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

by

Gauti Eggertsson

Martin Ellison

University of Oxford, October 2018

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"

Fast stuff

- Demographics
- Inequality
- Fall in relative price investment
- Drop in productivity

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 $E_t\pi_{t+1} > 0$
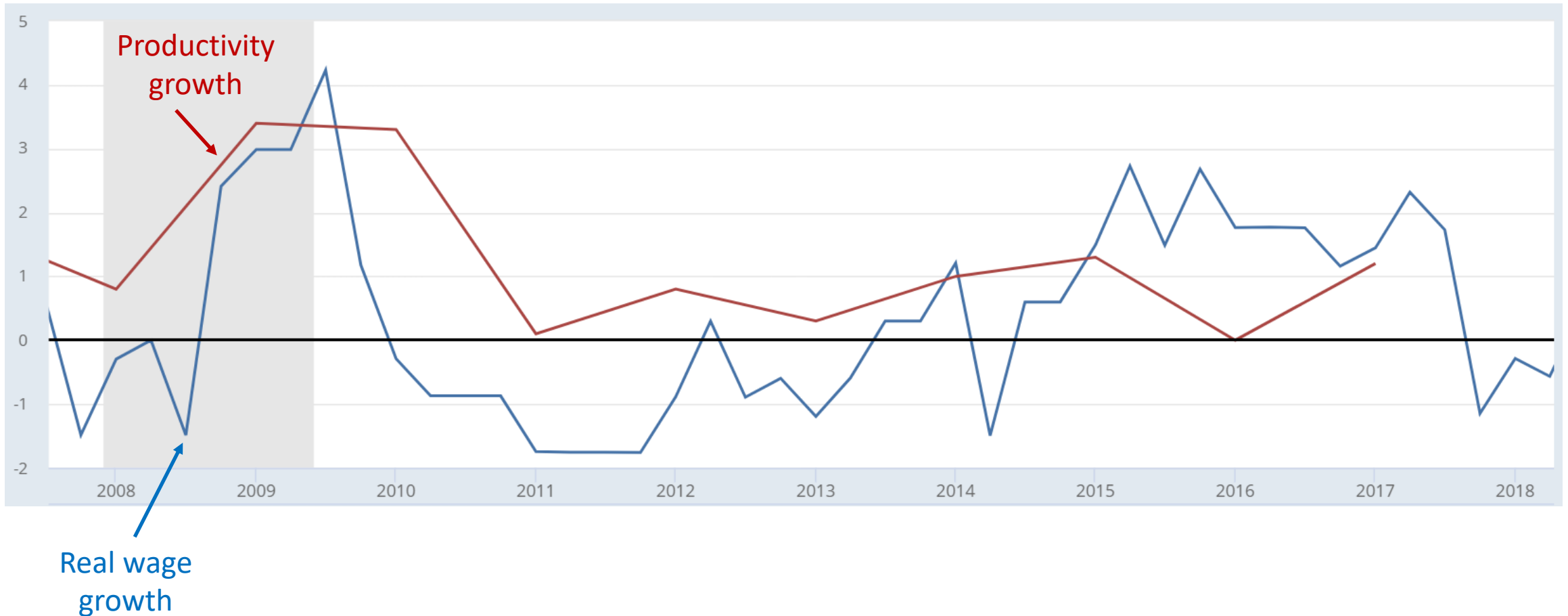
Potential problems with the theory #1

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 ↑ 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?
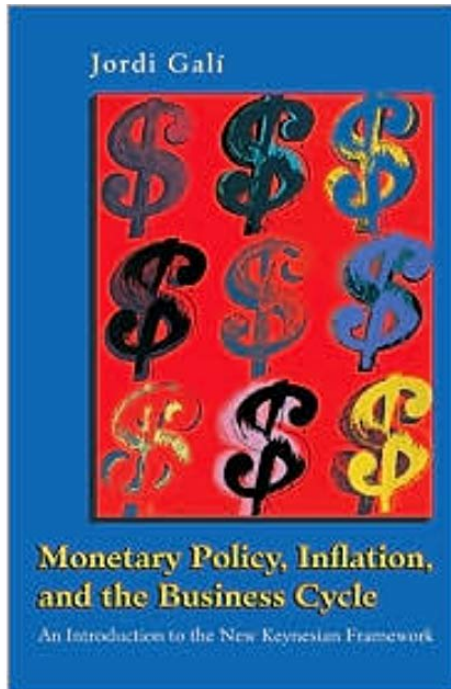- Non-linearities in competitiveness?

