

Discussion of “The liquidity trap: a unified theory of the Great Depression and the Great Recession”

by

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Initial reaction

Do we have a unified theory of the Great Depression?

Do we have a unified theory of the Great Recession?

A theory of the Great Recession

$$0 > r_t^n$$

Trigger/impulse

- Deleverage of over-accumulated debt
- Turbulence in banking sector
- Pessimism
- “Demand shocks”
- Demographics
- Inequality
- Fall in relative price investment
- Drop in productivity

Fast stuff

Slow stuff – secular stagnation

A theory of the Great Recession

$$0 > r_t^n < r_t$$


$$r_t = i_t - E_t \pi_{t+1}$$

Propagation

- Zero lower bound $i_t > 0$
- Wage and price rigidities
- Central bank cannot credibly commit to $E_t \pi_{t+1} > 0$
- Price rigidities prevent $P_t \downarrow$ needed for $E_t \pi_{t+1} > 0$

Potential problems with the theory #1

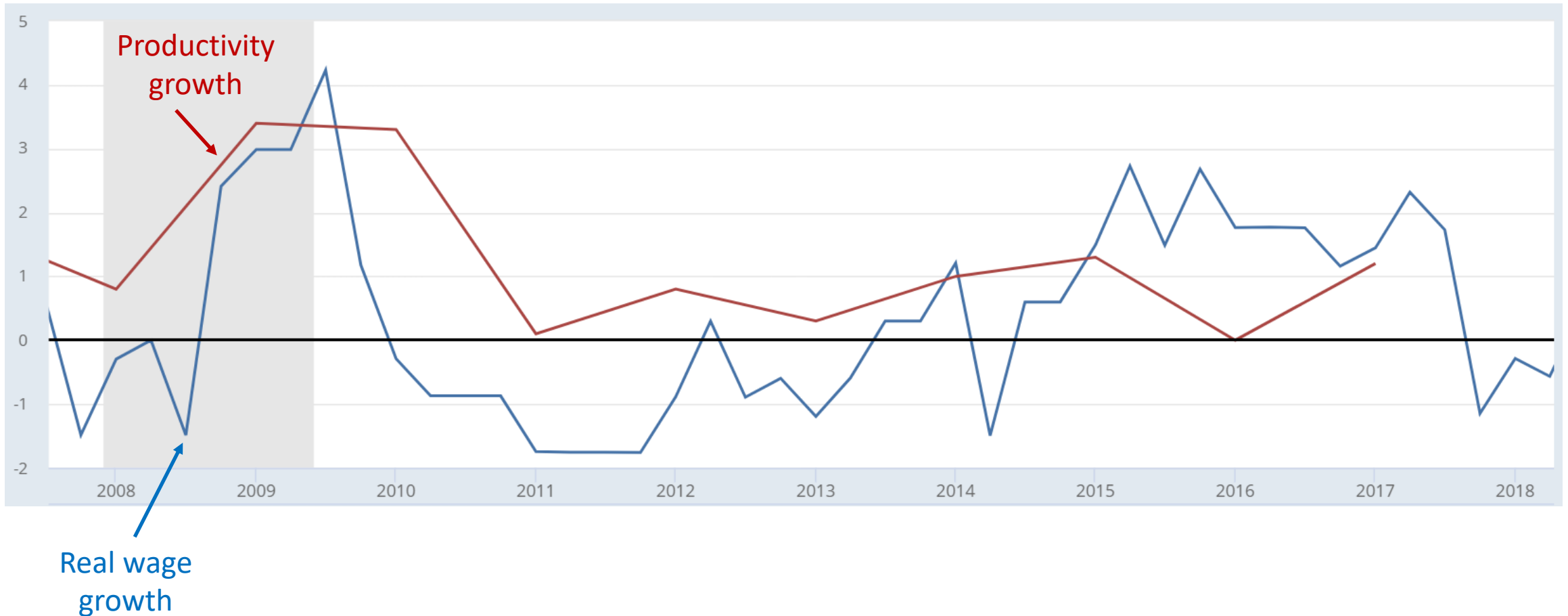
Real wage is equal to marginal product of labour

$$\frac{W_t}{P_t} = \alpha A_t L_t^{\alpha-1}$$

Unemployment rose in Great Recession $L_t \downarrow$

Real wages (adjusted for productivity) should \uparrow

But productivity \uparrow faster than real wages



Potential problems with the theory #2

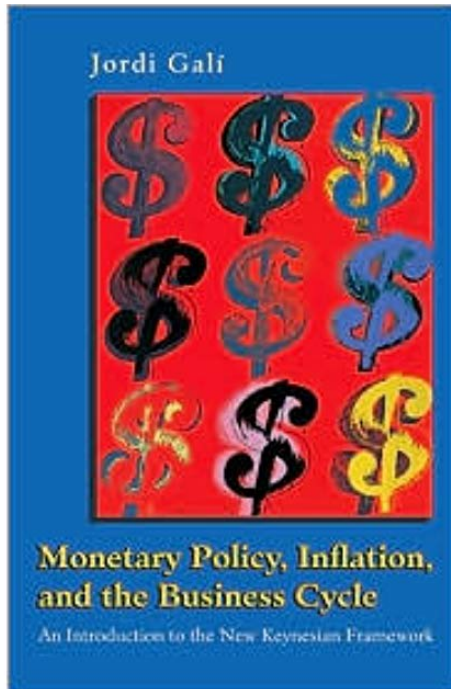
Missing deflation

- Hall (2011)
- Labour share ↓ dramatically but no deflation

Explanations

- Exogenous wage growth?
- Fiscal theory of the price level?
- Non-linearities in competitiveness?

