

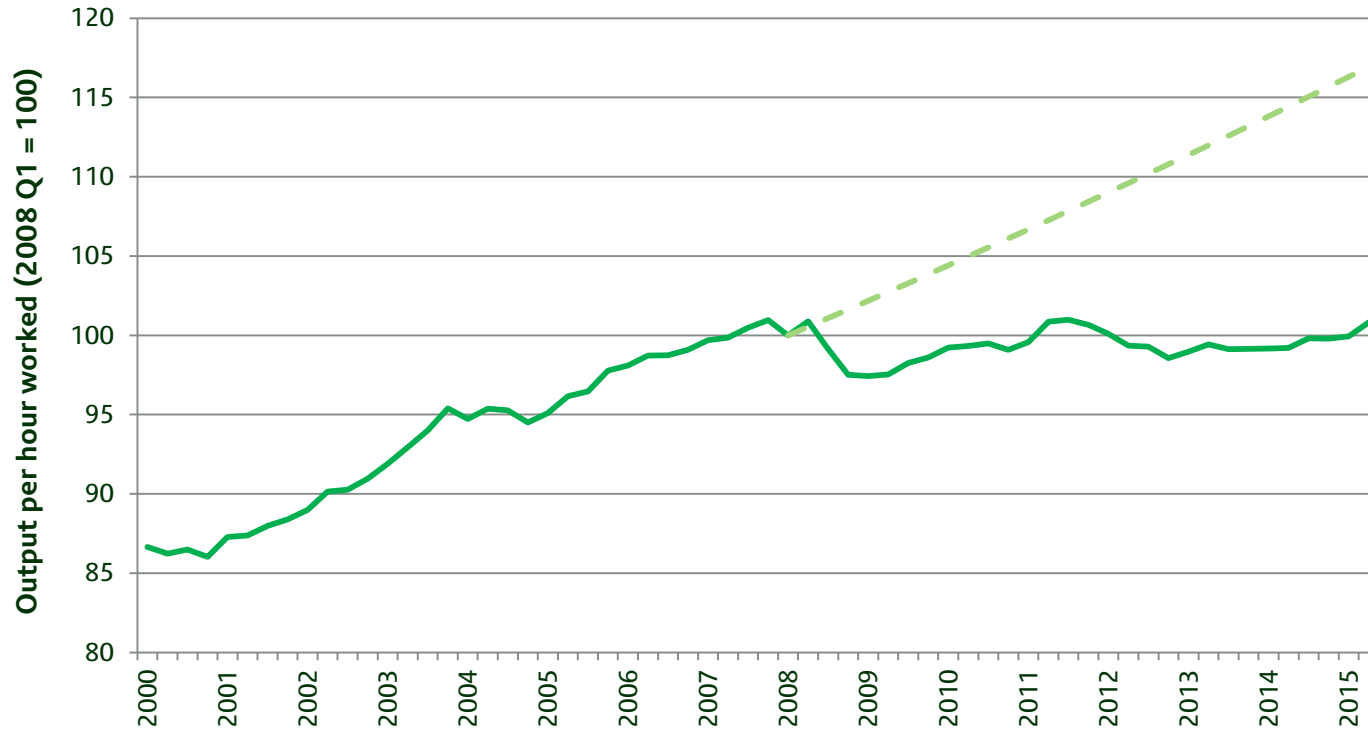


Capital allocation and productivity

Helen Miller (IFS) & Alina Barnett (BoE)



