

UK Workshop of the Global Forum on Productivity

HM Treasury, 14th October 2016, London

Summary Record

The workshop's main theme was "practical actions governments can take to improve productivity, in particular by looking inside businesses/organisations and making better use of data". Representatives from Canada, Costa Rica, Denmark, Finland, Germany, Hungary, Ireland, Italy, Latvia, Luxembourg, Mexico, Norway, Portugal, Spain, Turkey, the UK and the OECD participated in the workshop.

The workshop was briefly introduced by *Jenny Bates* (Chief Economist & Director of Analysis, Department for Business, Energy and Industrial Strategy) and *Jean-Luc Schneider* (Deputy-Director at the OECD Economics Department).

The workshop was divided in 4 sessions with 2-3 speakers each and general discussion.

The **first session** was devoted to "looking inside the world of work".

- Tera Allas (Visiting Fellow at McKinsey Global Institute) reported on work aimed at providing business with support, including an online tool ("How Good Is Your Business Really?"), to compare their management practices and productivity with that of their peers and to provide practical advice no how to improve. The tool was inspired by the observation of increasing dispersion of productivity levels across firms, with a persisting fat tail of low productivity firms; and the established literature around management practices, which suggests that improving productivity is not 'rocket science', but does require management to focus on it. The tool, and the supporting framework around it, are aimed at highlighting to businesses the scope for improvement and signposting them towards best industry practices.
- Harriet Robinson (Assistant Economist at Office for National Statistics, UK) described an
 ongoing project by ONS that applies the Bloom et al. (2013) "Management in America"
 methodology to evaluate management practices of the UK businesses. Results suggested
 that the prevalence of more structured practices is lowest in small, domestic and familyowned and managed firms, while it is highest in large, non-family managed firms and MNEs.
 Results also pointed to a strong correlation between management scores and productivity at
 the industry level.
- Tony Moody (Head of Enterprise Analysis at Department for Business, Energy and Industrial Strategy, UK) discussed ways to evaluate government programmes aimed at helping SMEs to improve their management practices so as to improve their growth performance. He noted that SMEs represented 99.9% of British firms and that according to some estimates poor management practices could explain up to one quarter of the productivity gap between the US and the UK. However he pointed at two main challenges for public policy aimed at supporting management practices: how to identify the firms that deserve to be helped (i.e.

those that have a potential to grow strongly)? And how to evaluate the winning policies? He reported results from the use of randomised controlled trials and argued in favour of putting the focus on the effects of specific areas of policy, possibly in a hierarchical way (i.e. analyse first those policies that whose success is a precondition for other policies to be effective). He illustrated more specifically the assessment of the UK Growth Voucher programme (in which a subsidy was provided to firms for acquiring external strategic advice) highlighting the results and the pitfalls of this kind of ex post policy evaluation.

The general discussion questioned the functioning of market mechanisms: why weren't competitive pressures sufficient to improve management practices? Was it an issue related to lack of competition (which was deemed unlikely in a country like the UK where available competition indicators suggest that these pressures are strong), lack of managerial skills or cultural factors (e.g. weak ambition)? And why are low productivity firms surviving? What is wrong with exit mechanisms? Are economists under-evaluating the extent of market imperfections?

The **second session** focused on "the impact of skills on growth".

- Daniel Arnold (Postdoctoral Researcher at Centre for European Economic Research (ZEW), Germany) reported the results of a study exploiting a large survey-based German micro data set to explore the extent and the effects on performance of skill shortages at the firm level. The study pointed to a strong increase of staff shortages and difficulties in finding specialised personnel since 2004. It also found that productivity in firms facing severe skill shortages was on average 3% lower than in other firms. The project also examined several ways in which firms might react to such shortages: develop skills internally, increase their attractiveness on the labour market and substitute labour with capital.
- Frank Bowley (Department for Education, UK) described some results of the LEO project that crosses different sources of individual administrative information available to governments (notably matching education history and revenues from fiscal records) to produce population-wide longitudinal data for use in policy making. He showed how the data were used to verify how individuals would fare in the labour market (or in further education) after completion of their studies. He also showed how education institutions could be classified according to their ability to successfully "place" individuals in the labour market or ensure a successful continuation in upper-level studies. In turn, these findings and rankings could be used to guide policies aimed at providing the right incentives to subsidised education institutions (e.g. via better accountability and more selective inspections) and better informing the decisions of individuals.

The general discussion focused on the definition of skill shortages and, again, wondered why market mechanisms were not ensuring the appropriate generation and allocation of skills. It was pointed out that skill shortages could be interpreted as a way to discriminate between more and less efficient firms, with the less efficient possibly facing more shortages. Also, it was stressed that a distinction should be made between skill shortages and skill mismatch, which seemed to be a much wider phenomenon in OECD countries bearing down on productivity outcomes.

