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Can Better Management Sustain Growth in China and India?

By Nick Bloom and Rebecca Homkes

The economies of China and India have been booming-but do they have the quality of corporate management to sustain growth over the longer term? Using a new global survey of more than 4,000 firms, **Nick Bloom** and **Rebecca Homkes** evaluate management practices in the two countries' manufacturing sectors.

The phenomenal growth of China's manufacturing sector over the last decade has been fueled in large part by a seemingly inexhaustible supply of cheap labor. The opening of the Chinese economy has enabled a country with one-fifth of the world's population to make greater use of that resource, and labor shortages in urban areas are supported by mass migration from the countryside.

But, even in China, the supply of workers is not infinite and economic growth is leading to wage growth. With rapidly increasing wage rates and an aging population (due in large part to the one-child policy instituted in 1978), Chinese manufacturing is set to change.

Can China's manufacturing sector continue to grow even with rapidly rising bills? And what about India, the other Asian giant? Can Indian manufacturing start to catch up with China by raising its annual growth rate to the 10 percent-plus levels that China has enjoyed?

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About The Authors

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Rebecca Homkes is management research project manager at the Centre for Economic Performance at the London School of Economics and has been overseeing the Chinese survey.

One key factor is the quality of management in these countries. If management practices are poor in comparison with those in Europe, Japan, and the United States, then Chinese and Indian firms will be less able to compete as their costs increase. But if Chinese and Indian firms are able to adopt world-class management practices, then the phenomenal growth rates of these industries may continue for many years.

A Stanford University, Cambridge University, and London School of Economics research program with McKinsey & Company makes it possible to compare management quality in China and India (Bloom et al., 2007). During the summer of 2006, our

Measuring Management Practices

Measuring management in a systematic way requires codifying the concept of good and bad management into a measure applicable to different firms. We used an interview-based management practice evaluation tool that defines and scores from 1 (worst practice) to 5 (best practice) across 18 of the key management practices that appear to matter to industrial firms, based on McKinsey's expertise in working with thousands of companies across several decades. For full details of the survey methodology, including all the questions, see Bloom and Van Reenen (2007).

The 18 practices fall into four broad areas:

- Shopfloor operations: have companies adopted both the letter and the spirit of lean manufacturing?
- Performance monitoring: how well do companies track what goes on inside their firms?
- Target setting: do companies set the right targets, track the right outcomes and take appropriate action if the two don't tally?
- Incentive setting: are companies hiring, developing and keeping the right people and providing them with incentives to succeed?

For each company in the study, researchers interviewed one or two senior plant-level managers, who knew only that they were taking part in a 'research' project. These managers were selected because they are senior enough to have a reasonable perspective on what happens in a company but not so senior that they might be out of touch with the shopfloor. The interviews relied on open questions and the interviewers were trained to probe for details of practices on the ground.

The interviews were run by an international team of 47 postgraduate students (mainly MBAs), who worked from Center for Economic Performance in London in a specially created survey centre during the summer of 2006. This was a 24-hour operation since the Chinese day starts at midnight in London, just before managers on the West Coast of the United States pack up to go home.

Exhibit 1: Chinese and Indian Firms are the Worst Managed on Average.
Average score on the 18 management practice questions (1=worst practice, 5=best practice) by country

