

Competition, Regulation and UK Productivity Performance

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Competition and Productivity Growth

- In agency-problem firms, competition speeds up technology adoption to prevent profits falling below satisficing level (Aghion et al., 1997)
- Entry threats may stimulate innovation to escape form competition based on difference between post- and pre-entry profits (Aghion et al., 2001)
- Regulation may create barriers to entry (licensing rules, start-up costs, planning restrictions etc.)

UK Evidence

- Competition is strongly positive for productivity growth in firms without a dominant shareholder (Nickell et al., 1997)
- Patenting performance of UK firms suggests an inverted U-shape relationship peaking at 20% price/cost margin (Aghion et al., 2005)
- Poor management practices are more prevalent when competition is weak (Bloom & van Reenen, 2006)

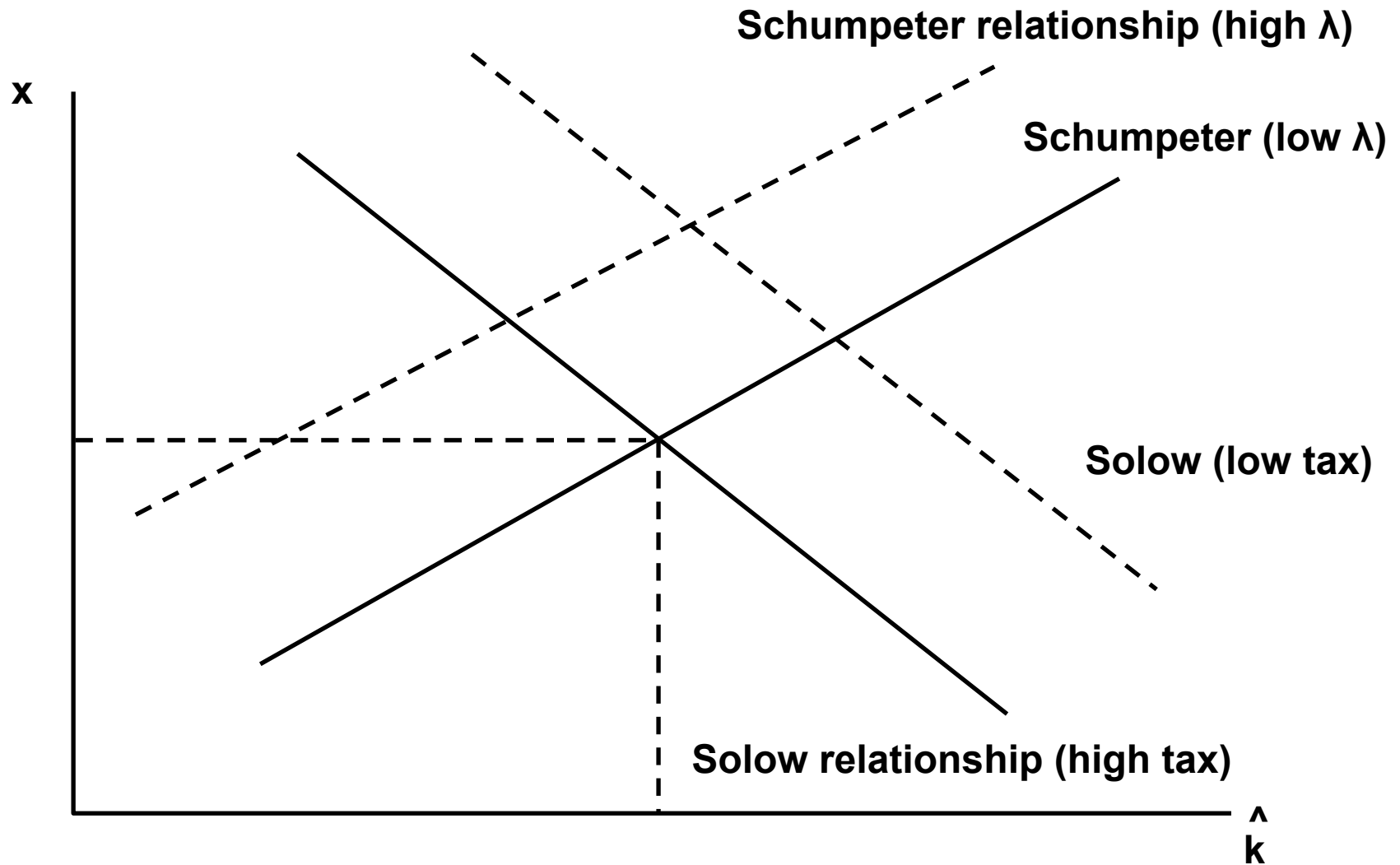
Golden Age Failure

- Weak competition notable by comparison with other countries/periods
- Reflected in price-cost margins (Crafts & Mills, 2005) and tariffs (Findlay & O'Rourke, 2006) in manufacturing
- Productivity performance in nationalized industries disappointing (Vickers & Yarrow, 1988)
- When competition was strengthened by 1956 Act productivity improved considerably in previously-collusive sectors (Symeonidis, 2004)

Regulation and Productivity

- **Compliance costs** have direct productivity implication
- Additional adverse impacts if **disincentives** to invest and to innovate
- May create **barriers to entry** that reduce competition
- Impact has not been well quantified

Figure 3: Endogenous Growth



Regulation and the Growth Rate

- If regulation is a disincentive to investment and innovation, they will be lower
- Endogenous growth models predict that TFP growth will be adversely affected
- This would be the most serious consequence of excessive regulation rather than the diversion of resources through conventional compliance costs

Measuring Regulation

- **OECD Product Market Regulation**
(Conway et al., 2005): index designed to reflect the extent to which the regulatory environment is conducive to competition including indicators of state control, barriers to entrepreneurship
