Enhancing Innovation and Technological Capability for East Asia
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Thank you Mr. Chairman. His Excellencies, Distinguished Guest, Ladies and Gentlemen, this is a great honor to be here today and to have an opportunity of putting my observations and primitive thought on the table.

After the Lehman crisis, the G20 agreed to stimulate their respective economies through aggressive fiscal policy. However, the result was still a sluggish economy and increased government debt. Now, policies that promote innovation as a means for achieving sustainable growth have come into the spotlight.

Many countries have issued studies, recommendations and policy initiatives to facilitate the innovative processes. In the US, "Innovate America," was issued in 2004, and the "America Competitiveness Initiative" was announced in the State of Union Address in 2006. In the EU, the Lisbon Strategy was declared in 2000, and "Creating an Innovative Europe" in 2006 and "EU2020" in 2010 followed. The OECD published an important report on the innovation process in 2004. In Japan, "Innovation 25" appeared in 2007 as a center piece of economic policy of the Abe government and several "New Growth Strategies", which emphasized innovation, have been announced by every prime minister since then.

All of these initiatives cover technology developments, investment environments, diffusion processes and important infrastructures and institutional arrangement to support them. It reflects the complexity of the innovation process. They described the processes by which new technology is used to uncover important unmet needs, and the ways businesses invest profitably to materialize their value.

Globalization and MNE

These policy initiatives reflect changes in innovation processes. The diminished importance of national boarders and ICT developments affected

the innovation process in various ways. One of the important changes was the internationalization of major corporation's activities. The newly emerging environment made it possible for most companies to separate their business operations, such as R&D, production, distribution and marketing, and to conduct them in almost any country. As a result, the important portions of innovative activities of firms could be conducted in a country far from their home country. Now, not one country, but many countries, can benefit from MNE's innovative processes.

R&D and other innovation processes also changed. Globalization and the new competitive environment changed the speed and the scope of innovation. In order to compete effectively, firms cannot stick to their own technological developments. Now, they have to utilize outside sources. New developments are always occurring and new possibilities keep arising. The deepest insights of the "Best and Brightest" cannot assure success. Instead, a wider network and continuing adjustments to the ever changing technological scenery have become more relevant.

Looking back at the past, financially rich states owned companies, working together with universities and national labs, were major sources of innovative power.

Then, the privatized national monopolies or national champions appeared as important players. They had financial capability and, again with universities and national labs, produced excellent researchers and engineers. Their family companies developed their own innovative capabilities through their participation in the process.

In the 1970's, Japan introduced a national consortium in VLSI which was a new type of successful model for national innovative processes. Competing companies formed a consortium. They cooperated in the basic part of the technological developments and competed on the commercial application side.

In the 1980's, the concept of the "cluster", a geographical gathering of research institutes, competing companies and supporting industries and services, were found to be a desirable "bed" for massive innovative interactions among important players. Up until this period, the assumption was indigenous companies were the major players,

The globalization that occurred in the 1990's changed the situation. Under this globalization movement, many MNEs are willing to have more than one R&D site beyond their national boarders and they networked their operations. Their contributions to the host countries innovation process were substantial. According to an OECD report, MNEs spend 16% of their R&D expenditures in host countries. Then governments develop various clusters seeking investments from MNEs. Days of open innovation have started.

ASEAN

ASEAN and East Asia has become a production center successfully by attracting FDI. However, the distance from "production center" to "Innovation Center" is large. There are many complex and time consuming challenges for any national economy to acquire necessary absorption capability. East Asia is a mixture of developed, emerging and developing economies. In the case of ASEAN, a majority is developing countries and the differences in their economic development stages are very large. Naturally, their strategy for innovation policy is different from each other. Each country has different priorities. They develop their common strategy as a group and an individual strategy as a nation.

The most important element is to make region more attractive to FDI. It is perfect if it is for R&D activities, but other activity accompanies some innovative elements. Studies shows that FDI as a base for exporting provides a very good stimulus for innovation. A free trade environment is indispensable for FDI. The completion of AEC as a really integrated borderless community and its expansion is the most important policies. There are some important infrastructural requirements and institutional arrangements. High quality ICT infrastructure is the most fundamental requirement for innovation activity of any players. It not only enables ASEAN to compete in innovative activities, but also gives additional opportunity for IT industry. Intellectual property protection is another one.

Another important consideration is capacity building for the absorption. Some countries may have to establish bases for innovation activities first. Universities, national labs and organizations backed by government in important fields are among them.

In other countries, government procurements, grant or subsidy may be

effective means for the development of capable SMEs to absorb innovation capacity. At a certain stage the facilitation of a consortium or joint ventures between indigenous companies and foreign companies may also be effective.

At a more advanced stage, capital markets and labor markets suitable for starting new companies can become urgent. Fundamental reforms of existing institutions such as national universities or regulatory system may be required.

Life Innovation

East Asian countries, which are at different stages in the development process, can collaborate in the innovation process. Healthcare related technologies and services are one of the possibilities.

Most of the countries are expected to face aging population. Every nation likes to extend the best medical services as much as possible to its citizens. It can be very costly, but it is one of the good areas for any country to get consensus among public to spend public money if it is used wisely. This is also the area which any country to find the place to participate, depending upon the stage of economic development.

First, ASEAN countries can make efficient production and use of talented MDs. There are many specialties and many roles which MDs have to play; good clinicians in particular fields and good researcher in basic research. Successful development in "Life Innovation" requires basic research capability, translational research and intense interactions between them. It requires cooperation between universities, hospitals and private companies. Such cooperation can be done beyond national boarder.

Every country administers safety regulations. Each needs safe medical technologies, as soon as possible. Innovation in this field requires a complicated regulatory process including clinical trials, which is a lengthy and costly process. Asian countries can benefit from the establishment of cooperative rational and efficient regulatory processes.

Every country also likes to provide universal medical care with minimum cost. Each can benefit by acquiring "Best Practices." All countries need cost efficient development process and cost efficient healthcare service delivery. ERIA can facilitate these processes through the provision of intellectual

input by compiling country data for regulatory practices or medical service delivery system.

Healthcare is only one possibility. There should be many other areas which countries with different priority can participate in, contribute to and benefit from collaborative framework.

Thank you.