Monetary transmission in the ~~3~~ 4 equation NK model



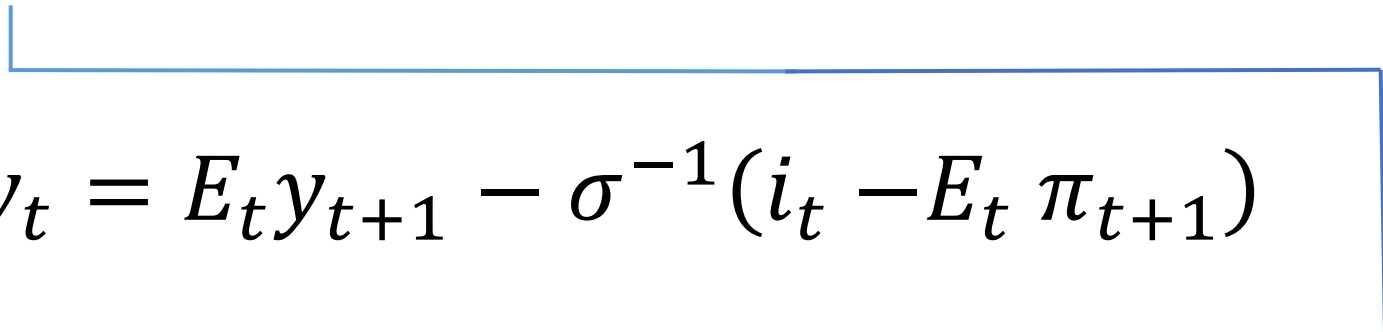
$$i_t = \max[\phi_\pi \pi_t + \phi_y y_t, 0]$$

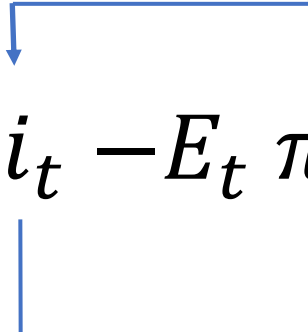
$$y_t = E_t y_{t+1} - \sigma^{-1} (i_t - E_t \pi_{t+1})$$


$$mc_t = \left(\sigma + \frac{\varphi + \alpha}{1 - \alpha} \right) y_t$$

$$\pi_t = \beta E_t \pi_{t+1} + \lambda mc_t$$

Alternative monetary transmission

$$i_t = \max[\phi_\pi \pi_t + \phi_y y_t, 0]$$


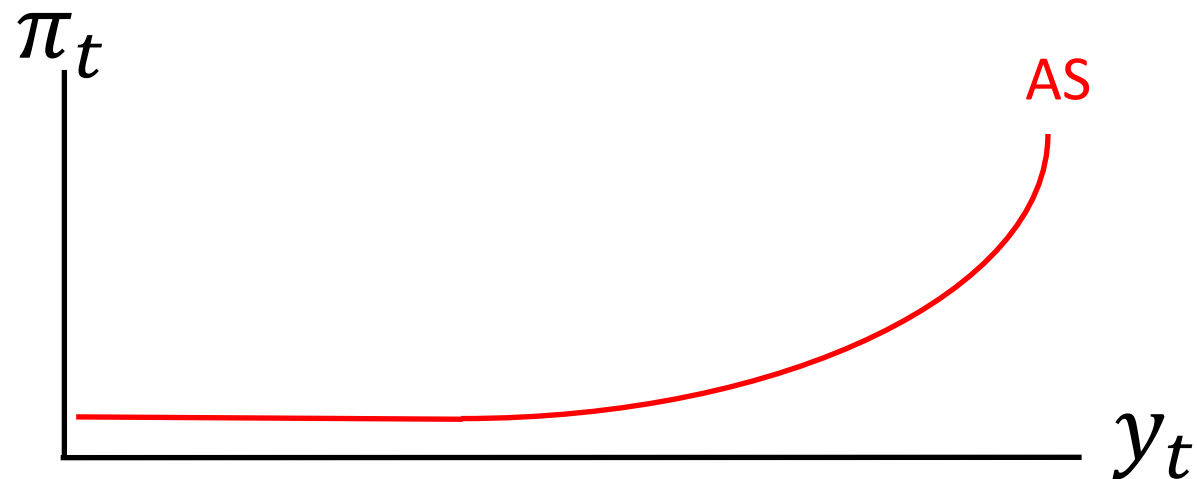
$$y_t = E_t y_{t+1} - \sigma^{-1} (i_t - E_t \pi_{t+1})$$


$$mc_t = \left(\sigma + \frac{\varphi + \alpha}{1 - \alpha} \right) y_t + \gamma (i_t - E_t \pi_{t+1})$$


$$\pi_t = \beta E_t \pi_{t+1} + \lambda mc_t$$

Missing deflation in the alternative

$$\pi_t = (\beta - \lambda\gamma)E_t\pi_{t+1} + \lambda\gamma \times \max[\phi_\pi\pi_t + \phi_y y_t, 0]$$



This is the *Real Keynesian* model of Beaudry and Portier