The **third session** examined how "to fill the gaps in the measurement of the economy".

- Rebecca Riley (Associate Research Director at NIESR, UK) described work aimed at replicating the Corrado et al. macro approach to measuring intangible investment relying on firm level data. Based on data from an ONS survey, she showed that by means of reasonable assumptions (to estimate investment in intangibles and convert the flows into capital stocks) this bottom up approach could yield results that reproduced the main stylised facts uncovered by the macro data: intangible investment has been higher than tangible investment in skill-intensive industries; intangible investment has been higher in skill-intensive than in low-tech industries; it has shown more resilience to the crisis than tangible investment. The firm-level data could be used to estimate production functions that include (different kinds of) intangibles as separate input(s). The resulting estimates for the UK are in line with priors, such as e.g. intangibles mostly affect output in information-intensive industries and there is complementarity between organisational and IT capital in high tech industries.
- Jennifer Ribarsky (Head of Annual National Accounts, PPPs and Prices at the OECD) noted that the some attributed part of the productivity slowdown to mismeasurement and discussed the extent to which the SNA should be adjusted to properly reflect the rise in intangible investment and non-standard work practices. She concluded that, while the SNA framework was still flexible enough to accommodate market and technological developments, measurement had to be improved in a number of areas, including especially financial services, cross-border transactions of intangible products and quality changes. She saw the rise in the occasionally self-employed as not so much of a problem for GDP as for MFP measurement.
- Alessandro Modica (Ministry of the Economy, Italy) reported on a study aimed at estimating
 the effects of different kinds of tax instruments on investment behaviour. He presented
 estimates relating the user cost of capital to investment based on firm-level and fiscal data,
 in which the user cost would depend on marginal effective tax rates faced by investors. The
 findings were in line with expectations and could be used to inform corporate taxation
 policy.

The following discussion focused mostly on the analysis and role of intangibles. Questions were asked as to the possibility to (a) extend the firm-level measures of intangibles to the spatial dimension so as to account for regional differences in productivity; (b) correlate the estimated investment in organisational capital to management scores; and (c) extend coverage to overcome the possible limitations of the analysis due to the under-reporting of smaller firms. Finally, it was noted that both the measured and unmeasured parts of intangible investment were likely to have played a relatively small role in the context of the productivity slowdown.

The **last session** was devoted to the "practical use of microdata to inform policy".

Chris Jenkins (Economics Director at Competition and Markets Authority, UK) presented
market structure indicators based on British firm-level data (including Herfindhal, leader
market share volatility, churn and market segmentation indices) aimed at measuring the

degree of competitive pressures in various markets. He noted that the indicators were consistent with priors but had to be used in a complementary way with other metrics. After discussing their pros and cons, he noted that these indicators generally do not correlate well with simple measures of labour productivity. However, this is likely to reflect the limitations of the relative productivity indictors, which might be improved on by considering TFP measures and/or international comparisons.

- Juan Rebolledo (Director General de Productividad Económica at Secretaría de Hacienda y Crédito Público, Mexico) noted that productivity in Mexico was low and growing slowly, with high dispersion across firms and huge regional differences (e.g. firms on the Northern border are estimated to be 2.5 times more productive than in other parts of the country) and a likely serious misallocation of resources. He then described an ongoing large scale survey of management practices in Mexican firms. He showed preliminary results suggesting that management approaches were particularly weak in businesses that were family-owned (and managed), relatively small, did not export and had low human capital. Completion of the survey was deemed extremely useful for formulating policies aimed at improving aggregate productivity.
- **Silvia Santos** (Ministry of Finance, Portugal) reported results of a study assessing the effects of structural reforms on Portuguese labour and multifactor productivity growth. In keeping with the OECD approach, the study distinguished between frontier and non-frontier firms. She concluded that if one took into due account implementation and other lags the effects of reforms had been positive as expected, directly affecting frontier firms and indirectly non-frontier ones via an acceleration of catch up.

In the discussion, it was suggested that competition indicators should be related to multifactor rather than labour productivity to capture the effects on innovation. It was also noticed that many of the competition indicators had only a weak relationship with actual competitive pressures (a more convincing indicator of the latter would be price-cost margins). Some wondered whether the Mexican data could also be used to gauge the spillover effects of FDI on domestic companies. Finally, the question was raised as to whether weakly productivity firms should be encouraged to exit markets or assisted by public policies to fix their structural problems (lack of human capital, failure to integrate into global value chains and weaknesses in innovation were quoted as issues that are pervasive in some Mexican regions).

The workshop was concluded by *Jenny Bates* who stressed the prominence of the productivity issue, the importance of micro data for designing and assessing productivity-enhancing policies and the value of exchanges of information, analysis and experiences among countries in the context of the Global Forum on Productivity.

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