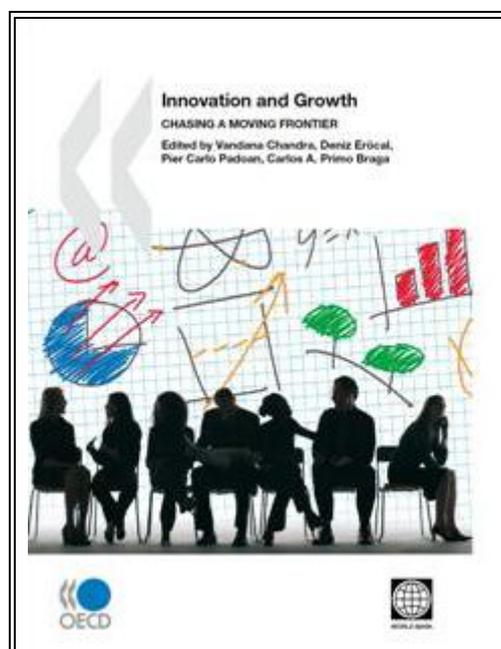


World Bank and OECD Say Innovate to Grow

Innovation is critical not just for developed countries to sustain growth, but for emerging economies and developing countries to catch up with developed countries, according to *Innovation and Growth: Chasing a Moving Frontier*, a new book launched by the World Bank and the OECD.



“We have to think about innovation not only in the context of breakthrough inventions, but also in terms of administrative and organizational changes that support technological diffusion,” said Otaviano Canuto, Vice President and Head of the PREM Network, at the book launch and seminar on innovation and growth on December 14.

The global financial crisis has affected innovative activities through several channels: lower research and development (R&D) spending, loss of human capital, lower risk taking and weaker international diffusion of technology. Attention to innovation, however, is even more crucial in the aftermath of the financial crisis to promote sustainable and [inclusive growth](#).

Why innovation matters

Innovation has always been the key driver of economic growth for OECD countries. As the international flows of trade, capital and labor have expanded across the global marketplace, the competitiveness and prosperity of high income economies have come to rely increasingly on their innovative capability. They innovate to become more competitive and reap productivity gains.

“What is new now is that innovation has moved to the center-stage of government policy,” said Pier Carlo Padoan, Deputy Secretary-General and Chief Economist of the OECD. “Firms increasingly engage in “open” innovation practices, collaborating with external partners to keep ahead of the game, and more and more emerging economies pursue innovation promotion policies.”

Unlike OECD countries, many developing countries’ competitiveness and prosperity remains

largely tied to their endowments of natural resources. But this is changing in a number of major emerging economies. And, the unique nature of innovative activity and the growing interconnectedness of the world economy call for greater attention to openness and technological innovation not only in OECD countries, but also in developing economies.



Pier Carlo Padoan (left), Deputy Secretary-General and Chief Economist of the OECD, Otaviano Canuto (center), Vice President and Head of the PREM Network of the World Bank, Carlos Braga (right), Director of Economic Policy and Debt Department of the World Bank

Innovation and catching-up

Since the 1980s, many low- and middle-income developing countries have liberalized their economies with the expectation of becoming more prosperous, but only a handful are catching up with OECD economies. What can they learn from the experience of countries like Brazil, China, India and Korea?

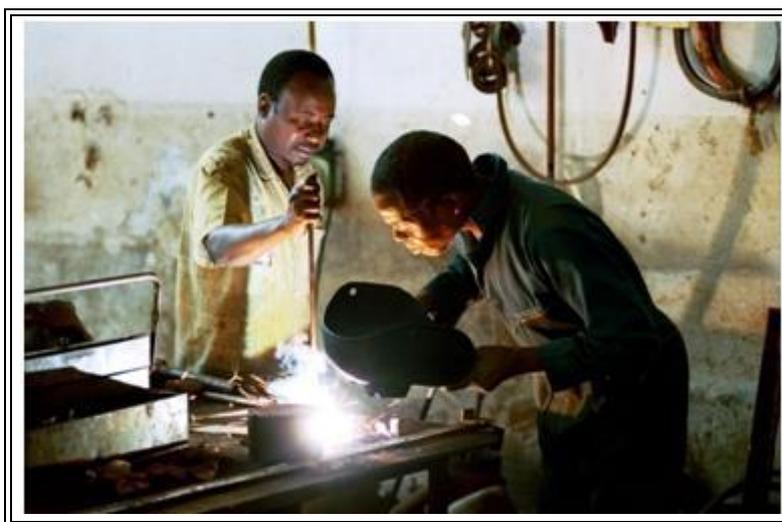
Carlos A. Primo Braga, Director, PRMED, notes that the book analyzes the incentives to innovation in response to competition. “When industries are closer to the technological frontier, they innovate to escape competition while a longer distance to the frontier discourages them from innovating. Moreover, for countries that are far from the frontier, catch-up is an even greater challenge as the frontier itself is a moving target,” said Braga.

The Korean growth experience is used as an example of the role of innovation in the development process. In fact, Korea’s catching-up with high-income OECD countries is strongly correlated with its innovative ability in fostering the technological content of its exports. There are strong signs of increasing innovation activity in China and other fast-growing emerging economies that it is certainly playing a role in their convergence with more advanced economies. The task of identifying appropriate “distance-shortening” policies in the current global economic environment, remains, however, a challenge.

Innovation for developing countries

Innovation in developing countries should not be defined just in terms of shifting global frontier technology, but in terms of what is new to the country, the sector or the firm. Unfortunately, in most developing countries R&D resources and technological absorptive

capacity are limited.



“A developing country’s innovation strategy should include policies and mechanisms that affect the country’s ability to draw on global knowledge,” said Vandana Chandra, one of the authors of the book and Senior Economist of PREM/DEC. “While the optimal policy will be country- and sometimes even sector-specific, investment in domestic R&D as well as policies that foster the development of high tech industries can make a difference.”

A policy priority is therefore to improve the allocation of public resources. The authors claim that it is necessary to put in place not only appropriate policies but also the supporting institutions, public and private, to create, acquire, and disseminate new knowledge.

Padoan said, “We see genuine innovation-driven leapfrogging even in relatively less developed countries, for example, competition from mobile banking in Kenya “helping” the traditional banking to upgrade its services. If policy is to play a role, governments need to develop a coherent “whole-of-government” approach to innovation.”

Moving forward

The Bank and OECD find that innovation and innovation policies as relevant issues at all stages of development. Currently, the OECD is working on an “[Innovation Strategy](#)” to help countries develop policies to boost innovation. It will include policy principles to guide the design and implementation of policies for innovation, new indicators on the innovation-economic performance link, initiatives for innovation-friendly business environments, and the development of best practices and policy recommendations.

The Bank has also developed numerous studies addressing the economics of innovation and technological change (such as its support to the [Growth Commission’s recent report](#) and [the 2008 Global Economic Prospects report, *Technology Diffusion in the Developing World*](#)) and has hosted many related activities including the [Development Marketplace](#). PREM, in particular, is committed to further exploring the implications of innovation policies for inclusive growth.

Innovation and Growth: Chasing a Moving Frontier, edited by Vandana Chandra, Deniz

Eröcal, Pier Carlo Padoan, Carlos A. Primo Braga, can be purchased [here](#).

The key issues in this book were initially presented at a joint conference on [Innovation and Growth in a Globalised World](#), held in Paris in November 2008.