# Discussion of
# “Clashing Theories of Unemployment”
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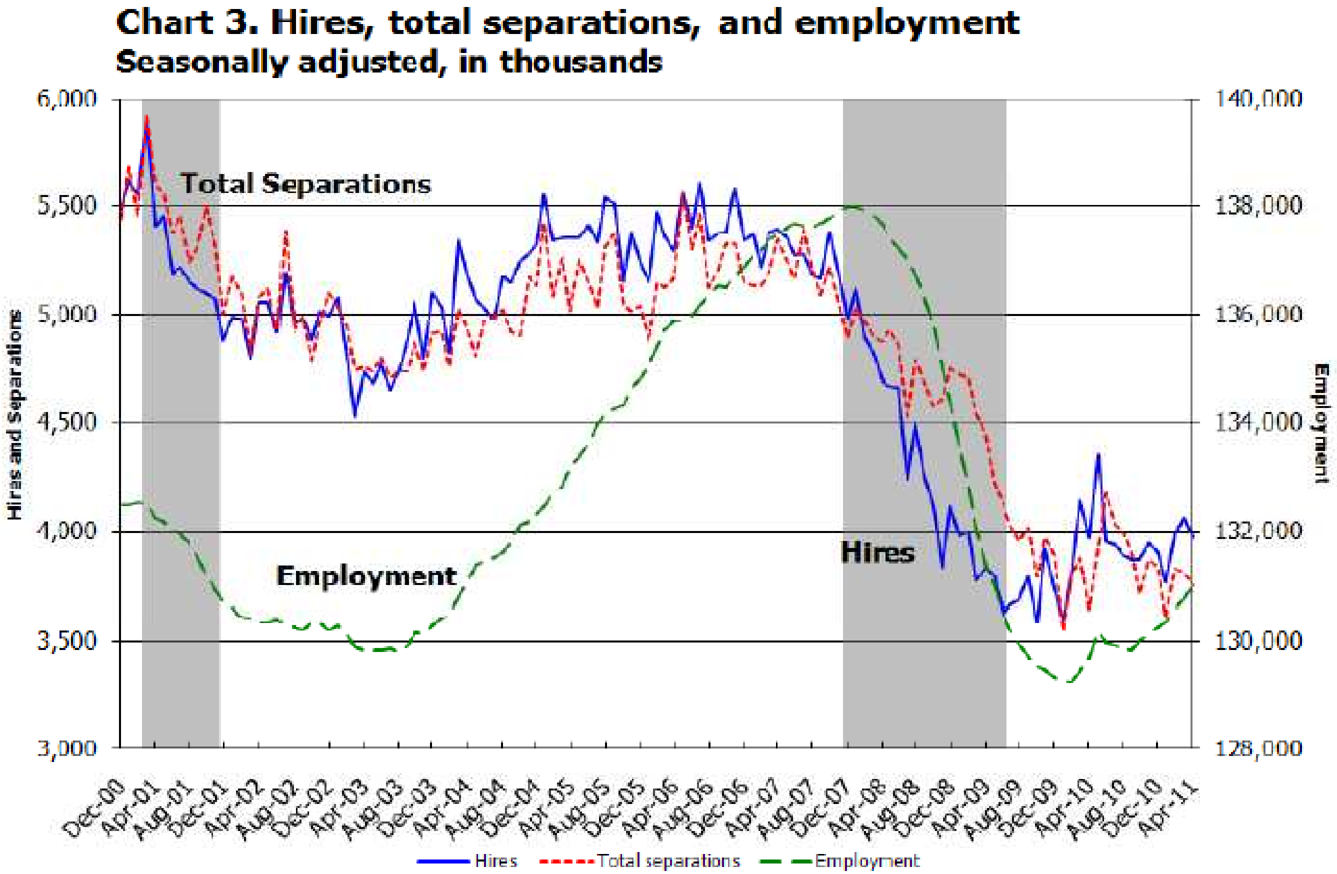
**Labor Market Institutions and the Macroeconomy**
Nuremberg, June

# The DMP Model

- **Matching function:** Job finding rate is an increasing function of vacancy/unemployment ratio.
- **Flow Balance:** Employment adjusts to equate hires and separations.
- **Free entry condition:** Vacancies equate job creation cost with the expected marginal value of a worker.
- **Bargaining:** The wage divides the difference between the value of the marginal worker and the value of unemployment.

