

Impulsreferat eingeleitet und deren Ergebnisse im Plenum vorgestellt und diskutiert wurden.

Als Beispiele dienen die genetische Beratung als Diskurs zwischen Experten und Laien (Helmut Baitsch und Gerlinde Sponholz), die Arbeit Klinischer Ethikkomitees (Matthias Kettner) und die Rolle von Tierversuchskommissionen in der biomedizinischen Forschung (Ursula Sauer). In Politik und Recht stellt sich die Notwendigkeit, bioethische Konflikte auf eine Weise zu handhaben, die eine konstruktive Umsetzung in rechtlich wirksame Regelungen ermöglicht. Aufgabe von Ethikkommissionen auf nationaler und internationaler Ebene ist es, Argumentationsgrundlagen zu entwickeln und den Weg für politische und rechtliche Entscheidungsfindungen zu bereiten.

4 Ergebnisse

In seinem Abschlussvortrag fasste Klaus Steigleder die Ergebnisse der Tagung in Form einer Reihe von Forderungen für die deutsche Bioethik zusammen: Es gelte, die Grenzen eines legitimen Pluralismus auszuloten; es bedürfe der Spezialisierung auf unterschiedlichen Ebenen sowie einer organisierten Form der Vermittlung zwischen diesen; der politische Entscheidungsdruck müsse verringert werden und nicht zuletzt bedürfe es einer Einbeziehung sozialemischer Fragestellungen.

Die Tagung gestaltete sich als ein gelungenes Forum der Präsentation und Diskussion einer Vielfalt bioethischer Themen und Positionen. Da neben den Vorträgen ausreichend Raum für Diskussionen zur Verfügung stand, bot sich den 120 Teilnehmern die Möglichkeit eines lebendigen Austauschs mit renommierten Fachleuten. So wurde die Tagung für alle Beteiligten zu einer spannenden und gewinnbringenden Veranstaltung, wie auch die Sprecherin des Graduiertenkollegs, Eve-Marie Engels, in ihrer Abschlussrede noch einmal betonte.

Literatur

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Innovation and SMEs: Some Asian Experiences

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In both Europe and the United States, there has been a growth in recent years in policy attention targeted to small and medium-sized manufacturing enterprises (SMEs). This has also been the case in Asia, where countries such as Japan, South Korea, and Taiwan have boosted the amount of attention focused on SMEs.¹ This article shares observations and findings gained by the authors from recent research, conference, and workshop visits in the Pacific Rim.²

Japan, Taiwan, and South Korea are countries that are now well advanced in terms of economic development standing, with gross domestic product per capita of \$ 26,900, \$ 23,400, and \$ 16,950 respectively (2004 data, purchasing power parity adjusted).³ Japan and South Korea are highly-ranked by UNDP human development indices, while all three invest more in research and development as a share of their economic product than the European average.⁴ Taiwan is ranked 3rd in the World Economic Forum's country technology index rankings (2004), while Japan is ranked 5th and South Korea is ranked 6th.⁵ Yet, there is also concern – particularly in Japan and Korea – that the broader competitiveness position of these countries in recent years has lagged their strong human capital and technological potential, and that attention to upgrading the capabilities and performance of SMEs is central to sustaining economic dynamism.

1 Growth and Restructuring

As in other developed economies, recent developments in the restructuring of industry, out-sourcing, off-shoring, and technological change have contributed to the greater policy focus on SMEs. Of course, the growth of industrial production and technological capabilities in mainland China has increased competitive pressures on SMEs in Japan, South Korea, and Taiwan. Business leaders and policy makers in each country are simultaneously search-

ing for ways that SMEs can compete with, source from, collaborate with, and sell to Chinese-based enterprises (all in the context of the complex geo-political relationships that each of the three Asian nations has with China). There is also a greater appreciation of the potential of SMEs to foster new business and technological development as economies shift from large-scale mass-production to flexible, knowledge-intensive, entrepreneurial, creative, networked, and more customized modes of manufacturing.