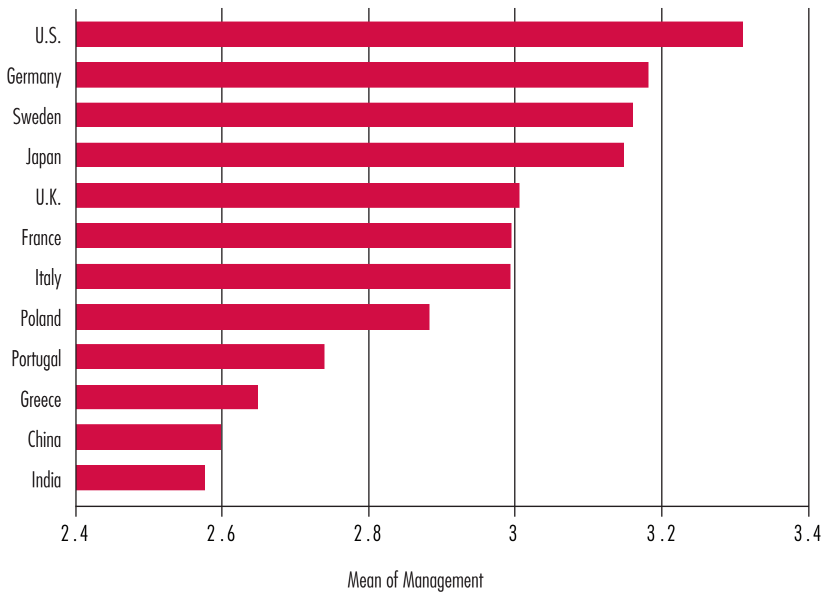
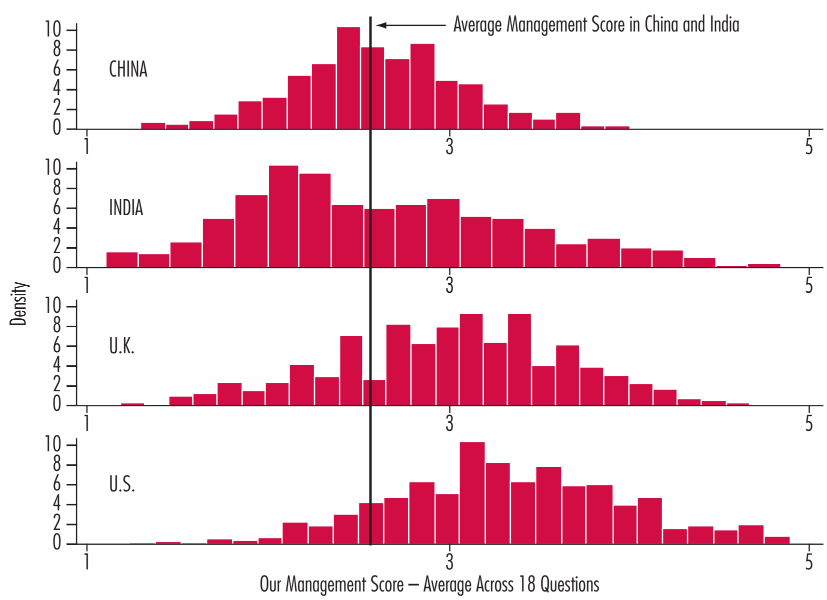


Exhibit 2: The Average Chinese and Indian Firm is Better Managed than About 15% of U.S. Firms and About 25% of U.K. Firms. Average score on the 18 management practice questions (1=worst practice, 5=best practice) by country



team contacted more than 4,000 medium-sized manufacturing firms across Europe, India, Japan, and the United States and spoke directly with plant managers about their firms' management practices. In the summer of 2007, we extended the survey to China.

The Average Chinese and Indian Firm is Poorly Managed

The research comparing all the countries in the sample finds that the average management scores for Chinese and Indian firms are the lowest (see Exhibit 1). And despite recent media attention for the impact of principles of lean manufacturing in China and India, both countries still lag behind in terms of modern manufacturing techniques and practices. Their firms also underperform in terms of incentive structures and people management.

> We find that about 15 percent of U.S. firms are actually worse managed than the average Chinese and Indian firm

By comparison, firms from more developed countries – Germany, Japan, Sweden, and the United States – are well managed. France, Italy, Poland, and the U.K.

are all solidly mid-table, while the management practices of Portugal and Greece are only slightly better than those in China and India. This suggests that the developed countries' advantages in management should not be overstated and that China and India may be catching up.

Furthermore, although the average Chinese and Indian firm performs badly, this disguises tremendous variation in management practices within each country. The best Chinese and Indian firms are as well managed as those in the United States (see Exhibit 2).

Indeed, rather alarmingly we find that about 15 percent of U.S. firms are actually worse managed than the average Chinese and Indian firm. And while roughly one-third of these well-managed Chinese and Indian firms are foreign multinationals, two-thirds are excellently run domestic firms.