- Not clear how good this index really is and the historical version is at best a proxy

Regulation as Barrier to Entry

- For example, costs of setting up new business, licensing rules, planning restrictions
- Empirical evidence of cross-country comparisons shows tighter regulation reduces entry and raises price-cost mark-ups (Cincera and Galgan, 2005; Griffith et al., 2006)
- Retailing productivity growth example of regulatory barriers having seriously adverse impact in Europe compared with US (McGuckin et al., 2005) in ICT era

Product Market Regulation (0-10)

	1998	2003
France	4.17	2.83
Germany	3.17	2.33
Italy	4.67	3.17
Spain	3.83	2.67
UK	1.83	1.50
USA	2.17	1.67

Source: Conway et al., (2005)

Product Market Regulation and Productivity Growth

- Regulation that creates barriers to entry raises mark-ups and reduces innovation, investment and productivity growth (Griffith and Harrison, 2004; Griffith et al., 2006)
- At the macro level de-regulation has been associated with better TFP growth (Nicoletti and Scarpetta, 2003)
- UK shows up relatively well on OECD measures and may have gained 0.5 percentage points in TFP growth compared with France and Germany in the 1990s
- Product market regulation is negatively correlated with the contribution of ICT-using services to aggregate productivity growth (Nicoletti & Scarpetta, 2005)

De-Regulation and Productivity Performance in UK

- Nicoletti and Scarpetta (2003) results imply UK has had small TFP growth advantage over France and Germany in recent past
- This is mirrored in decline in TFP (but not other) component of labour productivity gap
- Suggests revision to Card and Freeman (2004) conclusion

A Decomposition of UK Labour Productivity Gap (percentage points)

	France/UK	Germany/UK
1979		
Labour Productivity Gap	31	30
Labour Quality	6	5
Physical Capital	17	9
TFP	8	16
2000		
Labour Productivity Gap	21	17
Labour Quality	4	4
Physical Capital	17	12
TFP	0	1

Note: In 1979 Germany is West Germany only.

Sources: Broadberry & O'Mahony
(2006); Crafts & O'Mahony (2001)

Conclusions

- Regulation can have adverse effects on TFP growth in OECD countries
- Evidence is strongest for product market regulation that inhibits competition
- Compliance costs are not the key problem
- Greater emphasis on competition policy in the UK recently is good news