

Discussion: The Dark Corners of the Labor Market

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Conference on Secular Stagnation

Motivation

- **Hysteresis in unemployment:** In response to large shocks unemployment takes time to revert back to **normal pre-crisis** level.
- **Why?** Large (relatively old) literature: there are multiple steady states (the **dark corners**). This view has played little role in conventional business cycle DSGE analysis based on linearization
- **This paper** rehabilitates the **hysteresis** view of unemployment
 - 1 It argues empirically that the dynamics of US unemployment is characterized by multiple steady state
 - 2 Evaluate quantitatively the Pissarides (1992) loss-of-skill model and argues that it fits the data better than the conventional DMP model without loss of skill
 - 3 It concludes that dark corners are important to explain the US experience

Wow! This is an **important paper!!!**

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- Do I like the paper? **Yes, of course I do**
- Did I believe in Dark Corners before reading this paper?
Yes, of course I did, as any sensible European
- Did this paper change my prior about their importance?
Not sure, but OK my prior was already very high...
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My comments

- I briefly review the paper
 - ① How multiple steady states generate persistence
 - ② Empirical methodology used in the paper
 - ③ The Pissarides loss of skill mechanism
- Some reservations about empirical methodology
- Some reservations about the models horse race
- Some reservations about the loss-of skill mechanism
- But don't forget about previous slide!!!!

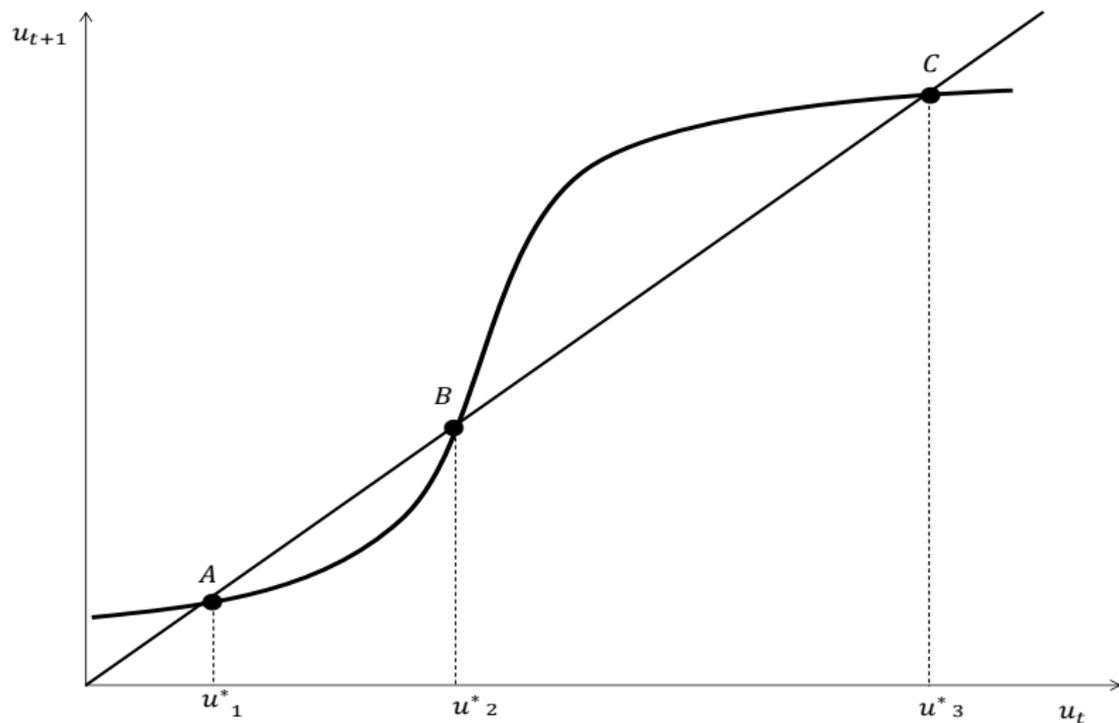
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Two reasons why multiple steady states generate persistence



- Change in steady state unemployment (A vs C)
- Transitions towards A is slow if you start close to B

Empirical methodology

- **The law of motion of end-of-period unemployment:**

$$u_{t+1} = (1 - \rho_{ft}) u_t + \rho_{xt} (1 - \rho_{ft}) (1 - u_t)$$

- **Steady state unemployment:**

$$\bar{u} = \frac{\bar{\rho}_x (1 - \bar{\rho}_f)}{\bar{\rho}_x (1 - \bar{\rho}_f) + \bar{\rho}_f}$$

- In this paper the author forecasts ρ_{xt} and ρ_{ft} with

$$\rho_{f,t+k} = \beta_0 + \beta_1 \rho_{f,t} + \beta_2 \rho_{x,t} + \beta_3 u_t + \beta_4 u_t^2 + \text{error}$$

$$\rho_{x,t+1} = \beta_0 + \beta_1 \rho_{x,t} + \text{error}$$

- He uses these equations to predict long-run values: $\bar{\rho}_f$ and $\bar{\rho}_x$
- Since forecasting equations depends on current u_t , the long run job finding rates $\bar{\rho}_f$ depends (**negatively!!!**) on u_t
- So **multiple steady states** arise!