Monetary transmission in the ~~3~~ 4 equation NK model
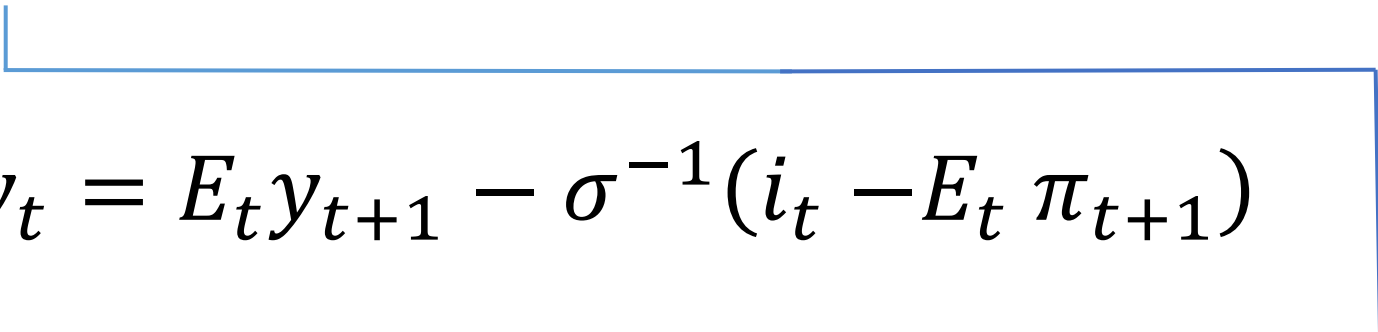
$$i_t = max[\phi_\pi \pi_t + \phi_y y_t, 0]$$
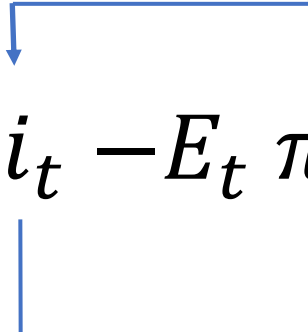
$$y_t = E_t y_{t+1} - \sigma^{-1}(i_t - E_t \pi_{t+1})$$

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

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

Jordi Gali

Monetary Policy, Inflation, and the Business Cycle

An Introduction to the New Keynesian Framework

Alternative monetary transmission

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

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

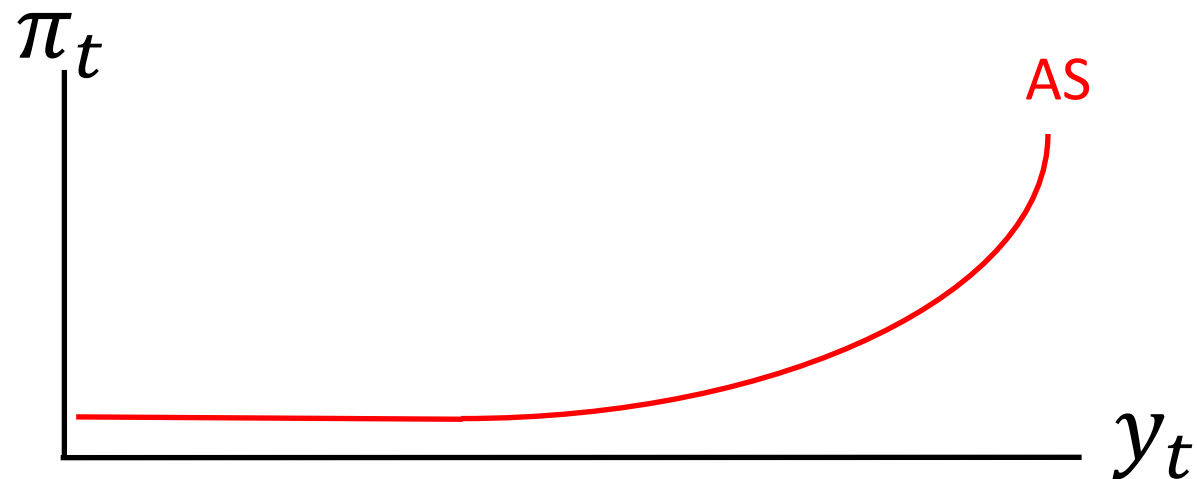$$mc_t = \left(\sigma + \frac{\varphi + \alpha}{1 - \alpha}\right) y_t + \gamma(i_t - E_t \pi_{t+1})$$

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

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