

Workers, Managers, Productivity Kaizen in Developing Countries

John Page
The Brookings Institution

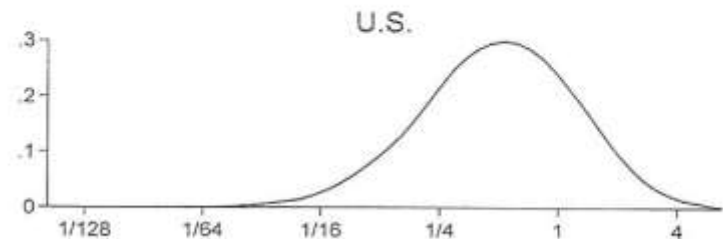
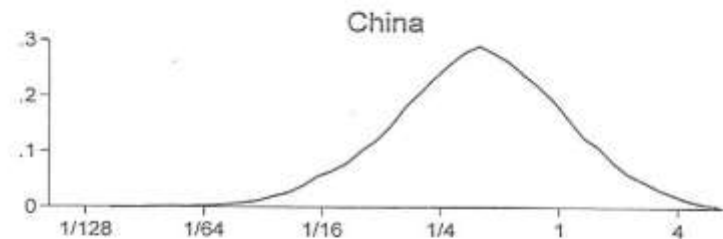
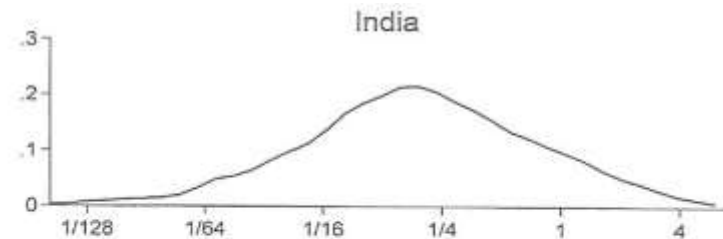
JICA Seminar, Tokyo
27 February 2020

Productivity, Quality and Competitiveness

- Productivity and quality are critical to success in international markets and to entering global value chains.
- But we still do not fully understand how to improve productivity and quality in developing countries.
- *Kaizen* is a widely adopted practice developed in Japan to improve productivity and quality.
 - But empirical studies analyzing its effectiveness—especially in low-income Africa and South East Asia—are limited.
- This book attempts to address that knowledge gap.
 - We ask whether *Kaizen* can make lower-income countries more globally competitive?

Why Productivity Matters

- Average TFP levels among firms in the same industry are lower in poor countries than in high income countries.
- In many poorer countries – like India – there is a long left-hand tail in the TFP distribution.
- Training interventions – like *Kaizen* – are industrial policies designed to shift the productivity distribution to the right and close the productivity gap.



Defining Kaizen

- *Kaizen is an inclusive and participatory approach to the continuous improvement of quality and productivity.*
 - It involves the whole firm including a high level of worker participation.
 - It is based on a distinctive philosophy that encourages teamwork, communication, and learning.
- *During half a century of development in Japan, Kaizen has developed distinctive tools and methods.*
 - Quality control circles and just-in-time inventory management are *Kaizen* tools and methods.
 - So too, is the “Toyota Production System.”

Kaizen, Productivity and Quality

- Kaizen operates in two dimensions
 - Productivity
 - Quality
- Productivity is a “cost shifter”
 - *Kaizen* improves productivity by eliminating *Muda* (waste), *Muri* (overloading), and *Mura* (inconsistency)
 - *Kaizen* does not emphasize capital investment
 - It is a low-cost approach to raising productivity, especially in smaller firms
- Quality is a “demand shifter”
 - Better quality raises the demand at all price levels.
 - A key insight: quality control not only improves quality; it increases productivity.