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Economic mechanism: loss of skill

- The model builds on Pissarides (1992). There is loss of skill **during unemployment**
- Due to random search, firms incentive to post vacancies depends on the **average skill-level of the labor force**
An **adverse selection externality**
- If firms post **few** vacancies unemployment is **high**, workers human capital **depreciates**, average human capital in labor force is **low**: this justifies posting **few** vacancies, which induces **hysteresis in unemployment**

Other auxiliary assumptions

- ① All workers lose their human capital after one period in unemployment, but no losses upon displacement
- ② Only aggregate shock is a shock to separation rate

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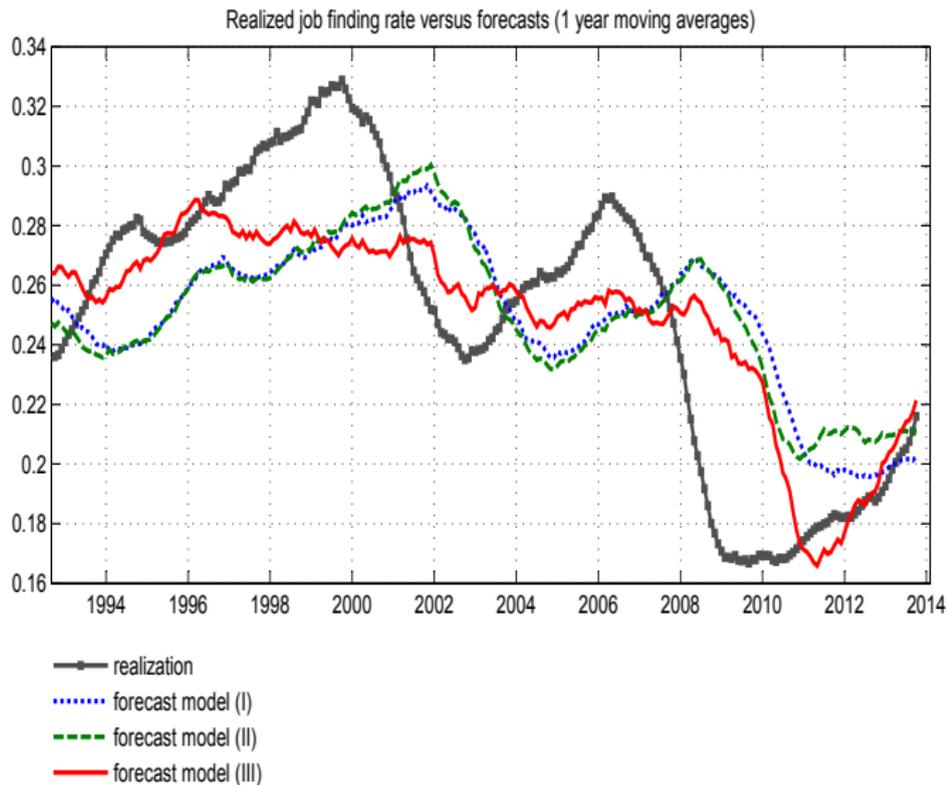
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Forecasting equation and empirical methodology

Figure 6: Job finding rate and forecasts made two years in advance.



Concerns about forecasting equation

- The author shows that (i) residuals are uncorrelated, (ii) and that forecasting equation performs better than other simple forecasting rules
- The forecasting equation could violate the boundaries
- Might not be stable at different forecasting horizons
- The forecasting equation should be optimal given the full information set available to agents in real economies
- Our information set is **much larger**: agents have more information available than just the current level of finding and separation rates and unemployment
- I have hard times in believing that one can not find a **better forecasting equation** for two years ahead future finding rates

