoku\\_Domestic\\_Aggregated\\_Level6.csv](#)

These files contain the amounts of employee compensation for each sector, corresponding to the main diagonal elements of  $X_{N' \times N'}^w = (x_{ij}^w)_{1 \leq i, j \leq N'}$  as presented in Appendix B.6. The IO linkage parameter  $\Omega_w$  is computed from this matrix according to equation (B.24). The first row of each file serves as a header indicating the sector codes listed in Table 1. All values in the second row correspond to  $x_{ii}^w$ .

#### 7. Total output weights

- US data: [TotalOutput\\_US\\_Total\\_Aggregated\\_OurCode.csv](#)
- Japanese data: [TotalOutput\\_Total\\_Aggregated\\_Level6.csv](#)

These files contain the total output values for each sector, which are used as weights when aggregating sectoral results. The first row of each file serves as a header indicating the sector codes listed in Table 1. All values in the second row correspond to the total output values for each sector.

#### 8. Final demand weights

- US data: [FinalDemand\\_US\\_Total\\_Aggregated\\_OurCode.csv](#)
- Japanese data: [FinalDemand\\_Total\\_Aggregated\\_Level6.csv](#)

These files contain the final demand values for each sector, which are used as weights when aggregating sectoral results. The first row of each file serves as a header indicating the sector codes listed in Table 1. All values in the second row correspond to the final demand values for each sector.

#### 9. Personal consumption expenditure weights

- US data: [PersonalConsumption\\_US\\_Total\\_Aggregated\\_OurCode.csv](#)
- Japanese data: [PersonalConsumption\\_Total\\_Aggregated\\_Level6.csv](#)

These files contain the personal consumption expenditure values for each sector, which are used as weights when aggregating sectoral results. The first row of each file serves as a header indicating the sector codes listed in Table 1. All values in the second row correspond to the personal consumption expenditure values for each sector.