

Motivation

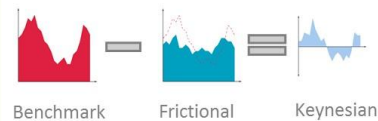
- High rates of unemployment in the Eurozone
- Knowledge of unemployment structure necessary to fight it effectively
- Components of unemployment are not directly observable

What we do?

- Unemployment decomposition method based on the DSGE model
- Investigate the structure of unemployment in Germany, France, Italy and Spain

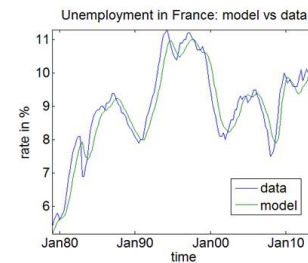
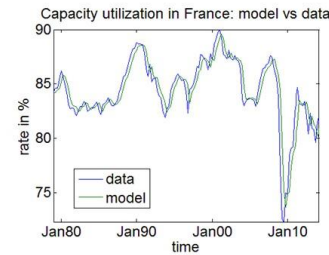
Two nested models

1. **Benchmark model**
 - DSGE framework, two shocks (productivity shock and demand shock)
 - DMP frictions in the labor market
 - Sticky wages and prices
 - Search frictions in the market of goods: output is a function of factors of production and the number of customers that show up to buy products
2. **Model with frictional unemployment**
 - Keynesian elements are removed from the model (price/wage rigidities, search frictions in the product market)



Empirical analysis

- Calibration and Bayesian estimation of the benchmark model



Decomposition

The decomposition is made in two steps:

1. The Kalman filter is used to compute the paths of shocks that adjust the estimated benchmark model to data
2. Extracted shocks are used to simulate the model where the only friction is the DMP friction in the labor market.