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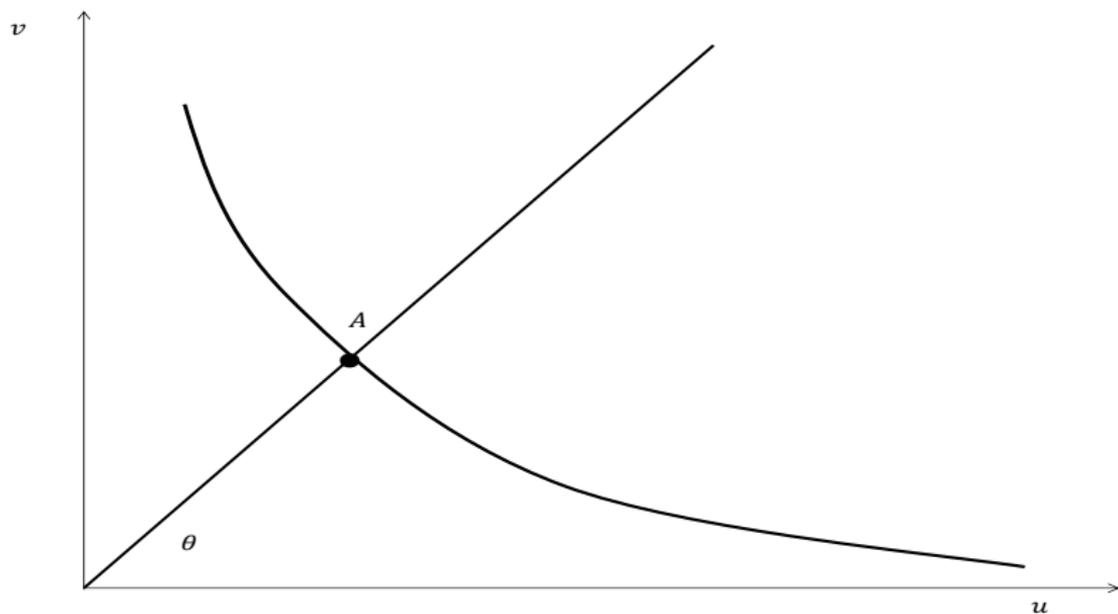
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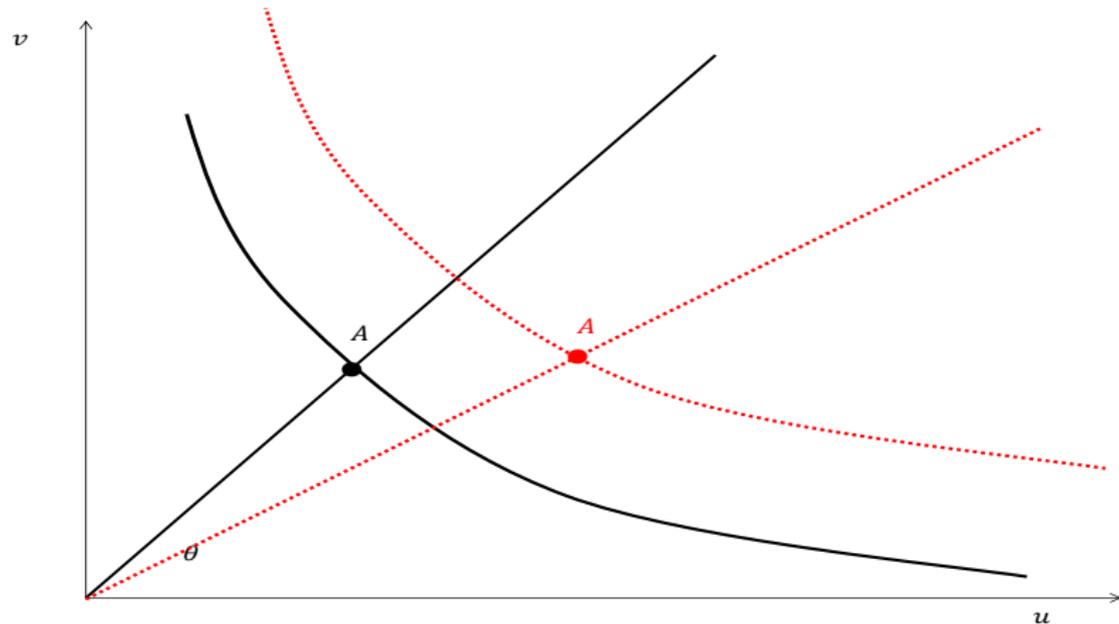
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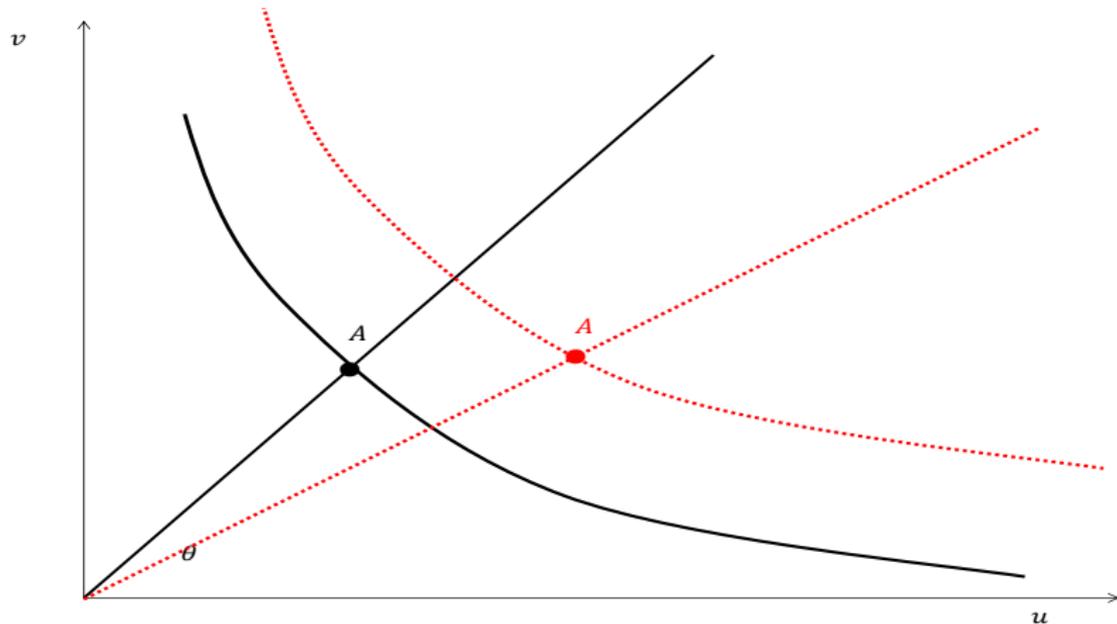


