Output following each recession

Quarter 0 = 100

Source: figure 3.2 in chapter 3
Output and employment following each recession

Quarter 0 = 100

Quarters since the last pre-recession quarter

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Source: figure 3.2 in chapter 3
Output per worker following each recession

Real output per worker (quarter 0 = 100)

Quarters since the last pre-recession quarter

Source: figure 3.2 in chapter 3
Output per worker following each recession

Source: figure 3.2 in chapter 3

Real output per worker (quarter 0 = 100)

Quarters since the last pre-recession quarter

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Output per worker following each recession

Source: figure 3.2 in chapter 3
Labour market

• Average real wages fell by 0.7% from 2008Q1 to 2012Q3, after growing at 2.2% per year on average in the preceding decade
  – consumer wage has fallen by more

• This is also in sharp contrast to the early 80s and 90s recessions
Low real wages

Source: figure 3.7 in chapter 3
Labour market – low real wages

• Low productivity → low wage
  – firms may choose to or have to restrain wage growth

• Low wage → low productivity
  – low wages allow firms to retain more staff than they otherwise would have, when demand falls
  – low wages increase the attractiveness of labour as a form of input relative to capital
Labour market

• Some economic factors affect wages directly, and have effects on productivity only through changes to wages

  1. labour supply increased relative to previous recessions
Inactivity rates stayed low by historical standards

Source: figure 3.9 in the IFS Green Budget 2013
Labour market

• Some economic factors affect wages directly, and have effects on productivity only through changes to wages

  1) labour supply increased relative to previous recessions, due to
     – negative wealth shock \( \rightarrow \) work longer to make up for lost wealth
     – pensions reform
     – more stringent welfare polices

  2) flexible labour market \(-\rightarrow\) cut wages and hours rather than headcount
Capital markets

• Business Investment fell to 16% below pre-recession peak, which was big in comparison to previous recessions
Sharp fall in investment

Source: figure 3.11 in the IFS Green Budget 2013, “Gross fixed capital formation”
Capital markets

• Business Investment fell to 16% below pre-recession peak, which was big in comparison to previous recessions
  – gradually reduced the capital stock available to workers
  – lower quality of capital
Capital markets

• Misallocation of capital
  – demand has fallen differentially for different goods and services, and it takes time for capital to move from what are now low-productivity projects to higher-productivity projects

• Consistent with the observation of
  – higher dispersion of rates of return across sectors
  – widening distribution of firms’ productivity
  – lower exit rate than previous recessions, due to low interest rate and bank forbearance
  – low entry of new firms
Other popular explanations

• **Workforce composition**
  – more part-time and self-employment
  – but also more educated, older, and have longer job tenures on average

• **Industrial composition**
  – the aggregate fall in productivity has resulted *entirely* from falls in productivity within industries
  – productivity changes within finance and mining and quarrying could explain more than half of the aggregate fall in output per hour from 2008Q1 to 2012Q3
  – but the productivity growth also slowed down significantly within most other industries

• **Labour hoarding or under-utilization**
  – but flows into employment remained high
Public sector

- Measured public sector productivity growth has been near zero in the decade till 2009
  - measuring public sector output (value added) is difficult
  - output is calculated from inputs to various degrees across the public sector → little productivity growth
- We believe public sector productivity has increased since the recession
  - total “public sector” employment fell 6% since 2009Q4
  - while output (value added) in “government services” increased
  - puzzling because input-based output measures make it hard for measured productivity to grow
- We may be making efficiency savings, but quality and longer-term effects of public services are important as well
Summary

• Output per worker has fallen since the recession and is 12% below the historical trend
• This experience is very different to previous recessions
• We think the most important factors in explaining the productivity shortfall are:
  – low real wages
  – low investment
  – a mis-allocation of capital
• Other potential explanations found to be not crucial: labour hoarding and changes to composition of the economy and of the workforce
• Public sector productivity probably increased, but hard to judge