Capital allocation and productivity

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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

Between sectors reallocation
Within sector productivity growth
Productivity growth

annual %, 4qma

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"