Finance & PSD Impact

The Lessons from DECRG-FP Impact Evaluations

APRIL 2010

ISSUE 10

We return from a hiatus in our note series which has occurred while our projects have been in the field. The tenth in our series of impact notes profiles early results from an ongoing randomized experiment, which is the first such experiment with large firms. Early results show how much difference improving management practices can make.

Improving Management in India
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Recent measurement has found that the majority of firms in developing countries are poorly managed by global standards. This is the case in India, where, apart from multinationals, most firms do not collect and analyze data systematically in their factories, tend to use less effective target-setting and monitoring, and employ inefficient promotion and reward systems. While there is a positive correlation between better management practices and higher productivity, it is not clear whether this reflects a causal relationship or just the influence of other unobserved differences across firms.

We therefore developed a randomized experiment designed to measure:
- Can measurement practices be improved in badly managed firms?
- How much difference does improving management make?

The Indian Field Experiment
We sampled textile firms around Mumbai to participate in our experiment. These firms employ about 300 workers each on average, who are typically located in two production sites per firm. They weave cotton fabric, operating with two twelve hours shifts per day, running in a non-stop production process.

At baseline these firms were badly managed. For example, factory floors were typically disorganized with old machinery and tools placed in hazardous positions around the factory, store rooms were chaotic with no formal system for inventory management, and the quality of production was so low that 20 percent of the labor force was occupied in checking and mending defective fabric.

Firms were then randomly divided into treatment and control groups. The treatment group received five months of intensive management consultancy by Accenture consulting’s Mumbai office. The consulting was designed to help firms adopt standard quality, inventory and production control systems which are standard in almost all U.S., European and Japanese firms. The control group received diagnostic visits which identified problems, but did not receive the detailed implementation help from the consultants.

We then measure the impact of the intervention through collecting detailed data on which management practices are used, quality defect rates, output, efficiency, inventory levels, and other production data. This was collected from both treatment and

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control plants on a daily basis.

**Results**
We are still continuing to monitor the results of this intervention, but the early results show large impacts:

- **Management practices can be improved**: treated firms doubled their use of 38 basic management practices, moving from a baseline of implementing only one-third of such practices to using 68 percent of these practices on average afterwards.

- **It takes time and intensity to improve management.** The increase in use of management practices occurred gradually over the project, and control firms implemented few of the practices after just receiving a diagnostic of areas for improvement.

- **Improvements in management practices led to large increases in performance.** Productivity levels rose by about 15% and profits by about 24% (an increase of $474,000 per firm). This was driven by improvements in a number of areas – for example, quality defects fell by over 50 percent in the treatment firms compared to control firms; inventory levels fell 17%, and output increased by 8%.

**Why are firms badly managed?**
Given these large improvements, the natural question is why firms do not improve management on their own, or otherwise get driven out of business by better-managed firms. We examine several explanations and conclude that:

- **Informational constraints are important**: Indian firms were simply not aware of many modern management practices, or otherwise had incorrect beliefs about the profitability of adopting.

  - Well managed firms appear restricted in their ability to grow by a reluctance to delegate control beyond family members, while large start-up financing costs restrict the number of new firms entering.

**Policy Implications**
Lack of knowledge on better management practices is a big constraint. This could be alleviated through

1. **high quality business education and a more vibrant local consulting industry which can signal reputation** – both depend on the government for a regulatory environment which makes entry easy and which allows quality to determine success.

2. **reducing legal, institutional and infrastructure barriers which limit the extent of multinational expansion.** Learning on the job in well managed multinationals is an important source of knowledge transfer, but such opportunities are limited by limits on multinational activity.

Our ongoing work will measure some of the longer-term impacts of better management, and explore in more detail the impacts on decentralization and computerization. Stay tuned for more results.

For further reading see:

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