How should governments support innovation?

CAN GOVERNMENT PICK WINNERS? And foster innovation? Those questions are naturally raised by the government's new Business Innovation Plan to encourage research, development and innovation, the subject of our cover story.

The main argument for encouraging national champions in innovation is that it worked in fast-growing countries post-World War II, especially Japan and South Korea. In Korea, there was powerful political support and public funds to promote the formation and expansion of *chaebols*, or what we would call conglomerates. Japan encouraged formation of *keiretsus*, Japanese conglomerates, but it is not clear how much government action influenced the emergence of world-beating companies like Toyota and Mitsubishi.

The success of Japan, the East Asian tigers, and more recently China has naturally attracted the attention of emerging countries looking for lessons on how to grow and reach wealth of more developed nations. However, it is necessary to see the whole picture of the Asian experience, not just pluck out one of its components, such as encouraging national standard-bearers.

The most prominent Asian tigers, like South Korea, not only encouraged innovation. They also invested heavily in education to increase productivity in the long run. They were able to finance those investments because they had high savings rates. They also had effective inflation control and an austere fiscal policy.

The main argument against government fostering innovation is that in general governments are a very bad at picking winners. Look at Japan. Its most successful products are automobiles and consumer electronics, industries that received negligible support from government. More recently, the U.S. and China have been heavily promoting, and subsidizing, the solar energy industry. The result has been a series of bankruptcies and little improvement in the efficiency of solar panels. On the other hand, without any government support, the innovations of Microsoft, Apple, and Google have transformed not just the U.S. but the global economy.

In addition, tax exemptions and subsidized credit to encourage innovation may create negative incentives for businesspeople to invest in building political connections and lobbying for access to generous government benefits rather than concentrating on cutting costs and developing new products and technologies (see: Solyndra, the bankrupt U.S.-subsidized solar panel manufacture). Meanwhile, it takes 5 years to get a patent in China and 10 to get one in Brazil—by which time it's worthless because the technology is obsolete. Wherever countries are particularly successful in developing new products, their government's share of total investment in R&D is less than 30%. The Brazilian government's share is over 50% (see cover story).

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Instead of playing favorites with tax exemptions and subsidized credit for a few sectors, Brazil should be looking for ways to reduce costs for all companies and create an environment (more education, better infrastructure, less administrative red tape, and low inflation) where companies themselves find it profitable to invest in R&D. Innovation and new products can flourish in the most improbable places.