However, while similarities in policy approaches for SMEs are evident in Japan, South Korea, and Taiwan, underlying conditions and trends are different in each of these three nations. In the Japanese case, there has been a striking turn in the trajectory of the SME sector. In the first few decades following World War II, the number of manufacturing SMEs grew sharply, from 183,000 manufacturing establishments with 4-299 employees in 1954 to 423,000 in 1972. It has been argued that the flourishing of industrial entrepreneurship exhibited by this increase of SMEs was the foundation of the Japanese post-war economic “miracle”, with many of these SMEs contributing specialized capabilities to supply-chains coordinated by larger firms.⁶ Growth among Japanese SMEs continued, albeit more slowly, into the 1980s (peaking at 444,000 in 1982). However, in the last two decades, a reversal has set in. In 2002, there were 286,000 manufacturing SMEs in Japan – a decline of nearly 140,000 establishments since 1991. More than 2.1 million jobs (or about one-fifth of the total) were lost in Japanese SMEs between 1991 and 2002.⁷

Several factors underlie the recent decline of manufacturing SMEs in Japan. These include the ongoing restructuring and internationalization of the Japanese economy, with large firms moving production overseas and cutting domestic SMEs out of the supply chain. Moreover, for more than a decade following the bursting of its “bubble economy” in 1991, Japan has experienced macro-economic stagnation. This has contributed to weak home demand for manufactured products. Additionally, as the counterpoint to the boom in entrepreneurship in the post-war years, Japan has entered a period where many SMEs have problems of succession and are forced to close.

In Taiwan, the development of SMEs has also been critical to modernization and economic growth over the past five decades.⁸ Indeed, Taiwan has typically been viewed as a diverse “small firm” economy, traditionally lacking the large corporations and conglomerated groups seen in Japan (“keiretsu”) and Korea (“chaebol”). Initially, there was an expansion of export-oriented SMEs in Taiwan in labor-intensive industries such as apparel, footwear, plastics goods and toys.⁹ Subsequently, there was a growth of SMEs in electronics and other capital and technology-intensive sectors. Taiwanese analysts report that over the last two decades, the share of Taiwanese manufacturing employment in SMEs has remained steady at just under four-fifths. However, the SME share of manufactured exports has declined significantly, from about three-quarters in the early 1980s to about one-third today. In turn, the role of large firms has now grown considerably in Taiwan, with these larger firms able to offshore parts of production to lower-cost locations.

Korea presents another variation. Although known for the emergence of a handful of large, conglomerated groups (such as Samsung, LG, or Hyundai) developed along the lines of Japanese counterparts, in recent years several of these groups have encountered problems leading to restructuring. At the other end of the scale – and in contrast to the Japanese situation – the number of manufacturing SMEs in Korea has seen some recent increase, up 13 % in the four years through to 2004, to more than 72,000 enterprises. Korean large firms appear to have increased their outsourcing to domestic SMEs. But there is significant transition within the SME sector, through births and deaths of firms. Researchers at the Korea Development Institute find that sectors with SME declines are ones where production and exports have increased from China, putting Korean SMEs under pressure. Yet, they also note that this has not led remaining SMEs to improve their own productivity, which is still low in Korea relative to large firms.

2 Policies for SMEs

The problems and challenges facing SMEs in all three of these Asian economies have stimu-

lated new policies and programs. Of course, policymakers are responding to domestic political, social, and regional pressures to try to retain manufacturing SMEs. At the same time, there is also a new appreciation of the role that networks of knowledge-intensive SMEs can play in economic development.¹⁰ This is particularly important in Japan and Korea where policymakers in the past concentrated support on large firms. However, large-scale targeted national industry policies are less viable today (given the globalization of these large firms as well as the current international trade regime) and, in turn, attention to SMEs has increased.

In all three countries, new policies have been introduced to stimulate high technology, start-up SMEs and to strengthen existing mature SMEs. In Japan, many technology incubators and enterprise start-up programs have been established and parallel policies have been put into place to promote industrial agglomerations and clusters of SMEs and to improve access to finance. Public universities have been “denationalized” and encouraged to be more active in spinning out entrepreneurial start-ups and transferring new technologies to SMEs.¹¹ In Korea, initiatives to foster innovative SMEs include setting up business incubators (of which there are now nearly 300). Efforts are also underway to strengthen regional innovation clusters in Korea by decentralizing policy responsibility, and encouraging local linkages between universities, technology centers and companies. Taiwan has also expanded measures to promote SME linkages with universities and R&D, business start-up and incubation support, technology and management upgrading for SMEs, and technology parks and regional innovation clusters. In these three Asian countries, parallel policies have also been put in place to increase access to finance for SMEs (including the availability of venture capital) and to improve the broader business climate for SMEs.

