Are poor management practices holding back middle-income countries? **Renata Lemos** and **Daniela Scur** look at evidence for private firms and public organisations in India – in manufacturing, retail, healthcare and education.

Bad management:

a constraint on economic development?

For years, economists have documented surprising differences in the productivity performance of firms, even among those operating in the same narrow sector. One factor that may help to explain these differences is the quality of management practices, something that has been systematically measured since 2001 by CEP's World Management Survey (WMS, http://worldmanagementsurvey.org).

The WMS uses an interview-based evaluation tool that defines and scores a set of between 18 and 23 basic management practices from one ('worst practice') to five ('best practice'). It has now collected data on over 7,500 manufacturing firms, nearly 900 retail firms, 1,700 hospitals and 1,400 schools across middle- and high-income countries.

Research using these data finds consistent evidence that management practices – defined in terms of monitoring, targets and incentives – are linked to firm and national performance. Furthermore, competition, ownership, skills and labour market regulations play a major role in explaining variations in management practices across firms and countries.

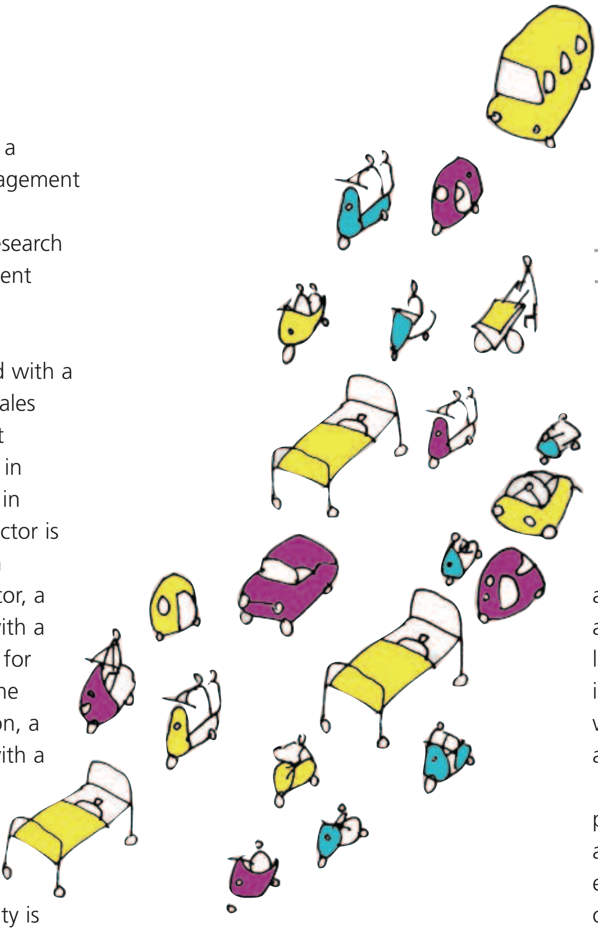
The research also finds that firms in middle-income countries have much worse management practices, on average, than firms in high-income countries (see Figure 1). This seems to be due to a large tail of badly managed firms co-existing with firms with world-class management. Indeed, 63% of the variation in management practices in the manufacturing sector can be attributed to variation within countries, while only 21% can be attributed to variation between countries. This suggests that bad management could be an important factor behind the lower levels of productivity and development of many countries.

Management and productivity across sectors

The WMS initially surveyed manufacturing firms. As the data set grew to encompass more than 7,500 firms, a telling picture of the state of management across the world started to emerge: the usual suspects – the United States, Germany, Japan and Sweden – have the best management practices, while emerging economies such as Brazil, China and India have worse management practices on average.

Since then, the survey has been adapted to other sectors of the economy. In 2012, data collection was expanded to the retail, healthcare and education sectors in India. Comparison between middle- and high-income countries tells the same story across all sectors: management quality varies in tandem with levels of development.

Across countries, we also find a positive correlation between management quality and various measures of productivity in all sectors. WMS research shows that a one-point improvement (on the one-to-five point scale) in management practices in the manufacturing sector is associated with a 1.4 percentage point increase in sales growth, a 14% increase in market capitalisation and a 23% increase in productivity. A one-point increase in management score in the retail sector is associated with a 36% increase in productivity. In the healthcare sector, a one-point increase is associated with a 0.5% lower 30-day mortality rate for heart attack victims admitted to the emergency room. And in education, a one-point increase is associated with a 10% increase in test scores.



Management practices across sectors in India

India's average management quality is the lowest of all the countries we surveyed across all sectors. But why is India's management quality so much worse than that of countries in Europe and North America?

In the manufacturing sector, the low average score is due to a large tail of badly managed firms, which is thin or non-existent in the countries with the highest average management scores. In other words, while there are several firms in India that have implemented top-notch management practices (the average score for the top 25% of manufacturing firms in India is 3.5), when comparing the distribution of management scores for firms in India and the United States (the country with the highest average), there are no badly managed firms in the US sample. In fact, the percentage of firms with very little or no modern practices implemented (below two on our management measure) in the United States is 2%, while it is 25% for Indian firms.

