# Management and productivity in the public sector

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Recent empirical advances have shed light on how management practices and leadership styles impact organisational productivity.

There are opportunities and challenges for future research in new areas of the public sector.

The potential for generating new data and experimental policy design should be explored.

### Tackling the measurement challenge

We need to understand the drivers of public sector productivity in order to improve it. But understanding the relationships between management, leadership and productivity in the public sector is challenging for a number of reasons. First, there is the issue of how to measure management or leadership in a consistent and comparable way, both within and across sectors.

Second, there are well known challenges in measuring productivity in the public sector,<sup>1</sup> which covers a diverse set of services and where outputs are often complex to define, linked to broad social objectives and lack market prices. Context-specific measures of productivity therefore need to be defined. Third, even with good data, there are challenges in establishing causal relationships between management or leadership and productivity. And finally, once we know what "good" looks like, there are questions about what types of government programmes could help achieve it.

### Management practices and organisational performance

The World Management Survey (WMS), originally applied in the manufacturing sector<sup>2</sup> has now been conducted worldwide in retail, schools, hospitals, universities, and the civil service.

The survey is conducted over the phone with open-ended questions that are subsequently scored. It measures the adoption of best practice in performance monitoring, target setting, and incentives. For example, a well-managed organisation is effective at rewarding high performing employees by tying promotion and rewards to some measure of effort and ability, rather than tenure or personal connections. The focus is on operational practices, rather than strategic management, as these are more objective by nature, and less likely to be context specific.

National statistical offices (including the ONS) have started integrating "closed ended" questions on management practices in business surveys. These are

<sup>&</sup>lt;sup>1</sup> Foxton, F., Grice, J., Heys, R. and Lewis, J. (2019). The Welfare Implications of Public Goods: Lessons from 10 years of Atkinson in the UK, ESCOE Discussion Paper

<sup>&</sup>lt;sup>2</sup> Bloom, N. and Van Reenen, J. (2007). Measuring and Explaining Management Practices Across Firms and Countries, The Quarterly Journal of Economics.

cheaper to collect than telephone surveys, but can be less informative.<sup>3</sup>

Across different settings, higher management scores have consistently been found to be positively and strongly associated with measures of organisational performance, and a number of studies provide evidence that the relationships are causal.<sup>4</sup>

In education, better management practices are associated with better educational outcomes for students in schools<sup>5</sup>, better teaching and research assessments in universities,<sup>6</sup> and higher Ofsted scores in further education colleges.<sup>7</sup> A randomised control trial in schools has shown that offering management training to principals raises student achievement.<sup>8</sup>

Better managed hospitals also have higher levels of clinical performance (proxied by outcomes such as survival rates from emergency heart attacks).<sup>9</sup> In the NHS, management practices are associated with lower mortality rates, infection rates, waiting lists and higher hospital ratings.<sup>10</sup>

Given that management practices appear to drive organisational performance, why aren't all organisations adopting best practice?

A number of factors matter, including informational or market frictions, and the skills of both managers and workers.<sup>11</sup> In hospitals, combined medical and business qualifications seem to be important.

While we expect leaders to have significant influence over the management practices in their organisations, these measures will not capture differences in leadership style or strategic management.

## The impact of leaders on organisational performance

A number of studies consider the extent to which leaders themselves have an effect on performance. A popular approach is to track leaders over time as they move between organisations, studying their impacts as they do.<sup>12</sup> In firms, individual CEOs matter for firm policies and performance, as do some of their characteristics (like having an MBA). This type of method has been applied in public

<sup>&</sup>lt;sup>3</sup> Bloom, N., Lemos, R., Sadun, R., Scur, D. and Van Reenen, J. (2016). International Data on Measuring Management Practices, AER Papers & Proceedings. Bloom, N., Brynjolfsson, E., Foster, L., Jarmin, R., Patnaik, M., Saporta-Eksten, I. and Van Reenen, J. (2019). What drives differences in management? American Economic Review.

<sup>&</sup>lt;sup>4</sup> See for example: Bloom, N., Eifert, B., Mahajan, A., McKenzie, D. and Roberts, J. (2013). Does Management Matter? Evidence from India, The Quarterly Journal of Economics.

<sup>&</sup>lt;sup>5</sup> Bloom, N., Lemos, R., Sadun, R. and Van Reenen, J. (2014). Does Management Matter in Schools? Economic Journal.

