"A Comparison of Venture and IT Industries in Korea and Japan" November 8, 2001 RIETI, Tokyo

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I would like to make a comparison of the venture and information technology industries in Korea and Japan. Competition between Japan and Korea is important but I would like to emphasize areas of potential cooperation.

Japan has had a longer time horizon to develop its IT industry, while Korea historically lagged behind. Korea was forced to adapt to IT business.

The 1990s were a transitional period—from dominance of capital-intensive industries to high value-added technology-intensive industries. In order to overcome the economic crisis and to realize a knowledge-based economy, the Korean government implemented steps to facilitate growth of the venture industry and made it a top priority of the national agenda.

In 1997, the number of venture firms (approved and unapproved) in Korea reached approximately 1,700, a 70% increase compared to 1994. Although the venture industry has also suffered under the economic crisis, the number of new start-up firms has nevertheless increased since 1998. In 2000, the number of registered venture firms reached 10,000.

The Korean government's operational definition of a venture firm includes the following organizations: a firm where over 20% of total equity is new stocks; a firm where the R&D to sales ratio in the previous year exceeded five percent; a firm that commercializes patented technologies and other IPRs (over 50% of sales of 25% of exports should originate from the commercialization of IPRs); and a firm that was evaluated as having a high level of technology or outstanding commercialization, although it cannot satisfy any of the previous criteria.

Although the Korean government has several measures for promoting VCs, the

procedure is complicated. It can take years for a firm to move through the venture stages: administrative procedure, fund supply, technological development, securing manpower, and sales promotion.

Japan has already gone through three venture booms. In the 1970s, Japan tried to utilize its plentiful supply of funds against a background of excess liquidity to promote niche business and to relieve the economy of its dependence on exports. In the 1980s, a second boom focused on the bio-medical industry, electronics, and high tech industries. During the economic stagnation of the 1990s, Japan tried to foster software and new services to avoid an industrial "hollowing out" and to provide a buffer against unemployment.

While ventures in Korea are concentrated in the IT sector, ventures in Japan cover a variety of sectors including electronics, machinery, precision machinery, metals, and information services.

Japan has the historic advantage. About 83% of Japan's VCs were established in the 1970s or earlier. In Korea, meanwhile, 75% of the VCs were established in the 1990s.

Nevertheless, among OECD countries, in 2001, Korea was ranked number two (after the US) in entrepreneurial activity, while Japan came in last (after Ireland).

Korea's IT strategy policy measures have included "Cyber – Korea 21" (March 1999), which promoted new businesses, increased productivity of the state, and concrete plans for establishing infrastructure of the knowledge and information society. Korea's informatization policy targets include early completion of the high-speed network, increase in quality and quantity of access lines, promotion of ventures, reduction of the digital divide, and informatization of education.

The IT strategy in Japan has included the establishment of the IT Strategy Headquarters (July 7, 2000), which aims to enable all Japanese citizens to enjoy the benefits of the IT revolution and to promote measures for an internationally competitive nation in IT. The country's basic policy includes the e-Japan Priority Policy Program, which plans the following: the establishment of ultra high-speed network infrastructure and competition policies; the facilitation of e-commerce; the realization of e-government; to nurture high-quality human resources; promotion of R&D; the improvement of the digital

divide; and international cooperation.

As for a comparison, the contribution of IT to the growth in GDP is substantial in Korea and in Japan. Korea has invested in IT more intensely than Japan and in more productive areas. Korea is the number one country in the world in terms of broadband. Internet penetration in Korea is higher than it is in Japan. Internet access is cheaper in Korea than in Japan. Korea is ahead of Japan in e-government. More Korean venture firms are entering Japan than Japanese firms to Korea. The e-commerce market in Japan is much larger than in Korea. Generally, in IT, Japan has the advantage in scale and capital, whereas Korea has the advantage in speed and entrepreneurship.

Why has Korea been doing well? It has a strong competitive spirit against regional powers. It has quickly picked up on the opportunities of IT for economic development. The financial crisis of 1997 forced it to restructure. It has a younger and dynamic generation. There is a culture of risk loving and entrepreneurship.

Why is Japan doing poorly? It is trapped in its past successes and the IT paradigm differs from the manufacturing paradigm. Its elderly population discourages dynamism. A group-oriented culture is still dominating. Decisions are made by consensus, which is slow. There is insufficient investment in IT and venture industries. The industrial structure is less competitive.

In what areas can the two countries cooperate? Korea offers qualitative manpower, fast decision-making, strong local demand, commercialization ability, and excellent IT infrastructure. Meanwhile, Japan offers large domestic markets, abundant capital, qualitative hardware, overseas network, and strong manufacturing technology. Opportunities would include launching Korea-Japan IT cooperation, growing Korea's markets, development of the Chinese economy, and exploiting a new generation in Japan with Internet preference.

The present worldwide IT recession will last a few years. But it is just a delay. The IT revolution will continue to eventually realize digital economies all over the world. Considering its past performance, it is a matter of time for Japan to be one of the leading countries in IT. Whether Korea continues to keep its current lead in Asia depends on basic R&D and strategic alliances with future leading countries.

Competition is inevitable, but cooperation is equally beneficial to the development of the digital economy and economic growth for both countries.

Question and Answer

Q: What tax policies have facilitated the creation of SMEs in Korea?

Korea offers a 50% income tax exemption for six years for start-ups. Small tech firms get tax exemptions too. They get a 75% exemption on local property taxes for two years. There are tax exemptions for individual investors on capital gains taxes.

Q: Is there a regional disparity in SME development in Korea?

Of all VCs, 50% are located in Seoul and the Kyonggi province. The situation is similar to that in Japan. The disparity is due to the externalities from contacts and networking.

Q: How ubiquitous is IT in Korea? Is there disparity on the consumption side?

Four million households use high-speed Internet. People in the countryside do not get high-speed service, but they can use dial-up. The reason for this disparity is that you need an apartment complex to reach economies of scale to make installation of high-speed service worthwhile. All of Korea's major cities have this service because there is competition in the private sector. Many companies can compete because it takes little equipment to serve as a provider. The government encourages competition.

Q: Is there more pirating in Internet content?

Yes, there is pirating. But Korea firms themselves are hurt. In the long run, pirating does more harm than good, so the government realizes the seriousness. One-to-one copying is dangerous now because there are many organizations watching for pirating. The government and environment are less tolerant.