Productivity puzzle



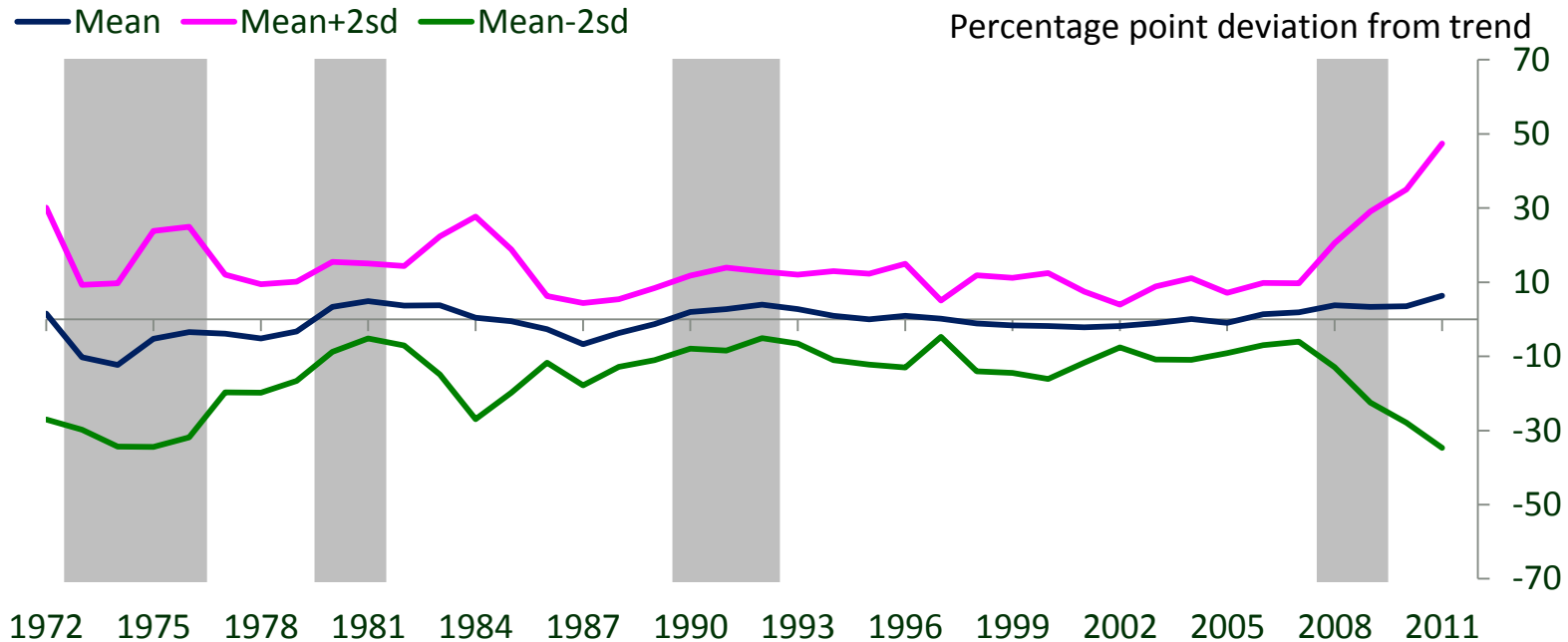
Source: Author's calculation using ONS data series ABMI and YBUS.

Dashed line shows pre-2008 trend, calculated using the average quarterly growth rate for the decade prior to 2008.

