A search for a new strategy for the innovation-oriented industrial development of Korea

Sogang University  Kim Kwang Doo

Since 1960s, the Korean development strategy had worked well. However, since 1988 Korea has faced new domestic and foreign challenges. It has experienced higher labor costs, a stronger currency, the increasing reluctance of developed countries to be so generous with their technologies, and even the spreads of work attitudes to try to avoid so-called 3D (dangerous, difficult and dirty) jobs. Korea is experiencing shaking exports, a sluggish economy in 1966, and the growing fears that it might lose its competitive edge in the world market in 1996.

In these courses of endogenous and exogenous changes of environments, a new approach for the industrial development has been discussed among the peoples concerned. Several models for the industrial specialization along with the comparative advantages have been suggested.

Naturally the discussions have been focused on how to recover and strengthen the international competitiveness of Korean products. And many of them believe the level of science and technology will determine the future of the industrial competitiveness of Korea in the international market.

However, the current level of science and technology in Korea is far behind that of the developed countries. The Technology Scale Index of Korea remained at such a low level of 8.86, while setting the U.S. level be 100 in early 1990s. On the other hand, the High Value-added Index of Korean Exports has also shown poor performances. It has even declined from 100 in 1989 to 65 in 1994. And, the value-added ratio of the technology intensive products has been staying at the level of 30% since 1982, whereas that of Japan climbed gradually from 33% in 1982 to 38% in 1991.

Then how can Korea overcome the science and technology bottleneck in the course of attaining the industrial competitiveness enough to sustain the rapid developing pattern? The one measure is concerned with the international technology protectionism and the other is with the domestic market uncertainty of the new technology products within the new international economic order of WTO.
To respond effectively to the emerging technology protectionism of the technologically advanced countries, Korea should improve the technology transfer strategy. To improve the technology transfer strategy, it can pursue the following three major elements of the new technology strategy. First of all, its bargaining power has to be increased in the course of technology imports. It is desirable to induce research institutes to go abroad to extend their R&D abilities, collect technology information. Secondly, the efficiency of technology imports has to be increased. To this end, technology import strategy should be in harmony with the local technology development. Finally, the procedure and system of technology imports need to be improved. The laws related with technology imports should be integrated into one law.

The intellectual property right system is another important issue in relation to the technology protectionism. To lean against the protectionism wind, Korea should also improve the present intellectual property right system. In readjusting the intellectual property right system, measures to counter the abuse of the intellectual property right should be established in the spirit of the Fair Trade Law.

The new international economic order of the WTO system forces all the participating countries to open fully their local market. Consequently, the newly innovated products by the local producers can hardly secure the local market, a benefit which has been guaranteed by government up till recently. In this respect, a set of helping hands which can revive the depressed innovative spirit need to be prepared. To this end, four policy measures can be proposed as followings.

Firstly, Korea should establish a comprehensive institute to support the commercialization of the new technology products.

Secondly, a promotional measure for the engineering industries needs to be established.

Thirdly, the financial supporting system for the commercialization of new technology need to be readjusted.

Fourthly, safeguard provisions within the WTO agreements should be appropriately utilized for the protection of local products newly commercialized from the locally developed new technologies.