### Why Indian firms don't innovate

Throwing light:Internal inadequacies and externalities beyond companies' contol hamper innovation in India, says World Bank economist William Maloney.getty Images/iStockDigtialStorm

A large proportion of Indian companies just don't have the policy or human resource capabilities to invest in innovation though the country fares favourably in terms of research and development (R&D) spending when compared with its peers, according to a top World Bank official.

"If you look at how much India invests in R&D as a share of GDP compared to other countries at its level of income per capita, it actually doesn't do badly," said William Maloney, chief economist for equitable, growth, finance and institutions in the World Bank.

"It's (R&D spending) substantially above the average. That said, there are a couple of things to note," Mr. Maloney said in an interview.

### 'Low R&D investments'

"One, there aren't that many of the big and modern firms that are investing a huge amount in R&D," he added. "And, the vast majority of firms in India don't have the capability to do R&D.

"We have [the] data on measures of management practices around the world and you have the good performers such as Sweden and Germany, and you have parts of Africa that do pretty badly. India is somewhere in the middle. It's around China, Latin American levels."

What this means, Mr. Maloney explained, is that firms in India lack the capability to take a careful look at their basic plant layouts, can't make long-term plans, don't have an innovation strategy and don't have an HR (human resources) policy to staff their innovation strategy.

The other point Mr. Maloney made about India was that the focus should be on increasing productivity and not simply focussing on R&D or single-mindedly increasing employment.

"R&D is one of several types of innovation that firms can do, but there are lots of others, such as the adoption of better practices and products, upgrading quality, licensing technology from abroad, all these things are under the heading of 'innovation,'" he said.

Mr. Maloney acknowledged that it is not feasible for a country or a company to do everything by itself, and that India still stands to gain a lot from borrowing technology from abroad, which then enables it to leapfrog some existing technologies, such as the case with 4G adoption or the implementation of BS-VI fuel norms.

"You can't do everything, Every firm is going to have to find out what process and product innovations it needs to do to improve productivity," he said.

However, Mr. Maloney did concede that borrowing technology from abroad and then implementing it at cheaper prices in India could lead to some friction between the exigencies of a developing country and the huge investment needed for R&D. A case in point being how, in 2012, the Indian government stripped pharmaceutical company Bayer of its exclusive rights to sell its cancer treatment drug in India and granted Natco Pharma a licence to sell a generic version of the drug at about 3% of the price Bayer was charging. "It's difficult, to reconcile the demands of a developing country and the huge investments that R&D requires," Mr. Maloney said. "Ideally, you could say the government should be paying whatever the costs are to recover the R&D investment and

delivering it at lower prices. But this is a huge demand on the government Budget."

There are a number of reasons why a firm doesn't innovate, he added, explaining that several of these have to do with internal inadequacies, while others have to do with externalities beyond the control of the firm.

### **Business environment**

"What leads a firm to want to accumulate more knowledge or innovate.

"On the one hand, you have to look at the business environment, the macro stability [and] look at opportunities to export once you get going, all those sorts of things that say it will be worthwhile to sink money into upgrading, raising quality levels, doing R&D, etc," he said. "All those things on the demand side are critical.

"But many firms have trouble identifying an opportunity," he added.

"In the sense that they don't have the managerial capabilities. SMEs (small and medium enterprises) are constantly in a situation where they are putting out fires, they don't have a fiveyear plan, they don't have somebody keeping track of what new technology has come out of some place that they could bring to the firm.

## 'Upgrading capability'

"That managerial capability comes with much more sophisticated firms and part of what we are arguing is that countries like Japan and Singapore invested a lot in capability upgrading programmes that sought to first organise the plant, get people with good records and a clean plant, with some sort of vision for the future, some way of listening to workers and evaluating the quality of the staff, all those very basic building blocks," he said.

One manner to address these deficiencies is to attract talent from abroad by engaging with the Indian diaspora more and trying encourage them to come back and bring their training and expertise to India.

"In both China and India, a lot of international patenting is being done by firms that are multinationals," Mr. Maloney said. "So, in some sense, you have very sharp Indians working for multinationals, but with unclear spillovers to the local economy. So, both the 'brain drain' and this phenomenon could be seen as bad."

"On the other hand, Ireland, Taiwan, and India started their tech industries largely due to the returning diaspora," he added.

"Ideally, you'd like to create a landing pad here so that they [diaspora] say 'okay, I would like to go home and try to start something there.' It's an obvious thing, but you'd be amazed at the number of countries that don't make it that easy."

Another way in which the Indian government could help SMEs is to help them identify their strengths and weaknesses in a systematic manner and then provide them with access to international best practices and advice on how those could help them. Most of the SMEs I have worked with are full of smart people, often trained as engineers, very committed to their firms and the workers, but they are often just not aware of how they could be doing things better. The management support programmes that Japan, Singapore, the entire West engages in are important for exactly that reason, he said.

# 'Quick wins'

There are some quick wins if you just tell firms that this what you should be doing and this is where you are.

"And the thing is, most of these governments subsidise these programmes," he added. "If you have a small company that doesn't know how good or bad it is, you can't expect them to shell out a huge sum of money to find out. But if the company becomes better and starts earning more, then the government earns back that money in taxes."

# Focus should be on increasing productivity and not simply focussing on R&D

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