Turning to management scores in other sectors, the results for India mirror those for manufacturing: Indian management practices in retail, education and healthcare

Manufacturing firms in middle-income countries have much worse management practices, on average, than firms in high-income countries

are, on average, poorer than in Europe and North America (see Figure 2). Also in line with the manufacturing results, there is wide variation in management practices within India, particularly in the healthcare and retail sectors.

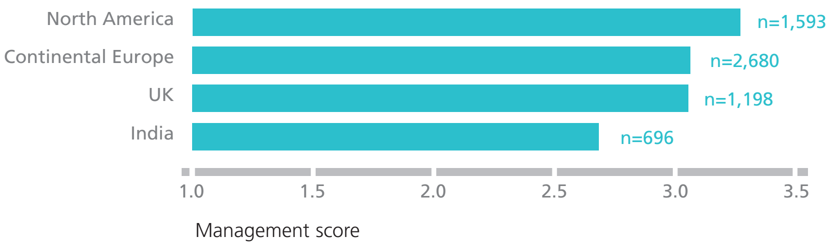
This again suggests that while it is possible to implement best practices across establishments in India, as evidenced by the few very well managed ones, these practices are not being diffused widely. In fact, the top 10% of Indian hospitals are better managed than 19% of US hospitals and 31% of UK hospitals. In retail, the top 10% of Indian stores are better managed than 40% of US stores and 57% of UK stores. But in education, only 8% of US schools and 1% of UK schools are less well managed than the best 10% of Indian schools.

What do these large tails of badly managed organisations mean in terms of real practices? After listening to the interviews, a few anecdotes stuck with us. In the retail sector, we heard stories of managers who still counted their inventory by hand and never organised their stock room. One manager reported incurring frequent losses from damaged goods left in stocking-carts in the store's aisles, as people sometimes bumped into them and the items dropped to the floor. This happened often because every day there were times when the store had a surge of customers, leaving his staff running around to give them all the excellent customer service for which the store is known.

If this manager implemented better scheduling and stocking practices, it is easy to see how there could be an improvement in the store's performance. If the manager adopted a better organisation system of his stock room,

Figure 1:

Country management practice scores in manufacturing are strongly linked to development levels



Note: Data from the World Management Survey. North America includes Canada and the United States. Continental Europe includes France, Germany, Greece, Ireland, Italy, Poland, Portugal and Sweden.

he could avoid the over- or under-stocking of items as they are sold, as well as having to leave part of the stock on the shop floor. And better scheduling of his employees based on the hourly foot traffic of the store would reduce stress on the staff while perhaps even improving the customer service he values so highly.

There are similar examples in education and healthcare. Managers in many hospitals noted the bad layout of patient pathways. We listened to tales of patients being moved from the emergency room across the parking lot to reach other areas of the hospital, and of doctors and nurses transporting patients since no other staff were available for the job. We also heard of the frustration of long waits for incoming patients while recently vacated rooms were being cleaned and prepared. Once, we even spoke to a patient who ended up answering our call since the receptionist was nowhere to be found. As with retail stores, it is clear that a study of patient flows – to schedule arrivals and discharges more effectively – could help hospitals to reduce their waiting times.

In education, many head teachers told us that there was no way of tracking pupils across grades, as teachers did not discuss pupils' progress in a systematic manner or share class results from previous years. They also described teaching practices focused solely on preparing the pupils for passing their end of year exams. Implementing a system to keep track of pupils across grades with regular teacher meetings could also help identify problem pupils early on, raising the chances of improving their learning. Instead of doing observation rounds, some head teachers monitored their teachers

Indian management practices in retail, education and healthcare are, on average, poorer than in Europe and North America

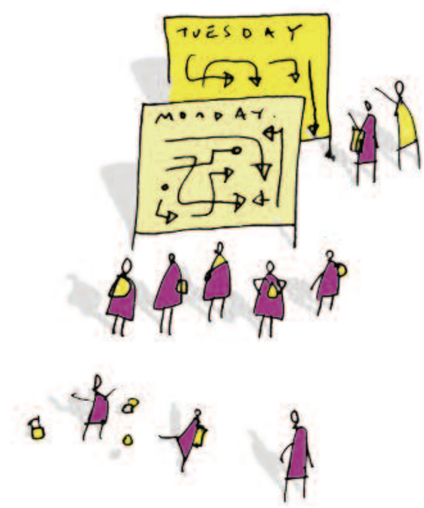
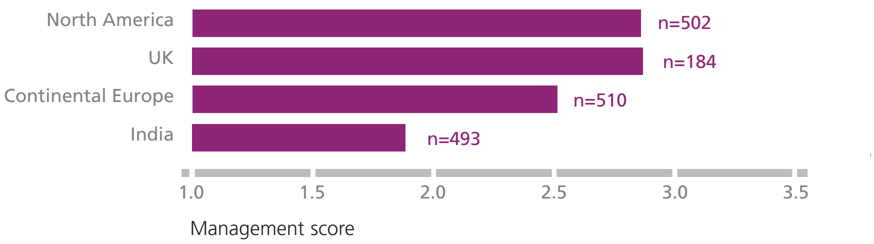