Foreign multinationals are well managed in China and India, but foreign joint ventures are not

Another notable result illustrated in Exhibit 2 is the marked variation in management practices in India, especially in comparison with China. While India has a large upper and lower spread of over- and underperforming firms, Chinese firms are solidly clustered slightly below average.

The domestic Indian firms with poor management practices are typically publicly owned or family firms that practice *primogeniture* (handing down the CEO position to the eldest son). They stand in sharp contrast with some of India's well-known industrial giants, which operate using world-class management practices.

India also displays a substantially larger spread of productivity across manufacturing plants than China. This suggests that there is something in the Indian business environment that is conducive to much more variation in management practices and productivity than in China, a phenomenon we are currently researching.

Which Firms are Doing it Right?

To understand why China and India have these underperforming firms with poor management practices, we segmented the firms by broad ownership category. We find that multinational firms are well managed everywhere. These firms are typically the Chinese and Indian manufacturing operations of successful European, Japanese, and U.S. firms, which have transferred their world-class management practices abroad.

In stark contrast, foreign joint ventures – in which foreign and domestic firms share ownership – tend to struggle. Most of these ventures are located in China. They date from regulations introduced in 1979, which required foreign investors to set up joint ventures with local firms in order to gain entry to the market. (It was not until 1986 that the first wholly owned foreign enterprise was established.)

Given the complex management structures that shared ownership entails (multiple layers of domestic and foreign management and shareholder boards), managerial clashes seem to have plagued the management of operations and incentives. Combined with the inherent cultural and language clashes, these foreign joint ventures adopted substantially worse management practices than even many domestic firms.

Other firms that are poorly managed are those owned and run by families. Such firms are particularly common in India but rare in China (there has been a more recent drive toward private family ownership in China, but

Exhibit 3: Foreign Multinationals are Well Managed in China and India but Foreign Joint Ventures are Poorly Managed. Average score on the 18 management practice questions (1=worst practice, 5=best practice) by country

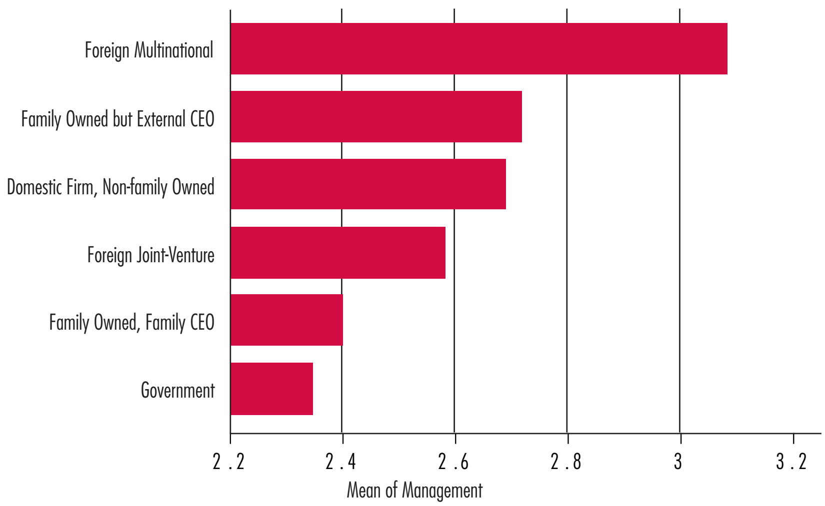
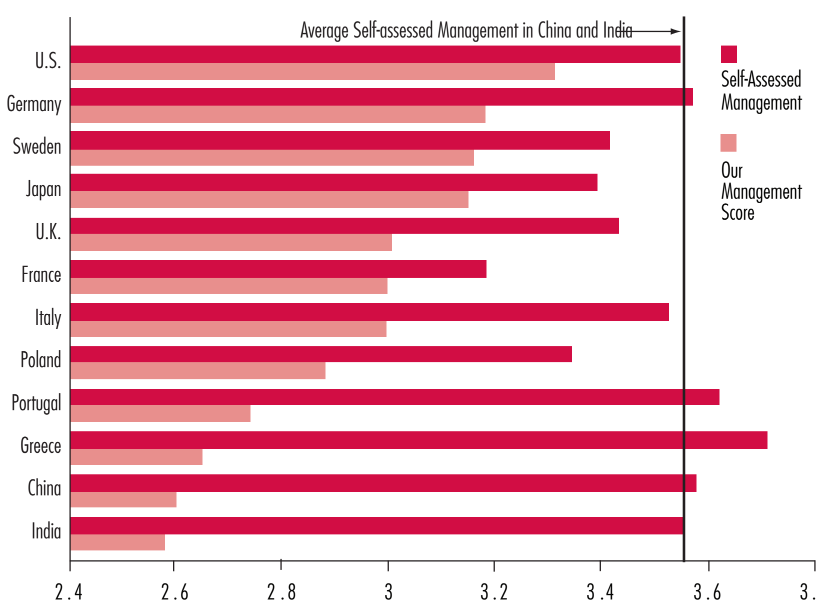


