In the latest of CEP's 'big ideas' series, **John Van Reenen** sketches the evolution of the Centre's research on the drivers of productivity growth – and its impact on the design of new policies in the UK and the European Union aimed at fostering greater competition.

Big ideas

How competition improves management and productivity

CEP's mission is to understand economic performance and the key indicator of that is productivity. As Nobel laureate and long-time CEP associate Paul Krugman once quipped, 'Productivity isn't everything, but in the long run it is almost everything'.

Krugman is basically right: over the long haul, the basic determinant of material wellbeing is the growth of wages, which is determined by productivity growth. If wages start to run ahead of productivity, then the only way the economy can adjust is through either inflation or unemployment.

But what determines productivity, or the amount of output that can be produced from a given set of inputs? And can government policy do anything to raise productivity? These questions have been explored in detail by CEP researchers over the past two decades, looking in particular at the roles of competition and management.

Does competition increase productivity?

In the 1990s, Stephen Nickell led a team of CEP researchers to address the productivity question head on. Advances in information technology enabled him for the first time to be able to access and analyse accounts of many thousands of UK firms over many decades.

The first finding was a descriptive fact that has stood the test of time: there are huge differences in productivity between firms even in narrowly defined industries that last for many years. Yet the existence of persistently less efficient firms encountered in Nickell's research was hard to square with the standard economic model of perfect competition, which assumed that such inefficiency could not persist.

A different framework was needed, which required a more subtle view of imperfect competition in the way firms set prices and workers bargain for wages and conditions. Such a model provided the microeconomic foundations for CEP's influential research on the macroeconomics of unemployment and productivity (discussed in the first of our 'big ideas' series on welfare reform, published in the Spring 2008 issue of *CentrePiece*).

Nickell collaborated with CEP

researchers Sushil Wadhwani and Charlie Bean (all three would later become members of the Monetary Policy Committee) combining accounting data with their own surveys and collecting detailed information on the degree of competition in product and labour markets.

Their hunch was that tougher competition had an important role to play in explaining productivity differences. The question could not be settled theoretically as competition has ambiguous effects. Indeed, the dominant school of thought in growth theory was that competition retarded growth by depressing the profits that were the incentive to invest in research and development.

In a series of studies culminating in Nickell's highly cited 1996 article, CEP research showed that increases in competition provided a large and persistent boost to firm productivity. Competition could be increased in a number of ways: more openness to trade, lower barriers to entry and greater consumer choice. Governments had an important role to play here because strong competition policy was needed to ensure that markets remained competitive.

Left to themselves, businesses would frequently collude to avoid competition. As Adam Smith wrote in *The Wealth of Nations:* 'People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public or in some contrivance to raise prices.'

Policy influence

Conservative governments from 1979 were keen to promote competition through privatisation, labour market deregulation, lower state subsidies and reduced barriers to entry. But Prime Ministers Margaret Thatcher and John Major were more reluctant to strengthen competition policy, believing that the market would more or less look after itself.

Protecting inefficient firms from going under is a major reason for lower European productivity

As Chancellor of the Exchequer, Gordon Brown was far keener on toughening competition policy. CEP's influence was important in the 1998 Competition Act and 2002 Enterprise Act, which increased penalties for cartels, de-politicised the merger regime and increased resources available for the beefed-up competition authorities – the Competition Commission and the Office of Fair Trading.

A paper I co-authored with Nickell summarised what we knew about Britain's productivity gap, and we were both active in promoting the importance of competition to policy-makers at home and abroad (Nickell and Van Reenen, 2002). For example, I gave much evidence to support the European Union's Services Directive, which sought to open up European markets in the heavily regulated service sector.

CEP research also tried to get a better handle on *why* competition could foster productivity. In one study, we showed that competition on average promoted innovation through looking directly at over 3,000 major UK innovations since the war (Blundell et al, 1999).

