Beveridgean Unemployment Gap
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## Replication Files

This document describes the files provided to replicate the results in the article. The results were obtain on a Mac running macOS Catalina 10.15.7 with the following software:

- Matlab R2020a
- Microsoft Excel 16.16.27

The results are produced through the following steps:

1. Run the Matlab script `baiPerron.m`. This script estimates the Beveridge elasticity, allowing for structural breaks in the Beveridge curve. The estimation results are reported in the Matlab window.
2. Run the Matlab script `beveridgeElasticity.m`. This script collects the results from the Bai-Perron algorithm and plots the Beveridge curve and Beveridge elasticity for the US, 1951--2019. The script saves the results in the Excel book `book.xlsx` so they can be used by the script `efficientUnemployment.m`. This script produces two sets of graphs:

- `elasticity.pdf` : The time series for the Beveridge elasticity, with its 95% confidence interval.
- `beveridgebreaks_n.pdf`, with $n$ between 1 and 6: The 6 branches of the Beveridge curve.

3. Run the Matlab script `efficientUnemployment.m`. This script plots the efficient unemployment rate for the US, 1951--2019, and various robustness checks. This script produces 6 graphs:

- `efficienttightness.pdf` : Time series for the efficient labor-market tightness.
- `efficientunemployment.pdf` : Time series for the efficient unemployment rate.
- `unemploymentgap.pdf` : Time series for the unemployment gap.
- `unemploymentgap_epsilon.pdf` : Range of efficient unemployment rates when the Beveridge elasticity takes all the values in its 95% confidence interval.
- `unemploymentgap_zeta.pdf` : Range of efficient unemployment rates when the social value of nonwork takes a range of plausible values.
- `unemploymentgap_kappa.pdf` : Range of efficient unemployment rates when the recruiting cost takes a range of plausible values.