<sup>&</sup>lt;sup>6</sup> McCormack, J., Propper, C., and Smith, S. (2013). Herding Cats? Management and University Performance, The Economic Journal.

 <sup>&</sup>lt;sup>7</sup> McNally, S., Schmidt-Rivera, L. and Valero, A., Management Practices in FE Colleges, LSE Mimeo.
<sup>8</sup> Fryer, R. J., (2017), Management and Student Achievement: Evidence from a Randomised Field Experiment, Working Paper

<sup>&</sup>lt;sup>9</sup> Bloom, N., Sadun, R., Lemos, R. and Van Reenen, J. (2020). Healthy Business? Managerial Education and

Management in Healthcare, The Review of Economics and Statistics.

<sup>&</sup>lt;sup>10</sup> Bloom, N., Propper, C., Seiler, S. and Van Reenen, J. (2015). The Impact of Competition on Management Quality: Evidence from Public Hospitals, The Review of Economic Studies.

<sup>&</sup>lt;sup>11</sup> Feng, A. and Valero, A. (2020), Skill Biased Management: Evidence from Manufacturing Firms, The Economic Journal.

<sup>&</sup>lt;sup>12</sup> Bertrand, M. & Schoar, A. (2003). Managing with style: The effect of managers on firm

Policies, The Quarterly Journal of Economics.

sector settings and results vary by context.

In UK hospitals, evidence suggests the movement of CEOs does not affect performance.<sup>13</sup> This might be because of the size and complexity of hospitals, CEOs being in post for too little time, and perhaps being driven by political goals rather than long-term policies. There do, however, appear to be observable characteristics of CEOs and hospital types that result in more productive "matches". For example, CEOs with a clinical background are associated with better clinical performance in teaching hospitals.

In further education colleges, principals do appear to matter for the educational performance of their students.<sup>14</sup> This is likely because of recruitment and wage policies rather than observable characteristics like age, gender, qualifications or even salary. Similar research has shown that principals matter in schools.

While these studies highlight where leaders impact performance, they are less informative on what CEOs actually do.

A valuable strand of literature has attempted to shed light on this through "shadowing" CEO activity via observation in real time – though these tend to be based on small samples. A scaled up version of shadowing has been undertaken using data on executive time-use in the private sector,<sup>15</sup> revealing two CEO types: "leaders" who are more likely to engage in multi-function, high level meetings; and "managers" who prefer individual meetings with core functions. Firms that hire leaders tend to be more productive, though it takes a new CEO three years to begin to have an impact.

On the sample of firms where both CEO behaviour measures and management practices scores are available, it is found that these measures are positively correlated. However, they are also independently correlated with firm productivity, suggesting that they do indeed capture distinct drivers of performance.

#### Ideas for further research

The evidence and insights described here suggest exciting avenues for future research. While the WMS can be tailored to different situations, it generates consistent measures of management practices that have been shown to matter in the public and private sectors. The WMS could be applied in new contexts in the UK public sector where there are consistent performance metrics available and where there is the potential to achieve sufficient sample size (to enable statistical analysis).

Similarly, administrative or survey data on time use of public sector leaders could reveal whether leadership styles appear to drive differences in performance and whether these relationships differ with the

<sup>&</sup>lt;sup>13</sup> Janke, K; Propper, C. and Sadun, R. (2019). The Impact of CEOs in the Public Sector: Evidence from the English NHS, NBER Working Paper 25853.

 <sup>&</sup>lt;sup>14</sup> Ruiz-Valenzuela, J., Terrier, C and Van Effenterre, C.,
(2020). Effectiveness of CEOs in the Public Sector:
Evidence from Further Education Institutions, CVER
Briefing note 005.

<sup>&</sup>lt;sup>15</sup> Bandiera, O., Prat, A., Hansen, S. and Sadun, R., (2020). CEO Behaviour and Firm Performance, Journal of Political Economy.

private sector. It would be valuable to understand more about the interactions between management practices and leadership styles by collecting data on both.

Finally, where feasible, experimentation could be built into new training programmes for public sector leaders. This would enable us to track the cause and effect of different training interventions, both in terms of their effectiveness in raising managerial competencies, and the impacts of such improvements on productivity.

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