

AGGREGATE DEMAND, IDLE TIME, AND UNEMPLOYMENT

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MOTIVATION

- What is the major determinant of the unemployment dynamics?
- The literature has proposed many hypotheses:
 - Labor market mismatch
 - Job search effort
 - Technology shocks
 - Aggregate demand
- Propose a tractable equilibrium model that can empirically test these hypotheses

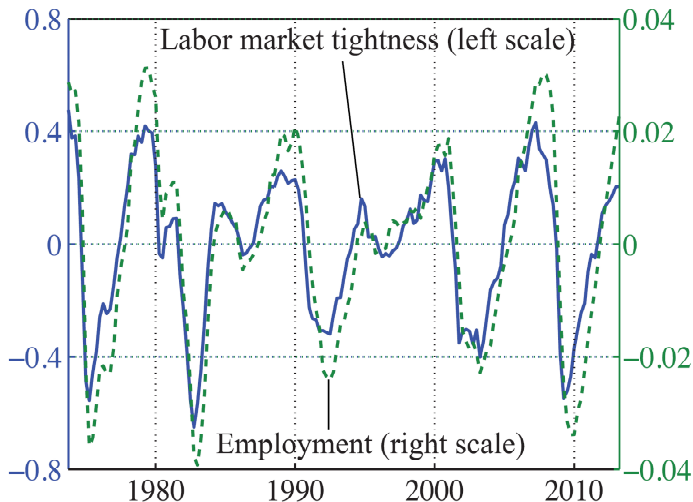
THE FEATURES OF THE MODEL

- Based on the disequilibrium theory of Barro and Grossman (1971): micro-founded Keynes' theory
- In contrast to Barro and Grossman, the model generates an equilibrium
- The model can represent many kinds of equilibrium in a tractable way
 - Competitive equilibrium
 - Sticky price/wage equilibrium
- The equilibrium is determined by price and market tightness
- Market tightness also can be observed by data
- Comparative-statics allows us to identify the the major determinant of the unemployment dynamics by comparing with data

THE PREDICTION OF THE MODEL

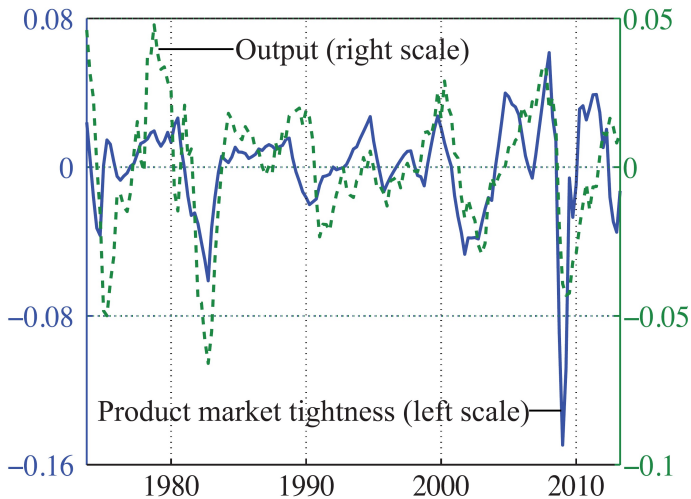
- In a competitive (efficient) equilibrium, prices are adjusted so that the market tightness attains optimum
- In a fixed (rigid) price equilibrium,
 - Aggregate demand shock increases output, employment, product/labor market tightness
 - Technology shock increases output, employment, labor market tightness, but decreases product market tightness
- Data shows,
 - product/labor market tightness fluctuate significantly
 - the correlations between output and product market, and between employment and labor market tightness are positive

LABOR MARKET TIGHTNESS AND EMPLOYMENT



A. Cyclical components

PRODUCT MARKET TIGHTNESS AND OUTPUT



A. Cyclical components

CONTRIBUTION/CONCLUSION

- This research proposes very tractable model that allows comparative-statics
- In a very general framework, it identifies the importance of demand shock for unemployment
- The model is applicable to many topics (e.g., Ghassibe and Zanetti 2022, JME)