Exhibit 4: Chinese and Indian Managers Were More Over-Confident Than European, U.S. and Japanese Managers. Average score on 18 management practice questions and self-assessed management score, by country



Note: Self-assessed management is the response to the question: *"Excluding yourself, how well managed is your firm on a scale of 1 to 10, where 1 is worst practices, 10 is best and 5 is average?"* Scores are divided by 2 to put them on the same scale as our management scores.

this was difficult prior to 1979). Given the difficulties of separating ownership from control in India (arising from problems in the legal system), family firms rarely bring in external management.

Chinese and Indian firms are much more centralised than Northern European and US firms

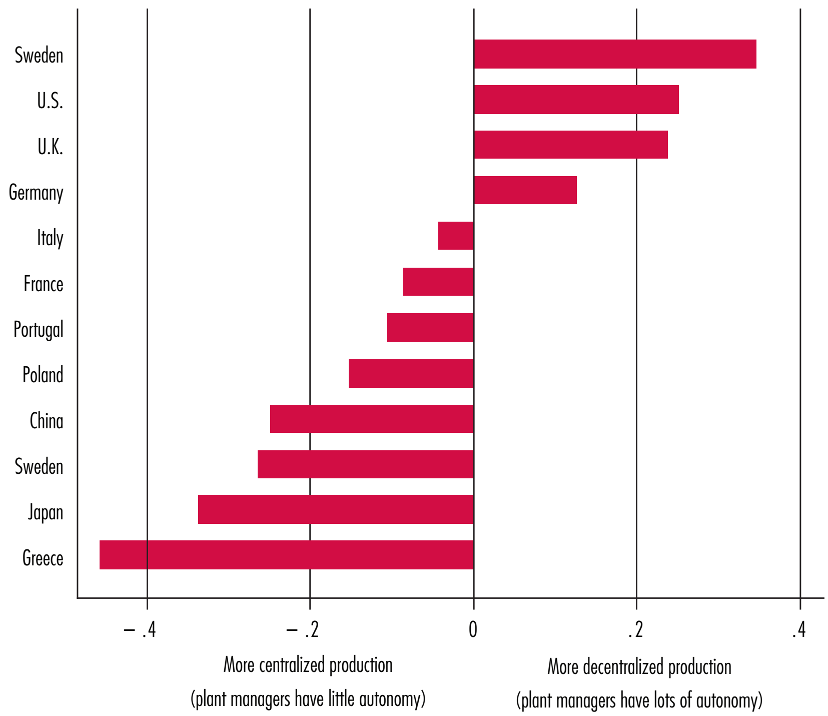
Government firms are also extremely badly run in both countries (and indeed across all the countries in the sample), with particularly weak management of workers and a lack of modern manufacturing techniques.

In recent years, there has been a strong push in former Chinese state-owned firms toward dispersing ownership among their workers. With reforms to India's legal system, government and family-run firms may diminish in importance in both countries. This may pave the way to a brighter future for their manufacturing sectors if firms can adapt their practices to match those of their competitors.

