Workers, Managers, Productivity
Kaizen in Developing Countries

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Productivity, Quality and Competitiveness

• Productivity and quality are critical to success in international markets.
  – In particular, to entering global value chains.

• 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.
  – Empirical studies analyzing its effectiveness—especially in low-income Africa and South East Asia—are limited.

• This book addresses that knowledge gap.
  – In short, we ask can Kaizen make lower-income countries more globally competitive?
Why Productivity Matters

• Some “new” stylized facts about firms:
  – TFP levels vary more across firms in the same industry in poor countries than in high income countries.
  – In many poorer countries there is a long left-hand tail in the TFP distribution.
  – Average TFP levels among firms in the same industry are lower in poor countries than in high income countries.

• If we could raise productivity in developing country firms we could close the income gap.

• Training interventions – like Kaizen -- are a form of industrial policy designed to shift the distribution to the right.
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 – an inclusive and participatory approach.
  – It 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.”
Defining Kaizen

- Kaizen operates in two dimensions
  - Productivity
  - Quality
- **Productivity is a “cost shifter”**
  - Elimination of *Muda* (waste), *Muri* (overloading), and *Mura* (inconsistency)
  - Kaizen does not emphasize capital investment
  - Thus, it is a low-cost approach to raising productivity in smaller firms
- **Quality is a “demand shifter”**
  - Better quality raises the demand at all price levels.
  - It is essential to entering GVCs.
  - More effective quality control not only improves quality; it increases productivity.

![Diagram of Demand Shifters and Cost Shifters](image)
Kaizen and Three Issues in Development

• 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.

• Kaizen is a promising and uniquely Japanese approach to capability building
  – It helps workers and managers to identify and resolve production and quality problems
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 have emerged on the role of learning societies in development (Stiglitz).
  – The capacity of firms and institutions to learn is a key aspect of development

• 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, for example, Kaizen enhanced teamwork, communication, and learning attitudes, building “core capacity.”
  – The ability to commit and engage, to identify needs and key issues, and to acquire knowledge and skills.
Kaizen and Equitable Growth

• Japan introduced Kaizen at a time when labor relations were very conflictive.
  - As a result, Kaizen was adapted to maximize long-term social return rather than short-term private return.
• Shimada argues that Kaizen was not solely a technological innovation. It is a social innovation that can contribute to achieving economic growth and equity.
  - Mainly by more equitable sharing of the gains from productivity growth.
• 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 government 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

- 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

• Micro, small and medium firms are the backbone of the manufacturing sector in low-income countries.
  – Evidence of impact is more persuasive with respect to micro, small and medium enterprises.
  – Kaizen improves productivity and quality in MSMEs.
• In Vietnam Kaizen training had spill-over effects to non-treated enterprises through social networks.
• Kaizen can be implemented effectively by local trainers.
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 are innovation inputs, enabling 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.
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