Policy brief
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International Growth Centre

Does Management Matter?

Evidence from India

In brief

- **Competition and foreign investment drive productivity growth**
  This sample of Indian firms were typically poorly managed because foreign competition is restricted – for example Chinese imports face 50% tariffs – and foreign ownership is restricted. With greater competition Indian firms would be forced to catch- up with the world frontier of management practices.

- **Rule of law is essential for firms to grow**
  Many of India's best managed firms cannot grow because of an inability to decentralize decision making to non-family members. This is because the courts are so overwhelmed that prosecutions against fraud are extremely hard, making owners wary of letting outside managers have much control over the firm. As a result owners do not give key management roles to non-family members, thereby missing out on job creation.

- **Basic management training would improve productivity**
  Many of the shortfalls with Indian management practices could be addressed through more widespread basic management training. For example, industry, government and university provision of 3-month operations management training courses.

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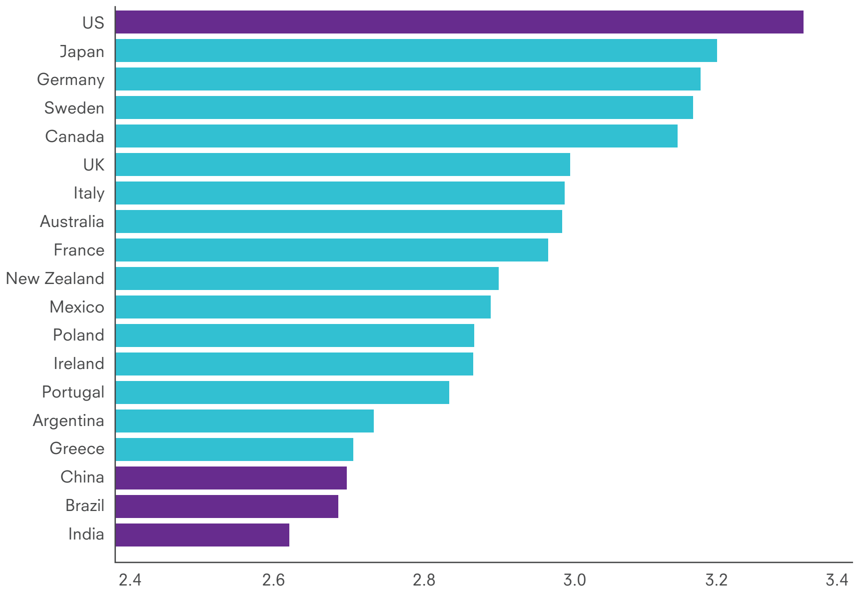
Research Aims

Economists have long puzzled over astounding differences in productivity across both firms and countries. For example, GDP per capita in the US is about ten times that of India. A natural explanation for these productivity differences lies in variations in management practices. But economists, policy makers and even business people have long been sceptical of the importance of management. One reason for their scepticism is the belief that competition will drive badly managed firms out of the market. As a result any residual variations in management practices will reflect firms' optimal responses to differing market conditions. For example, firms in developing countries may not be adopting quality control systems because wages are so low that repairing defects is cheap. Hence, their management practices are not "bad", but just adapted to local conditions.

A second reason for this scepticism is the complexity of management, making it hard to measure and quantify. However, recent work has down-played the "soft skill" attributes of good managers – which can be difficult to measure, let alone change – in order to focus on specific management practices like performance monitoring and incentives. For example, I have been involved in a large project measuring management practices across firms and countries, finding large gaps in management practices between developing countries and the US and Europe (see Figure 1).

Average score on the 18 management practice questions (1=worst practice, 5=best practice) by country Source: Bloom and Van Reenen (2010, Journal of Economic Perspectives) and www.worldmanagementsurvey.org

FIGURE 1: Developing country firms are badly managed on average



In this project we used field experiments to evaluate if these management differences causally led to differences in performance. To do this we improved the management of a randomly selected group of large Indian textile firms and compared the impact to another randomly selected group of similar control firms. In summary, we found better management led to massive improvement in productivity and performance, suggesting that bad management is a key factor holding back the growth of developing countries like India.

Summary of the Project

In this IGC-funded project we undertook a management experiment in India with 20 textile firms of about 300 employees. The project involved giving these firms an initial management diagnostic phase and then four months of free consulting from a major international consulting firm (see Bloom et al. 2010 for details).