Resource allocation & productivity

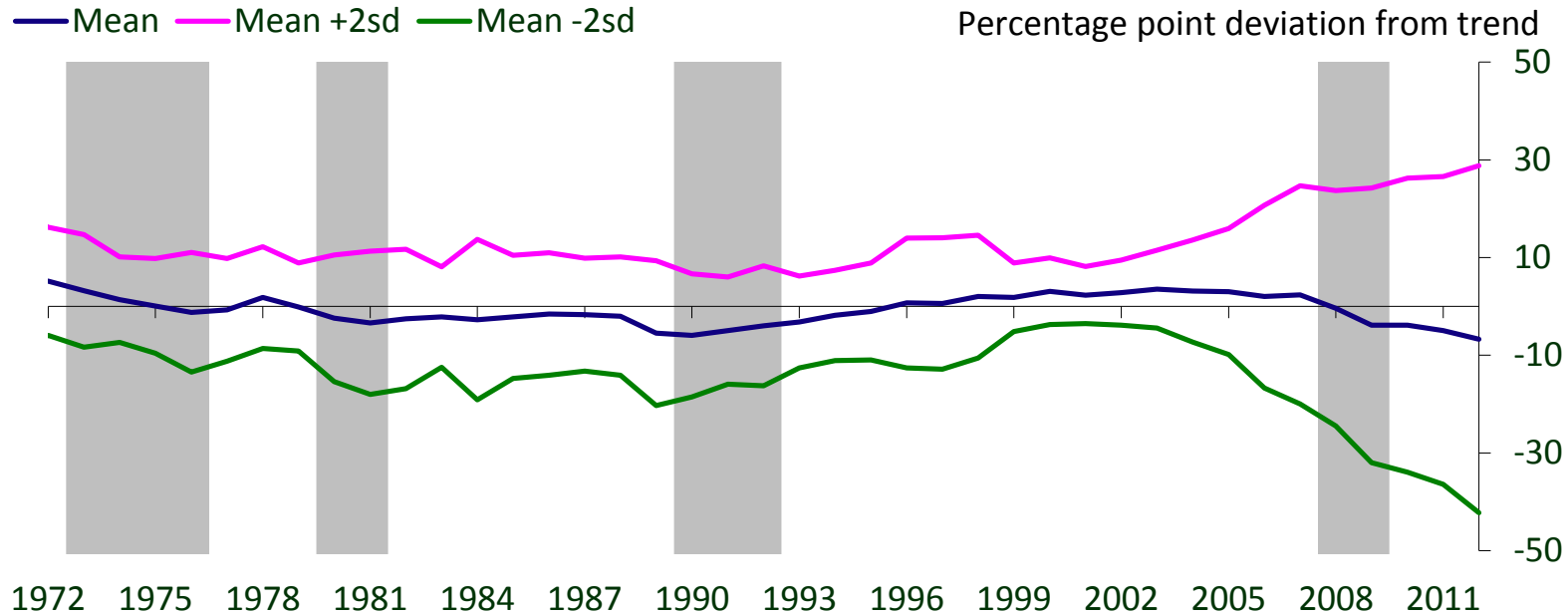
- Productivity growth comes in part from the reallocation of resources within and between firms (Disney et al. (2003) , Barnett et al. (2014))
- Uneven shocks create incentives for resources to move
- Possible impediments since the crisis:
 - financial market frictions
 - weak demand and uncertainty
- Frictions to labour and capital choices can lead to persistent dispersions in prices and output (e.g. Hsieh and Klenow (2009))

Price level dispersion across sectors



Source: Bank calculations. The mean and standard deviation are calculated across sectors for each year. Deviations from trend are based on HP filtered data between 1970-2006. Sample is whole economy. Data from ONS and EU Klems.