# Labor Market Flows



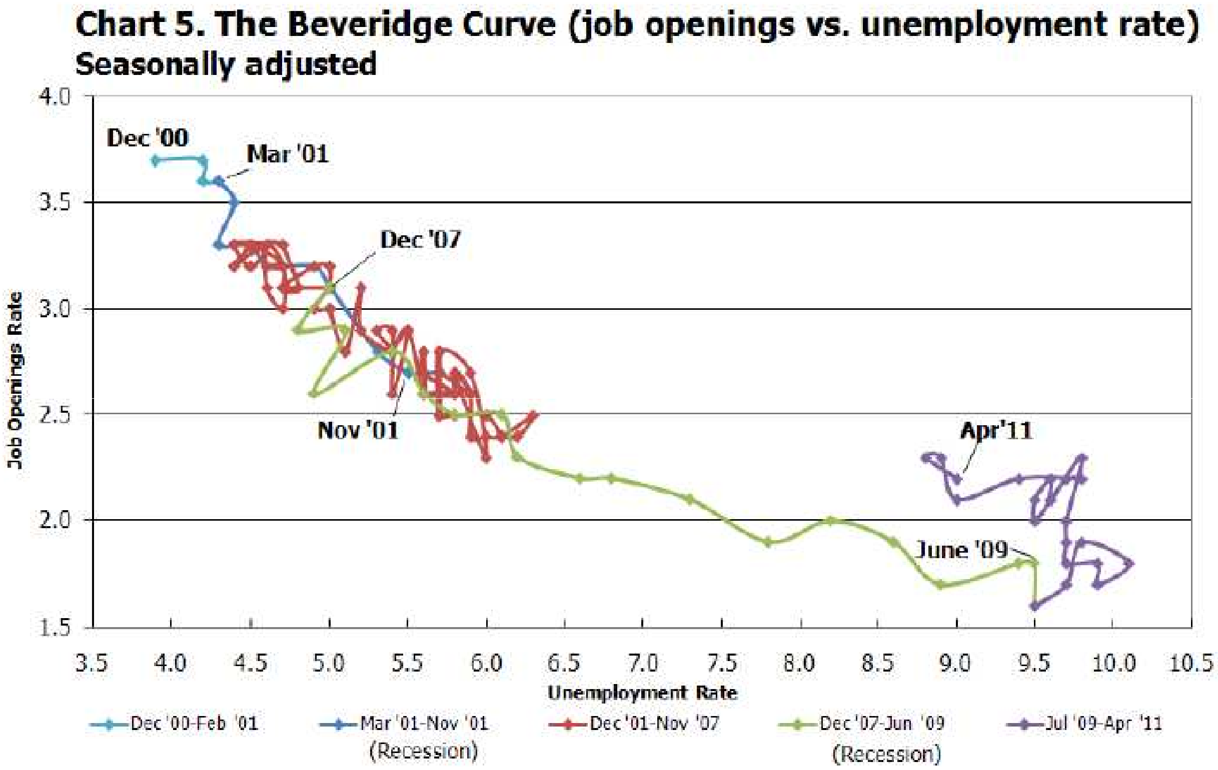

Sources: Bureau of Labor Statistics, Current Employment Statistics and Job Openings and Labor Turnover Survey, June 7, 2011.

Note: Shaded areas represent recessions as determined by the National Bureau of Economic Research (NBER).