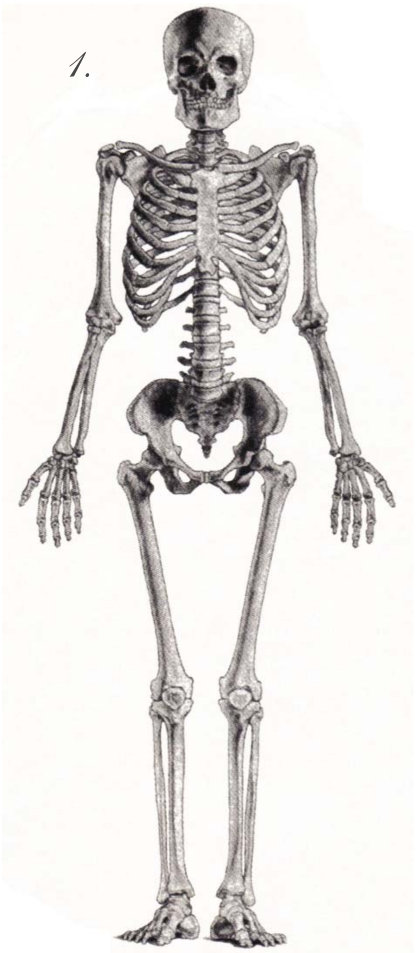
In another study, CEP psychologist Michael West and colleagues had some fascinating findings on how competitive shocks to firms are often bad news for managers but spur them into making organisational changes that improve performance. Their in-depth econometric case studies suggested that management mattered (Dawson et al, 1999).

But what about the bosses?

In the 2000s, Nicholas Bloom and I built on the insight that firms' internal organisation was the key to productivity by launching a major effort to measure management and organisation within firms (Bloom and Van Reenen, 2007).

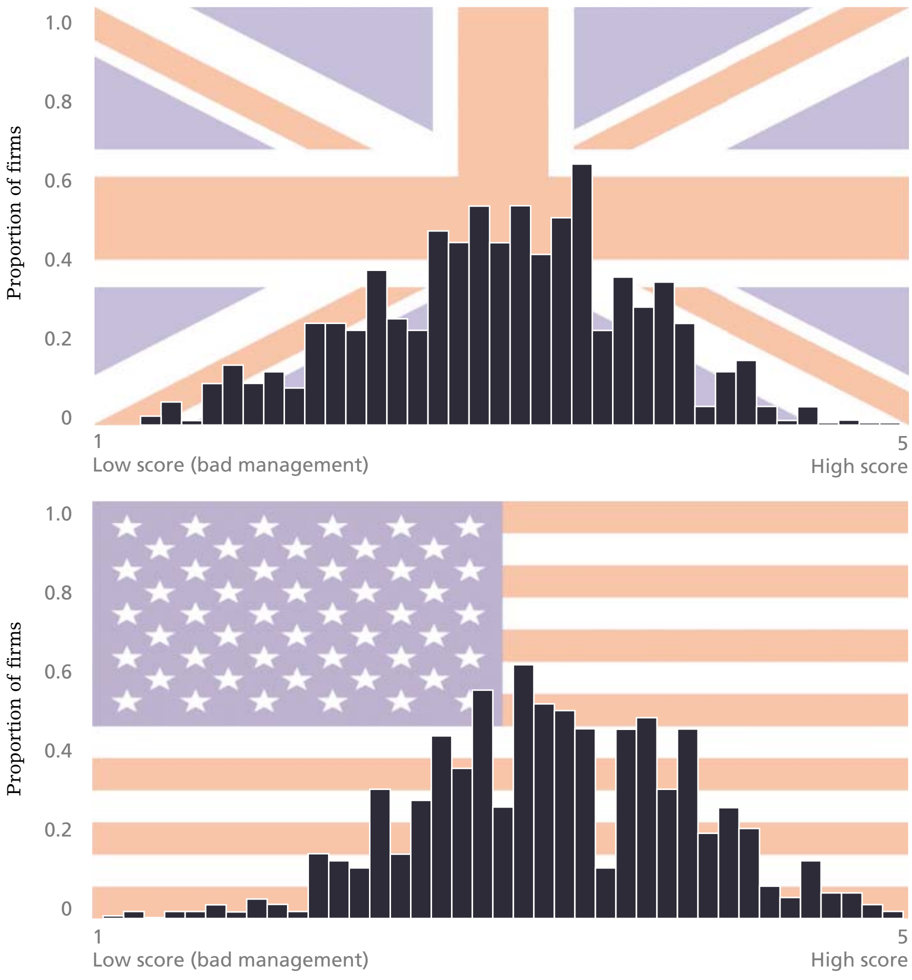
We worked with leading international management consultancies to build a scoring grid that measured management across a range of key dimensions on lean operations, monitoring, targets and people management. Our team of MBA students has now interviewed around 10,000 firms in 20 countries to get a robust picture of management around the world (see http://worldmanagementsurvey.org).