Figure 2:

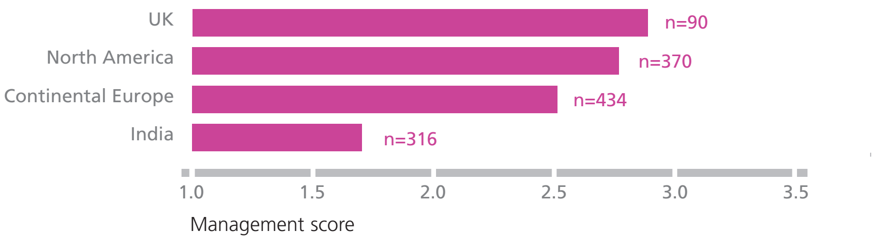
Country management practice scores in hospitals, schools and retail firms follow similar patterns to country management practice scores in the manufacturing sector

Hospital management scores



Note: Data from the World Management Survey. North America includes Canada and the United States. Continental Europe includes France, Germany, Italy and Sweden.

School management scores



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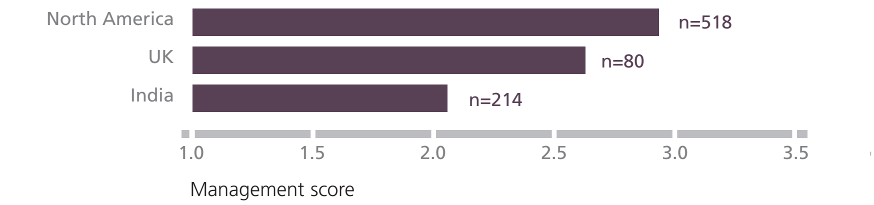
Retail management scores



Note: Data from the World Management Survey. North America includes Canada and the United States.

through a few closed-circuit television cameras installed in the classrooms, which transmitted video but no audio.

In the manufacturing sector, we have some experimental evidence showing that lower quality management is constraining firms' productivity but that both can be improved. A field experiment with large, multi-plant textiles firms in India found that adopting modern management practices raised productivity by 17% on average in the first year; after three years, it had led to firms expanding through more plant openings. So it is clear that better management practices can be adopted in Indian firms and can lead to significant improvements in performance.

Alongside the examples of badly managed establishments, there are also some shining stars comparable to the top stores, schools and hospitals in the United States and the UK. Stores that are part of multinational chains often follow many of the same practices as their US counterparts. For example, we interviewed some managers who detailed their clear problem documentation process to ensure that there are no recurrent mistakes in shop floor organisation, and many even have balanced performance-based pay schemes. We were also able to visit some of these stores in Mumbai, where our temporary office was based, and see these practices in action.

We also visited a Mumbai hospital and were thoroughly impressed by their management practices. The manager systematically tracks a wide set of indicators across a balanced set of categories (such as quality, financial, safety and human resources), and uses these to evaluate employees and set pay. The hospital even has a medicine delivery tube connecting the pharmacy on the ground floor to all other floors – something that we have only seen in the top hospitals in the United States and Europe.

Finally, we visited a school that had implemented many best practices, including posting class and pupil results on public boards, as well as creating standardised lesson plans so all classes at the same grade level are receiving consistent education.

If it is clearly possible to implement 'best practice' management in these establishments, why are these practices not adopted more widely? It seems that 'informational barriers' as well as constraints on the efficient reallocation of resources are the most likely culprits.
At the end of each interview, we asked managers to evaluate the quality of management practices in the rest of the company/hospital/school (excluding themselves) on a scale of one to ten.
We then re-scaled their answers to match our one-to-five scale and compared the results.

The gap between the actual management score, as measured by our survey, and the managers' self-score for each sector is astounding. There is a striking pattern of Indian managers significantly over-scoring the quality of management of their establishments across all sectors. This is a key point for policy as it is unlikely that managers – or stakeholders in general – will push for change if they believe that their practices are good enough already.

The evidence also points to a significant gap in understanding of what are best practices and how to implement them properly. An important question for further research is what drives this information asymmetry: would changing people's perceptions and informing them of their shortcomings lead to immediate implementation of best practices – or are there deeper structural issues (such as lack of education and specialised training) that would prevent managers from implementing the practices, even if they knew about them? What are the patterns of information diffusion and knowledge spillovers that lead best practices to reach only a subset of establishments?

These are important questions for research and policy. Many of these changes in management practices require relatively little capital investment and can yield significant improvements in productivity. In the context of tight capital markets, cash-strapped governments and a generally harsh economic climate, improvements in organisational capacity and management could be a way to drive future productivity growth.

Some Indian organisations have top-notch management practices, but there is a large tail of badly managed ones

Indian managers in all sectors significantly over-rate the quality of their organisations' management

Renata Lemos and **Daniela Scur** are research project directors for the WMS within CEP's productivity and innovation programme. In 2012, they directed the Indian survey in Mumbai.

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