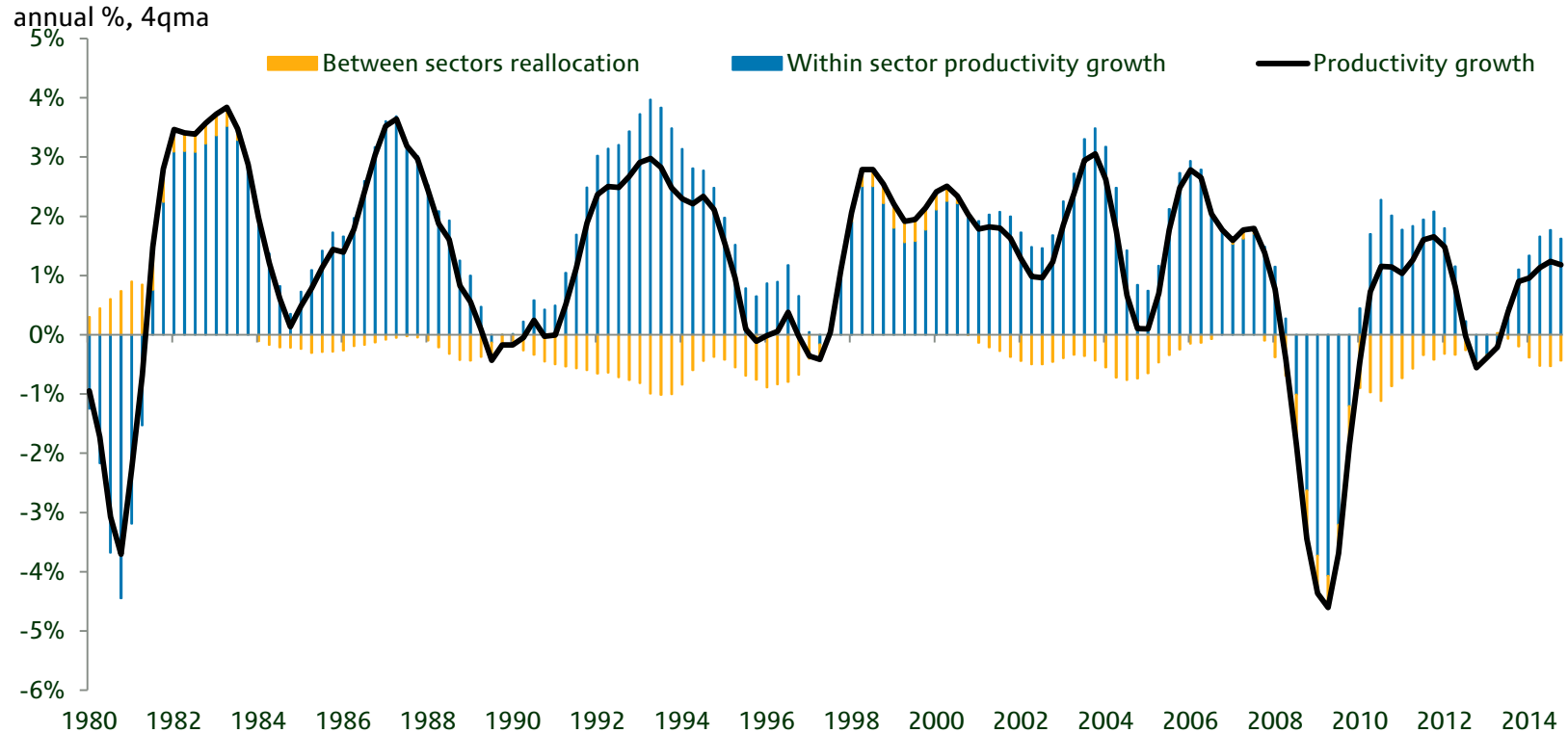
Productivity dispersion across sectors



Source: Bank calculations. The mean and standard deviation are calculated across sectors for each year.

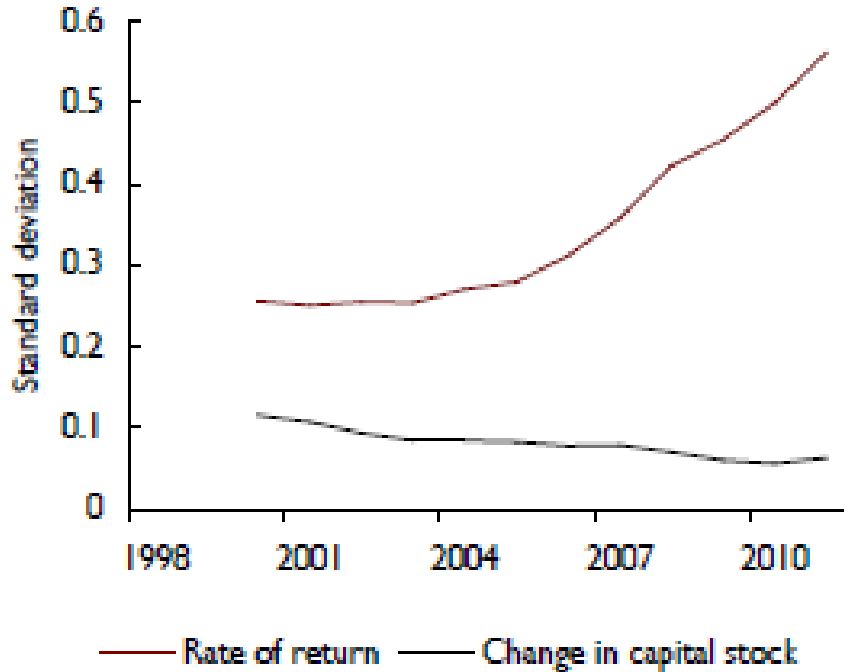
Deviations from trend are based on log-linear trends calculated between 1970-2006. Sample is whole economy excluding the energy sector. Data from ONS and EU Klems.

Productivity growth occurs within sectors



Source: Bank calculations.

Indications of misallocation at the firm level



- Dispersion of firm rates of return has increased since the crisis, that of capital has not
- Positive relationship between rate of return and investment has broken down

Source: Barnett, Broadbent, Chui, Franklin, Miller, National Institute Economic Review 228 2014

Where next?

- Measure frictions to capital allocation (ala Hsieh & Klenow 2009)
- **John Van Reenen** (LSE), *“Productivity, management and reallocation”*
- **Rebecca Riley** (NIESR and CFM), *“Productivity dynamics in the wake of the financial crisis: evidence from businesses”*
- **Chiara Criscuolo** (OECD), *“The future of productivity”*