It turns out that the original intuition of the 1990s work was right: management really does matter in explaining productivity differences. And furthermore, a key factor in boosting management quality in both the private and public sectors is competitive intensity. This worked not only within firms, as Nickell emphasised, but also between firms. In other words, competition raises

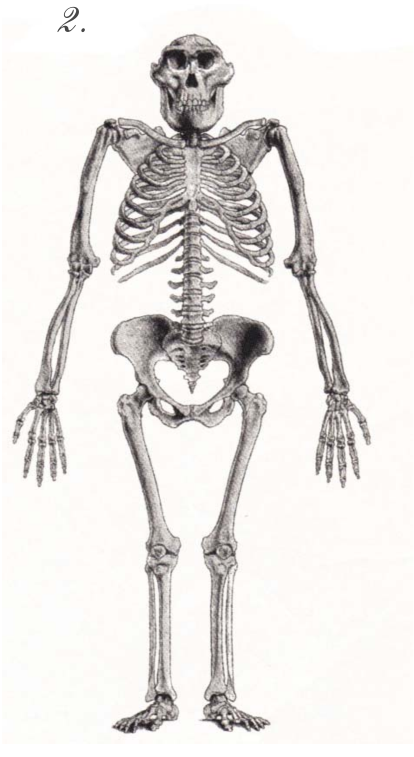


1.
Managementia
Competitivus

Figure 1:
The UK lags behind the United States in management because of a 'long tail' of badly managed firms



The quality of firms' management plays a key role in explaining productivity differences



2.
Managementia
Inefficienta
(Threatened)

average productivity in a nation through a Darwinian selection effect where the low productivity firms are driven out of the market and the high productivity firms expand (Van Reenen, 2010).

This is illustrated in Figure 1, which compares the distribution of management scores (from 1=terrible to 5=global best practice) in the United States, which is the highest scoring nation, to the UK. The main reason for the UK's lower score is not that every US firm is better than all UK firms, but rather that we have a 'long tail' of very badly managed firms.

This management analysis has influenced many policy-makers. For example, after presenting it to the European Commission's President Barroso, I helped to advise on redrafting the rules for state aid. Protecting inefficient firms from going under is a major reason for lower European productivity. The direction of policy is to make space for the more efficient firms to grow and prosper.

Conclusions

Two decades of CEP research on the impact of competition on productivity reveal many lessons for policy. First, a focus on collecting and analysing data is better than just theorising. A policy-maker will be much more influenced by some solid facts than an abstract theory.

Second, guarding and enforcing competition will not happen automatically in markets but requires vigilance from governments in many policy areas. Often raising productivity is better accomplished by taking away barriers to competition (for example, by reforming regulations on planning) than simply spending more money on government schemes. This should be some crumb of comfort to policy-makers in an age of budget austerity.

John Van Reenen is director of CEP.

Further reading

Nicholas Bloom and John Van Reenen (2007) 'Measuring and Explaining Management Practices Across Firms and Nations', *Quarterly Journal of Economics* 122(4): 1351-408 (http://cep.lse.ac.uk/pubs/download/dp0716.pdf)

Richard Blundell, Rachel Griffith and John Van Reenen (1999) 'Market Share, Market Value and Innovation: Evidence from British Manufacturing Firms', *Review of Economic Studies* 66(3): 529-54 (http://cep.lse.ac.uk/textonly/people/vanreenen/papers/marketshare.pdf)

Jeremy Dawson, Stephen Nickell, Michael Patterson and Michael West (1999) 'The Effectiveness of Top Management Groups in Manufacturing Organisations', CEP Discussion Paper No. 436 (http://cep.lse.ac.uk/pubs/download/DP0436.pdf)

Stephen Nickell (1996) 'Competition and Corporate Performance', *Journal of Political Economy* 104: 724-46

Stephen Nickell and John Van Reenen (2002) 'Technological Innovation and Economic Performance in the United Kingdom', in Richard Nelson, Benn Steil and David Victor (eds) *Technological Innovation and Economic Performance* (http://cep.lse.ac.uk/pubs/download/dp0488.pdf)

John Van Reenen (2010) 'Does Competition Raise Productivity through Improving Management Practices?', CEP Discussion Paper No. 1036 (http://cep.lse.ac.uk/pubs/download/dp1036.pdf)

Competition will not happen automatically in markets but requires vigilance from governments in many policy areas