Managerial Over-Optimism is Not Equated With Strong Management Practices

Since good management is strongly linked with good per-

Exhibit 5: Asian Firms are Much More Centralized (Hierarchical) than Northern European and U.S. Firms.
Average degree of plant manager autonomy over hiring, investment, sales & new products, by country



formance, why is it that not all firms make a priority of improving their practices? To examine the possible causes of this disconnect, we asked managers to assess the overall management performance of their firm. To avoid false modesty, they were asked to exclude their personal performance from the calculation.

The answers indicate that Chinese and Indian managers are particularly overly optimistic about their management practices. The average Chinese and Indian manager's self-assessment indicates that its management is better than the average French, Italian, Japanese, Polish, Swedish, U.K., and U.S. firm.

This is particularly striking given how poorly managed the average Chinese and Indian firms are in comparison with their European, Japanese, and U.S. counterparts. In fact, the only country with distinctly more optimistic managers is Greece, which has the third-worst managed firms in the sample.

Chinese and Indian Firms Tend to be Highly Centralized

More than management practices, the degree of autonomy within a firm can affect its productivity, especially in terms of its ability to implement processes and make timely decisions. We find huge variations in the extent to which power is centralized within firms' corporate headquarters rather than delegated to individual plant managers.

> Centralised management is likely to be less effective as production becomes more computer-intensive

The corporate headquarters of some firms treat their production plants almost as independent entities, letting plant managers make decisions on hiring, investment, sales, and product development. But others directly control almost every aspect of their plants' activities, leaving little decision-making power to plant managers.

To investigate this variation in decentralization, we asked plant managers about the degree of autonomy they had in four activities: hiring new full-time workers; making capital investments; controlling their sales and marketing;

and introducing new products. We combined these four indicators into one overall measure of plant managers' autonomy, where high values indicate that decisions are decentralized to plant managers and low values indicate that they are taken at corporate headquarters.

Exhibit 5 plots this measure of autonomy across countries. The substantial variation is evident as firms in Northern Europe and the United States are typically decentralized compared with the more hierarchical ones in Asia and Southern Europe.

In related work (Bloom, Sadun, and Van Reenen, 2007), we find that this degree of decentralization is positively related to the productivity of information technology (IT). Firms in which managers and workers are more autonomous appear to make much better use of IT, presumably because their greater operating freedom enables them to experiment and adapt the IT to their local environment.

This highlights a potential future problem for Chinese and Indian firms. Their highly centralized management structures are likely to be less effective as production technologies become increasingly computer-intensive.

The Future of Chinese and Indian Manufacturing

While the results of our survey highlight the fact that Chinese and Indian firms have below-average management practices, this is mainly due to a long spread of poorly run government and traditional family firms. As the two countries develop, both in terms of local markets and ownership structures, the proportion of these firms should continue to shrink rapidly.

The newly organized and changing firms that adopt competitive best practices should push average management practices toward those in Europe and the United States. Thus, even as Chinese and Indian wage rates and raw materials costs continue to rise, the negative effects could be offset by an improvement in management practices.

A possible cloud on the horizon for these countries is the hierarchical organization of their firms, which, as our research shows, impedes the effective adoption of IT. Whether Chinese and Indian firms can also modernize the organization of their firms alongside their management practices is a key question – one that Stanford researchers will continue to investigate.

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FurtherReading

Nick Bloom, Stephen Dorgan, John Dowdy, Christos Genakos, Raffaella Sadun, and John Van Reenen (2007), "Management Practices and Productivity: Why They Matter" *(http://cep.lse.ac.uk/management/Management_Practice_and_Productivity.pdf).*

Nick Bloom and John Van Reenen (2007), "Measuring and Explaining Management Practices across Firms and Nations," Quarterly Journal of Economics 122(4): 1351-408 (earlier version available as CEP Discussion Paper No. 716: *http://cep.lse.ac.uk/pubs/download/dp0716.pdf*).

Nick Bloom, Raffaella Sadun, and John Van Reenen (2007), "Measuring and Explaining Decentralisation across Firms and Countries," LSE/Stanford mimeo (*http://www.stanford.edu/~nbloom/decent.pdf*).

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