

DINNER/DISCUSSION SUMMARY

The UK Productivity Gap

Held at The Royal Society on Wednesday 23rd March, 2005

We are grateful to the following for support for this meeting:

The Gatsby Foundation
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Chair: **The Rt Hon the Lord Jenkin of Roding**
Chairman, The Foundation for Science and Technology

Speakers: **Professor Vicky Pryce**
Chief Economic Adviser and Director General, Economics, DTI
Professor Jonathan Haskel
Head, Department of Economics, Queen Mary, University of London
Professor John Van Reenen
Centre for Economic Performance, London School of Economics

The invited speakers had looked at productivity in the UK economy, as compared with that of its competitors, by reference to a number of measures. In discussion it was observed that there were substantial differences between sectors, with productivity high in the defence and electronics industries, for example, and low in the service sector as compared to manufacturing. Productivity was also low in the UK service sector by international standards, population being a factor. The growth of productivity in the retail sector in the US was unmatched elsewhere, and it was suggested that planning laws were relevant to this. Comparisons between similar firms in different countries suggested that workforce skills were also significant.

There were different views on how big an impact the large domestic market had on productivity in the US. One speaker argued that, while this might matter for retailing, it was less important for manufacturing because production was for the world market.

One problem in assessing productivity was measuring output. If this were done by reference to the value rather than the quantity of what was produced it was necessary to allow for products being priced differently for different markets. Prices of electronic goods on the global market, for example, were fairly standard, but there were big differences in prices for goods produced for domestic markets. Another problem was how to measure productivity in a service economy. The tendency had been to measure it as a residual, but the current approach was to look at value added

in each sector and so generate proxies for productivity.

It was argued that the globalisation of production made international comparisons of productivity harder. The automotive and defence industries, for example, decided where they wanted to locate production, and the productivity of their workforce depended on local conditions. In Germany, for instance, employees did what they were told, in the UK they argued. The costs of land and construction were also a major constraint in the UK, particularly in the retail sector where big supermarkets were at an advantage. One speaker had worked in a multinational company where it was never clear whether the real competition was from other firms or from their own company's subsidiaries in other countries. Another had tried to build a business in microbiological products in Canada, unsuccessfully in the face of competition from American companies benefiting from cheaper raw materials and energy and a patent law which was deliberately favourable to American businesses.

The effects of globalisation were not straightforward. In the long run the development of manufacturing in the Far East was likely to mean a shift in the market, as the Chinese, for example, became buyers as well as makers of cars. In the short term they had the benefit of low wage costs, but it still cost more to build a car in China than in the UK because of a lack of component manufacturers and the costs of transporting components. Manufacturing components in different countries carried another cost - that of dealing with a multiplicity of governments. Another speaker warned

against exaggerating the importance of the international movement of capital. Local markets mattered, even for high-tech industries.

It was noted that research and development in the UK attracted a lot of overseas investment, notably from the US and Japan. By contrast, the UK was recognised as weak in exploiting R & D. Some speakers wondered whether this was because venture capitalists in the UK looked for rapid returns. The lack of patient money was seen as explaining the difficulty in exploiting government-funded research. A desire for quick rewards was also suggested as a reason why firms lost skills. They would get consultants in to review a process, save a few posts and make the people redundant to save money, even though this meant losing expertise. Chief executives also seemed not to be expected to stay for more than a couple of years, and the returns on their salaries would be worth investigating.

One participant thought that the returns on investment in R & D were rather overstated. Most research and development in the UK was done by large sophisticated firms with access to international capital. It was different in the US, where there was a rich interaction between venture capital and high-tech business.

The response to tax credits for R & D had been limited so far, though it was still early days. One problem, it was suggested, was that the City insisted on looking at profits before tax.

The reliability of official statistics on R & D spending by companies was questioned. One speaker recalled working in a computer services company which did no research or development but claimed credit for a proportion of the expenditure of the larger group to which it belonged.

A speaker deplored a lack of connection between industry and university-based research, attributing this to the Research Assessment Exercise. This rewarded publication in peer-reviewed science journals but did not encourage applied research. Another speaker, however, defended the RAE system on the ground that it had driven up standards and helped UK universities attract the best students from overseas. American universities had traditionally done that, to the benefit of the economy because many of the best students from overseas stayed on. Another view was that in the US innovation worked from the bottom up, American faculty walls being more permeable than in the UK. Deals were set up by faculty members, not technology transfer officers.

There was concern over the decline in the training and recruitment of engineers, given the evidence

for their contribution to growth. It was suggested that the profession needed to think what industry wanted from it. Accountants and consultants were often found to have trained as engineers but moved out because it paid badly,¹ and it was said to be a good idea to hire a BMW for an engineer going to a school to give a careers talk.

Growth in the US was seen as associated with the polarisation of salaries, with people earning either a lot or not enough. Similarly some speakers were concerned about the polarisation of education in the UK. It was argued that the Government was preoccupied with academic excellence and inclined to neglect the middle. The level of functional illiteracy in the UK was alarming. The German apprenticeship system was one solution, but the UK seemed to be moving toward the American focus on the university sector.

The debate concluded with a plea for better communication between the scientific and financial establishments. A speaker had been involved in a project designed to encourage the civil exploitation of defence research, much of which did not need to be classified and was to be made available at a nominal charge for the intellectual property rights. An approach to the City only persuaded eight large institutions each to contribute the equivalent of a large domestic mortgage, and the venture collapsed when the investors pulled out because it was not making money fast enough. The speaker diagnosed short termism.

Jeff Gill

Related Web Links:

The Economic and Social Research Council has funded a wide range of research on this topic

www.esrc.ac.uk/ESRCContent/downloaddocs/UK_Productivity.pdf

DTI Reports on Innovation

www.dti.gov.uk/economics/economics_paper7.pdf

www.dti.gov.uk/innovationreport/innovation-report-full.pdf

Jonathan Haskel

www.qmw.ac.uk/~ugte153

John Van Reenen

<http://cep.lse.ac.uk/people/bio.asp?id=1358>

The Foundation for Science and Technology

Tel: 020 7321 2220

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¹ For a definitive report on salary comparison see - www.rsc.org/pdf/policy/PWCreport05.pdf for the RSC and IoP by PricewaterhouseCoopers published in January looks at the salary profiles of engineers and scientists compared to other disciplines.