



Panel Discussion

What are the factors that encourage technological capability building by developing countries firms operating in global markets?

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Issues for the debate

The aim of this panel is to discuss the opportunities and constraints that firms from developing countries are facing in the process of building up technological capabilities. Although firms are the central actors of these processes, they act in specific technological, institutional, financial, organizational, social, and political setups. Thus, the paths of learning technological capabilities building (TCB) by the firms are influenced by the features of the National Innovation Systems and by the type of linkages created between the agents in specific contexts and sectors. Domestic technological capabilities refer to the ability to make effective use of technology for the production of goods and services as well as for the production of further technological know-how. Over the long term, economic growth arises from the interplay of incentives- given by the institutional set up of the country- and domestic technological capabilities. However, over the last few decades, both developed and developing countries have become increasingly integrated into the world economy, opening up a new debate arena for scholars regarding the benefits and challenges posed by this dynamic. In the last three decades, a group of countries of east and South East Asia achieved important industrial and technological progress from the development of local suppliers of the manufacturing industry. Based on processes of learning and TCB, these local suppliers could advance rapidly from developing simple assembly activities to approaching the technology frontier. The industrial relocation process has achieved worldwide dimensions; however, many developing countries in Africa, Asia and Latin America remain far behind the technology frontier. In this sense, understanding the paths and patterns of learning and capability building in firms remains as crucial today as it was in the past.

Questions for discussion in the panel:

- What are the forces inducing the expansion of domestic technological capabilities in an increasingly globalised economy? Is capability building in developing countries easier or more difficult than it was years ago?
- What kinds of firms are driving the process of TCB in developing countries? What is the role that MNC's, large domestic firms and local SME's are called to play in the TCB in these countries? What does the evidence imply for policies to support TCB and the catching up of developing nations?
- How could domestic firms benefit from technological knowledge from MNC's? What are the processes through which firms could absorb knowledge from MNC's and what are the ways to encourage those processes? What is the role of absorptive

capabilities of domestic firms to benefit from technological spillovers from MNC's?
How important is in-house R&D for that purpose?

- Having in mind the experiences of some developing countries, what kind of changes in the institutional settings, policies, and incentives seem to be working and what changes are further needed?