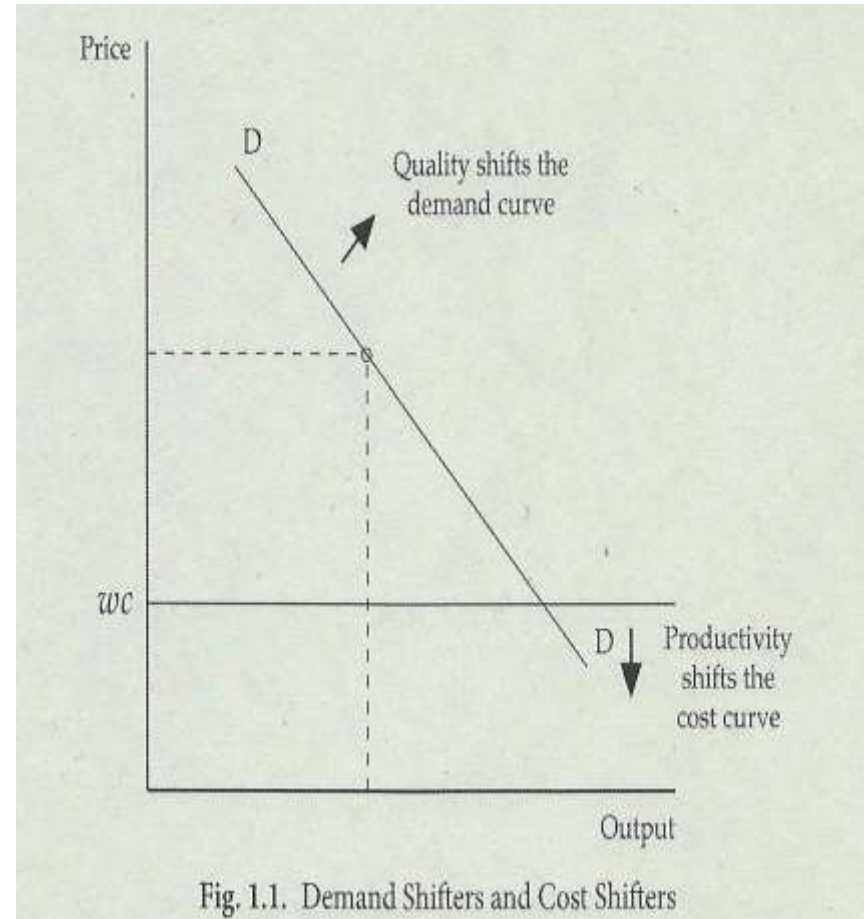


Fig. 1.1. Demand Shifters and Cost Shifters

Three Development Issues and *Kaizen*

- Industrial policy, capabilities and the learning firm (Page).
- *Kaizen* and the learning society (Hosono).
- *Kaizen* and equitable growth (Shimada).

Kaizen and Capabilities

- Capabilities are the tacit knowledge and working practices needed for production and product quality.
- They are linked more to people than equipment.
 - Management is important but it is not the only thing that determines capabilities, the whole workforce of the firm is relevant.
- Page argues that *Kaizen* is a promising and uniquely Japanese approach to capability building.
 - It helps workers and managers to identify and resolve production and quality problems

Kaizen and The Learning Enterprise

- By including all members of the firm in the process of learning and problem solving, Kaizen promotes the exchange of information between workers and managers.
- This helps to develop “learning organizations.”
- Some lessons from the case studies:
 - In larger firms, leadership from top management is essential to keep workers and managers moving in the same direction.
 - Among MSMEs, smaller size may promote closer engagement, but worker's attitudes and discipline may limit impact.

Kaizen and the Learning Society

- Recently, new ideas — emphasizing the capacity of firms, institutions and societies to learn — have emerged in development economics (Stiglitz).
- Hosono argues that *Kaizen* differs from other approaches to achieving better quality and productivity because of its distinctive focus on inclusive and participatory learning.
- *Kaizen* contributes to growth—and in particular to high-quality growth—by enhancing learning capacity in firms and institutions.
- In Ethiopia, *Kaizen* enhanced teamwork, communication, and learning attitudes by building “core capacity” — the ability to identify key issues and to acquire the knowledge and skills needed to resolve them.

Kaizen and Equitable Growth

- Japan introduced *Kaizen* at a time when labor relations were very conflictive.
 - As a result, *Kaizen* was adapted to emphasize maximizing long-term social return rather than short-term private return.
- Shimada argues that *Kaizen* was not solely a technological innovation. It was a social innovation that can contribute to achieving greater equity by sharing the gains from productivity growth.
- And because *Kaizen* requires the long-term commitment of both managers and workers to implement behavior change, it has the potential to improve labor-management relations.

Kaizen and Worker-Management Relations

- Our case studies of Ethiopia, Mexico, Philippines, South Africa and Vietnam give us mixed insights into how *Kaizen* impacts worker-management relations.
- Attitudes of managers and workers are critical to long run success.
- Japan's experience suggests that improving manager-worker relations takes a long time.
 - Vietnam, Ethiopia and South Africa show, the same pattern.

Introducing and Implementing *Kaizen*

- The main pathway of introducing *Kaizen* has been by training managers and employees and providing advice in the work place.
 - Both governments and the private sector have contributed to introducing *Kaizen*.
- The country studies suggest that an active government role is important when:
 - *Kaizen* is not widely known.
 - FDI is limited.
 - Local companies do not participate in GVCs.
 - There is distrust between workers and employers regarding the distribution of benefits

Kaizen in Large Companies

- The country studies include:
 - Two case studies of domestic firms attempting to upgrade in the GVC – Mexico and South Africa.
 - An innovative approach to measuring productivity and *Kaizen* in Brazil.
- The results of these studies may disappoint *Kaizen* advocates.
- Small sample sizes and lack of counterfactual evidence limits what we can conclude from the Mexico and South Africa case studies.
 - *Kaizen* interventions were perceived by sponsoring managers and engineers as successful.
 - Firms that persisted in implementing *Kaizen* appear to have moved up the value chain.
- There was little evidence of improvements in productivity associated with *Kaizen*-like interventions in Brazil.

Kaizen in Micro, Small and Medium Enterprises

- Our country studies show more persuasive evidence of impact in micro, small and medium enterprises (MSMEs).
 - Micro, small and medium firms are the backbone of the manufacturing sector in low-income countries.
 - *Kaizen* can be implemented effectively by local trainers.
 - *Kaizen* improves productivity and quality in MSMEs.
- In Vietnam *Kaizen* training had spill-over effects to non-treated enterprises through social networks.

Conclusions

- The country studies provide a fuller—but not a comprehensive—picture of *Kaizen*.
 - *Kaizen* has the potential to make an important contribution to efforts to raise productivity and quality in poorer economies, especially in MSMEs.
 - Case studies gave multiple examples of *Kaizen's* role in promoting learning.
 - *Kaizen* tools enable firms to experiment, adopt new technology and achieve innovation.
- Workers are critical to the success of *Kaizen*.
 - Pushes managers at all levels to listen to their suggestions
- The research underlines the need for an active state.

Thank You and A Shameless Book Plug