How will these SME policies fare? It is notable that while there are significant differences in the industrial histories and current economic and political structures of Japan, Korea, and Taiwan, all three countries are pursuing remarkably similar SME strategies: they are adopting “global best practices” in fostering SME development. Certainly, there are national and regional adaptations of these best

practices. However, even with these adaptations, these SME policies are confronted with particular “path dependent” framework conditions in each country that will affect outcomes.

Taiwan’s existing base of SMEs and its well-developed entrepreneurial culture may provide fertile grounds for new SME promotion efforts to take off, although Taiwan’s relationship with mainland China adds an element of uncertainty that will color future developments. In Korea, it is already evident that a new group of young entrepreneurs is emerging who are developing start-up technology-intensive companies. But much of this activity is focused in the dynamic Seoul metropolis, and it is a challenge for Korean policy makers to promote SME dynamism in other regions of the country.

Japan presents perhaps the most intriguing and complicated case. Shifting to an economy – and society – which is more flexible and less bureaucratic, and where SMEs have a more dynamic role, is now a national priority. Reforms and new policies are being put into place. But it remains to be seen whether Japan can proceed rapidly enough – and develop customized SME policies and strategies that will work in its particular environment – to retain its long-held place as the economic and technological leader in Southeast Asia.

In 1936, the English economist John Maynard Keynes now famously remarked: “The difficulty lies, not in the new ideas, but in escaping from the old ones.”¹² This is indeed the essential challenge facing Japan, Korea, and Taiwan. Their outstanding economic growth in the second part of the twentieth century was built on industrial and institutional foundations that now need to be remodeled to address the conditions and opportunities of the first part of the current century. Expanding the base of innovative SMEs is a key element of this transition (along with many other changes). But to do this, existing institutions, policies, attitudes, and practices – even though they were successful in the past – have to change and evolve too. This is exactly the process that SME’s (and SME policymakers) are undertaking in Southeast Asian countries – and, indeed, elsewhere in the developed world. We suggest, at least in this domain, that “first mover” advantages will likely apply.

Notes

- 1) Each country's SME definition varies by economic sector and by employment size and financial characteristics. However, as a general yardstick, manufacturing SMEs in Japan and Korea are typically enterprises with fewer than 300 regular employees. In Taiwan, manufacturing SMEs are typically enterprises with 200 or fewer regular employees.
- 2) Inter alia, the Conference on Restructuring SMEs in the Age of Global Enterprises, East-West Center, Honolulu, July 2005.
- 3) World Bank data, cited in European Trend Chart on Innovation, Annual Innovation Policy Trends Report for Japan, China, Korea, Taiwan, Singapore, India, Malaysia, Thailand, Indonesia. European Commission, Enterprise Directorate-General, Brussels, 2005.
- 4) United Nations Development Programme, Human Development Report 2005, New York, 2005. <http://hdr.undp.org/reports/global/2005/>. Note: Taiwan is not included in this UNDP report.
- 5) World Economic Forum, Global Competitiveness Report 2003-2004, in European Trend Chart on Innovation, op. cit.
- 6) For a historical review, see: Shapira, P., Modernizing Small Manufacturers in the United States and Japan: Public Technology Infrastructures and Strategies, in Technological Infrastructure_Policy (TIP): An International Perspective, (M. Teubal, D. Foray, M. Justman, and E., pp. 285-334, Zuscovitch, Eds.), Kluwer Academic Press, 1996.
- 7) Japan Small Business Research Institute, White Paper on Small and Medium Enterprises in Japan, 2004. Ministry of Economy, Trade and Industry, Tokyo, 2004.
- 8) Small and Medium Enterprise Administration, White Paper on Small and Medium Enterprises in Taiwan, 2005, Ministry of Economic Affairs, Taipei, 2005.
- 9) The discussion of SME developments in Taiwan and Korea in this and following paragraphs draws on presentations made by other experts at the Conference on Restructuring SMEs in the Age of Global Enterprises, East-West Center, Honolulu, July 2005.
- 10) See, for example: Hassink, R. "Regional Innovation Support Systems: Recent Trends in Germany and East Asia," European Planning Studies, 2002, 10:2, pp. 153-164. Mitsui, I., "Industrial cluster policies and regional development in the age of globalization: Eastern and Western Approaches and their differences," Yokohama National University (paper presented at 30th ISBC Conference, Singapore, September 2003).
- 11) See: Organisation for Economic Cooperation and Development, OECD Territorial Reviews: Japan, Paris, 2005.
- 12) Keynes, J.M., The General Theory of Employment, Interest and Money, Macmillan & Co., London, 1936, preface.

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