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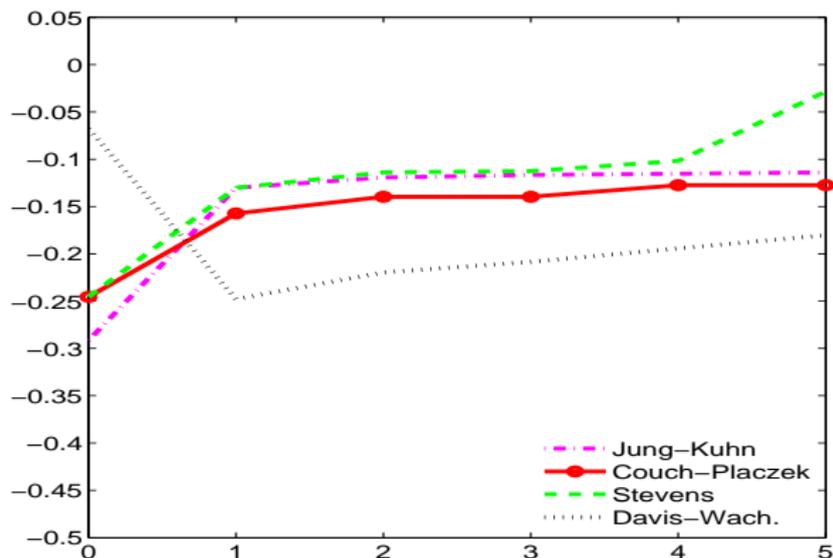
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- Is this a fair horse race?

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Earnings losses in data



Profile of yearly earnings losses in the model and in several papers in the literature. The black dotted line corresponds to the estimates by Davis and Wachter (11), the red solid line to Couch and Placzek (10), and the green dashed line to Stevens (97), the purple dash dotted line to Jung and Kuhn(12).

Loss of skill mechanism

In the model

- all workers experience a loss after one period of unemployment
- wage losses are due unemployment: they **increase during the unemployment spell**
- adverse selection externality: firms can not post contracts contingent on the duration of their unemployment spell or past experience

These assumptions are rather extreme and somewhat **counterfactual**:

- 1 Large dispersion in wage losses. Typically **concentrated just in a small group of workers**
- 2 Large debate on size of wage losses. But evidence that wage losses **increase with unemployment duration is scant**, almost absent after controlling for unobserved heterogeneity
- 3 Plenty of scope for undoing the adverse selection externality: **directed search**

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- Dark corners surely exist.... But
 - ① I have some reservations about empirical methodology
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 - ③ Aggregate demand externalities and/or financial frictions traps seem more plausible candidates
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