# US Beveridge Curve

## Dec 2000-April 2011

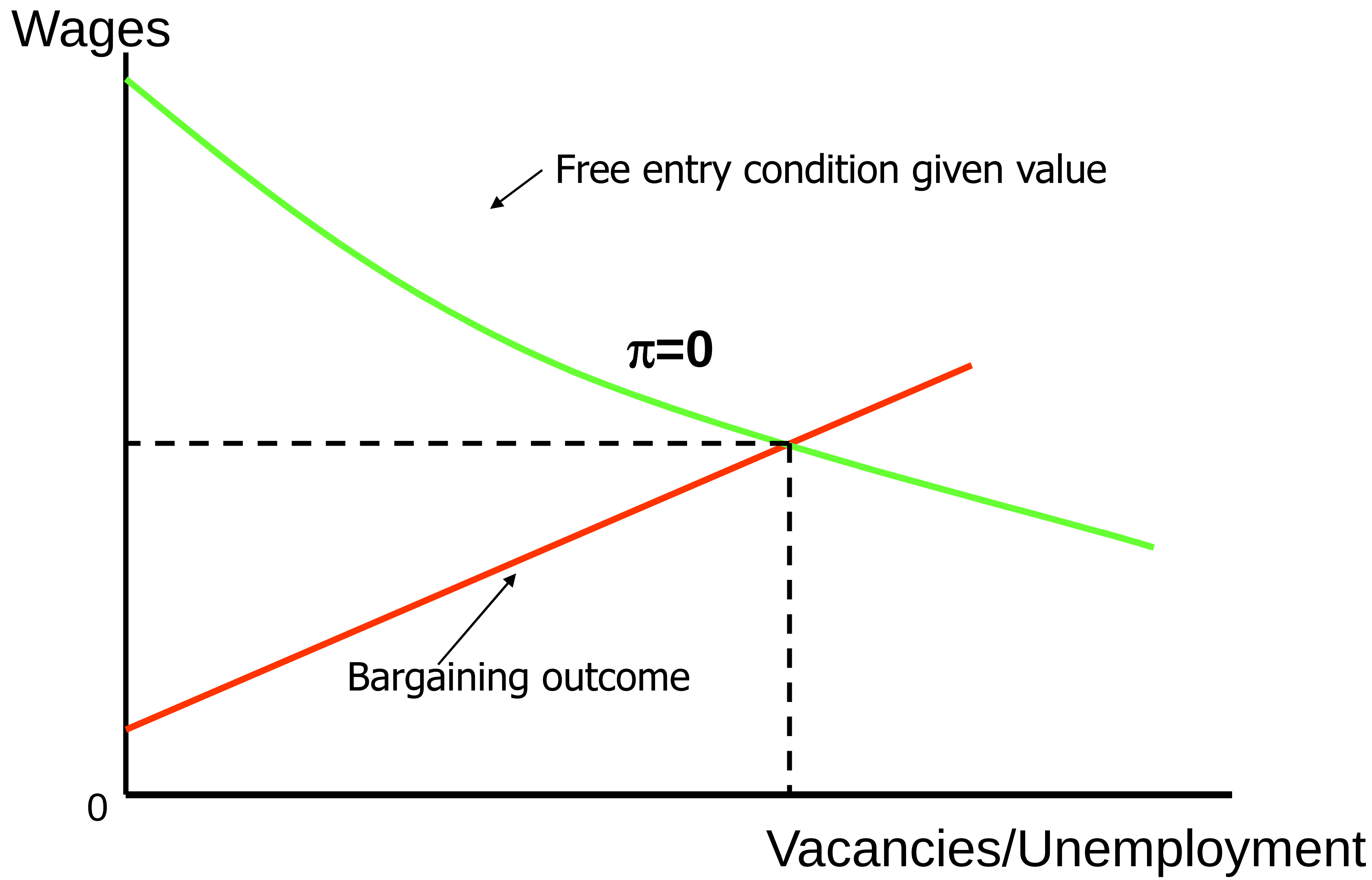
Vacancy rate



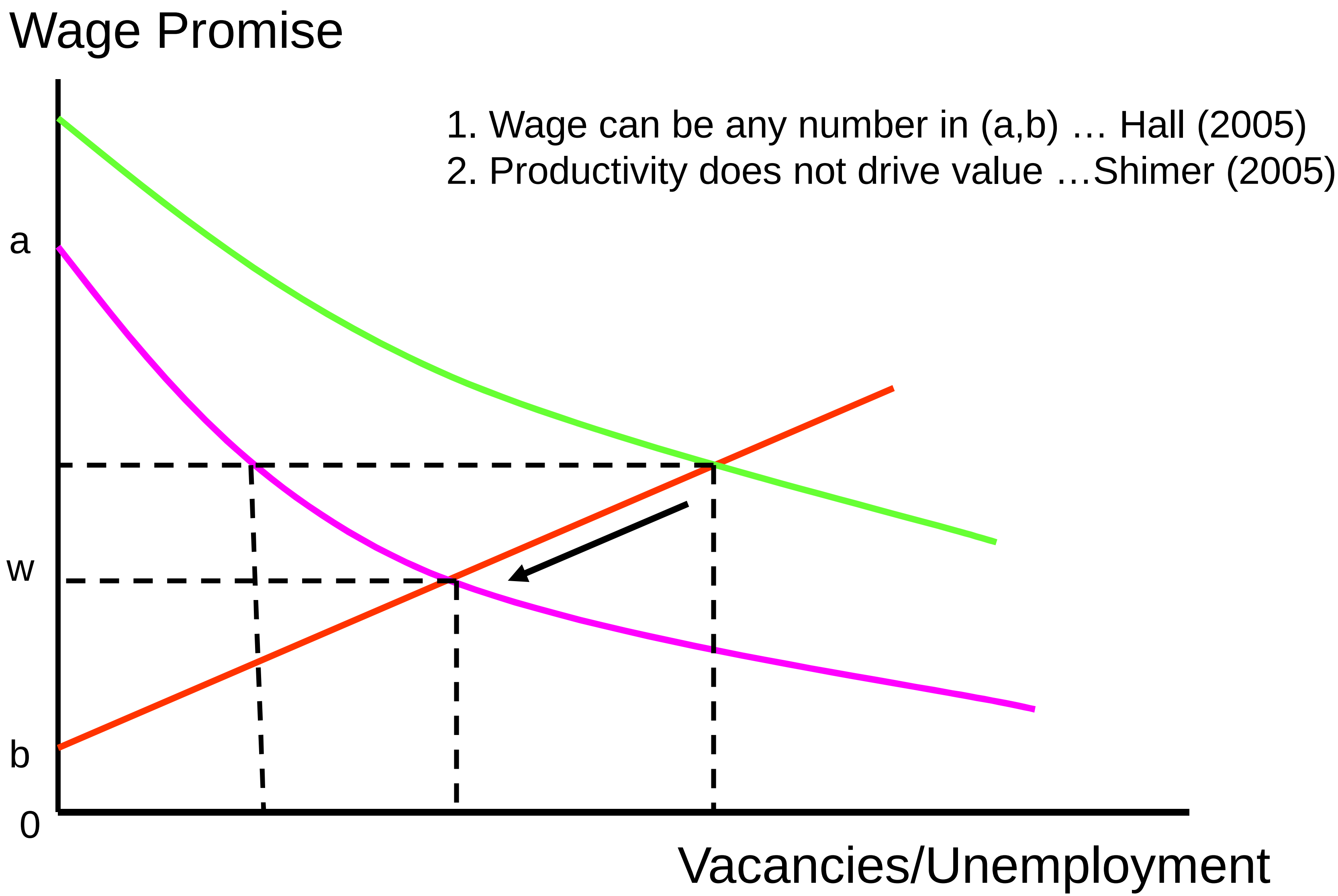

Sources: Bureau of Labor Statistics, Current Population Survey and Job Openings and Labor Turnover Survey, June 7, 2011.

Unemployment rate

# Model Equilibrium



# The Great Recession



# Why a Downward Shift in $\pi$=0?

- Initially
  - Drop in house prices reduced wealth and consequently consumption
  - Banks increased risk premium which reduced investment
  - Fed responded by driving down nominal interest rate
- Now
  - Zero nominal interest rate bound keeps the real interest rate from falling far enough (Hall 2011).
  - Government expenditures (state+federal) initially rose but are now falling.
- **So, what is the conflict?**

# What is the Conflict?

**$c = q(\theta)(\alpha Y/E - w)/(r+s)$ (free entry)**

**$w \in (z, \alpha Y/E)$ (bargaining outcome)**

**$Y = Y^d = C(r,W) + I(r) + G$ (demand)**

**$E = f(\theta)L/(s+f(\theta))$ (Beveridge curve)**

**$f(\theta) = \theta q(\theta)$ (matching identity) $= \theta^{1/2}$**

# For Example

**If $z=0$ and $w=\beta\alpha Y/E$, then**

$$cE/q = cL\theta/(s+f(\theta)) = cLf^2/(s+f) = \alpha(1-\beta)Y^d/(r+s)$$