To evaluate the impact on firm performance, we have collected detailed performance metrics on aspects such as output, inventory and quality at the firms to understand the productivity benefits of improved management. The evidence suggests that Indian factories are typically disorganised, with inventories and spare parts chaotically organised, inadequate performance tracking, and extremely poor quality control (see Figure 2 and 3).

Factories in the sample had chaotically organised inventories and spare parts and suffered inadequate performance tracking and quality control

Figure 2: Garbage inside a factory

Figure 3: The factory floors were disorganized

1. *Instrument not removed after use, blocking hallway*
2. *Old warp beam, chairs and desk obstructing the factor floow*
3. *As above*
4. *Fire extinguished three years past its service date*
5. *Tools left on floor after use*

Our partnerWWing international consulting firm started to address these issues by introducing the types of basic operational practices that are standard in European, Japanese and US factories (see Figure 4). These had massive impacts on performance, cutting quality defects by 50%, inventories by 40% and increasing overall productivity by 10%. This also increased firms profits by about $200,000, and improved the ability of owners to expand their firms.

This raises the obvious question: why had these practices not been adopted before? One important factor was informational constraints – the Indian firms were not aware of the importance of common modern management practices. This is perhaps not entirely surprising. Management practices evolve gradually over time, with innovations like the Taylor's Scientific Management, Sloan's M-form corporation and Toyota's lean production spreading slowly across firms and countries. For example, the US automotive industry took at least two decades to understand and adopt Japanese lean manufacturing. And the British fell behind the Americans in the 1800s by failing to adopt the American System of Manufacturing.

Figure 4: New management practices led to rapidly improving productivity, profitability and firm growth

Inventory was placed in bags (to stop the yarn rotting), and on metal shelves (to stop the yarn cones getting crushed). The yarn was organized on the shelves by color and thread, labeled and entered into a computer to facilitating the tracking of yarn inventory. These basic practices led to a 30% reduction in inventory levels.

Tools and spare parts organized by function and location, part of the basic operations management processes helping to increase output by almost 10%.

A related question is why product market competition does not drive these badly managed firms out of business? One reason is that the reallocation of market share to well managed firms is restricted by span of control constraints on firm growth. In every firm in our sample all senior managerial positions are held by members of the owning family. The number of adult males available to fill senior positions thus becomes a binding constraint on growth. For example, the owner of one of these best managed firms told us the reason he could not expand was "no sons, no brothers". Hence, well managed firms do not always grow large and drive unproductive firms out of the market if they lack male family members. Meanwhile, entry is limited by a lack of finance, while imports are restricted by heavy tariffs.

While we ran our study in India, the evidence on management practices presented in Figure 1 suggests similar issues will arise in other developing countries. In particular, our suspicion is that Indian firms are likely to be better managed than most African firms (since these rarely export into world markets) making the potential impact of better management on development even greater.

Further Reading

Nick Bloom and John Van Reenen (2009) 'Why do management practices differ across firms and countries', Journal of Economic Perspectives

Nick Bloom, Benn Eifert, David McKenzie, Aprajit Mahajan, and John Roberts, (2010) 'Does management matter', Stanford mimeo: http://www.stanford.edu/~nbloom/DMM.pdf www.worldmanagementsurvey.com

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R. Fisman (2010) 'In Defense of Middle Management', Washington Post, 16 October 2010

H. Chhapia (2010) 'Stanford tips boost desi balance sheets', Sunday Times of India, 12 December 2010

About the authors

Nicholas Bloom is a Professor in the Department of Economics at Stanford University and a Professor at the Graduate School of Business. He is also the Co-Director of the Productivity, Innovation and Entrepreneurship program at the National Bureau of Economic Research (NBER), and a fellow of the Centre for Economic Performance, and the Stanford Institute for Economic Policy Research. While completing his PhD he worked part-time at the Institute for Fiscal Studies, a London based tax think-tank. After completing his PhD Nick worked as a business tax policy advisor to the UK Treasury, and then joined McKinsey & Company as a management consultant. In 2003 he moved to the London School of Economics to focus on research, before joining Stanford University in 2005. Professor Bloom's research focuses on measuring and explaining management practices. He has been working with McKinsey & Company as part of a long-run effort to collect management data from over 10,000 firms across industries and countries. The aim is to build an empirical basis for understanding what factors drive differences in management practices across regions, industries and countries, and how this determines firm and national performance. More recently he has also been working with Accenture on running management experiments. He also works on understanding the impacts of large uncertainty shocks–such as the credit crunch, the 9/11 terrorist attacks and the Cuban Missile crisis–on the US economy, for which he won the Frisch Medal in 2010.

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