Executive Summary

The review of the Association of Southeast Asian Nation's Small and Medium-sized Enterprises (ASEAN SME) Policy Index conducted by the Economic Research Institute for ASEAN and East Asia (ERIA) showed that there is a lot to be done to attain best practice in the following policy areas: institutional framework, access to support services, cheaper and faster start-up, better legislation and regulation for SMEs, access to finance, technology and technology transfer, international market expansion, promotion of entrepreneurial education, and more effective representation of SMEs' interests. The most significant gaps and low regional standing are on technology and technology transfer; access to finance; promotion of entrepreneurial education; cheaper, faster start-up and better regulations; and access to support services.

The relative prioritization among the policy areas and indicators would be dependent on the stakeholders' assessment and judgment of each ASEAN Member State (AMS) and its level of economic development. In addition, it would be more beneficial if all the AMSs identified specific targets, timelines, and action plans in a concerted manner in moving forward to a more supportive policy and institutional environment for SMEs in the region.

In order to help narrowing policy gaps in AMSs, especially in the areas of technology development and transfers, access to finance, to boost more SME participation in trade and investment in ASEAN and East Asia, this project will document policy best practices in areas critical to fostering regional SME policy cooperation and providing practical policy implementations.

Best Policy Practices in SME Innovation and Technology Transfers

From the comparative studies, the factors underlying successful government innovation financing programs can be summarized as follows:

First, in the more successful countries such as Singapore and Taiwan, there are ‘co-evolutions’ of innovation in the financing policy instruments and the levels of technological and innovative capabilities of firms. Different levels of technological and innovative capabilities of firms need different policy instruments. The ability to initiate and implement new policy instruments to fit the changing needs of firms at different levels of capabilities over time is very critical. Policymakers must understand the current needs and technological barriers facing firms in their countries. The ‘Me-too’ strategies based on copying other countries, which will no doubt have different needs and challenges, are not going to be effective.

Second, the more successful countries, like Singapore and Taiwan, and to a lesser extent Malaysia have a higher level of flexibility, policy coordination, and learning. They offer a much greater variety of policy instruments and cater them ‘selectively’ to the particular needs of industrial sectors, clusters, technologies, types of firms, or even individual firm demands (the so-called ‘firm-specific’ or ‘pre-packaged’ incentives). Incentives should be formulated and executed to complement and contribute to the overall industrial technology development strategy. This is illustrated in the venture capital and business-angel financing cases in Singapore, and the mandate of Ministry of Economic Affairs in giving opinions on the prospects of newly listed firms in Taiwan’s stock markets. In addition, when incentives do not work for some particular types of firms, they should be adjusted to fit the demands of these firms. For example, Singapore’s research and development (R&D) tax incentives for start-up companies can be converted into grants since these firms do not make profits in their initial years of establishment.

Third, developing technological and innovative capabilities of firms takes a long time. Hence, the amount, duration, and continuity of government-supporting schemes are crucial. They reflect policy priorities and the commitment of governments on this issue. The case studies have illustrated that the governments of Singapore and Taiwan are very committed to offering these schemes.

Fourth, policymakers must have a deep understanding of what constitutes innovations and innovation systems, and how they evolve over time. This is an important prerequisite for formulating effective policies. There is a sharp contrast between Thailand, and Singapore and Taiwan in forming innovation financing measures. While the former narrowly focused on R&D-led innovation, the latter broadened their incentives to other activities important in innovation processes, both in-house and outside of a single firm. Incentives can also cover innovations in services, business models, solutions, and other types. The difference between Thai and Singaporean incentives to promote their countries as R&D hubs is also another good example of the different levels of understanding of government officials regarding the global R&D processes of transnational corporations.

Fifth, innovation financing policies require other corresponding policy initiatives to make them work successfully. In addition to financing innovation schemes, government initiatives that produce qualified human resources, attract foreign talent, and help organizations to work together are very necessary. Examples of this synergy are the cases of public research institutes in Taiwan and entrepreneurial universities in Singapore.

Sixth, institutional factors shape the choices and effective implementation of these policies. These factors include laws and regulations, unity and capability of government bureaucracy, trust, entrepreneurship, attitudes on corruption, and the role of government in supporting private firms. It is important to note that institutional shortcomings can be, to some extent, corrected. Successful countries can use financing innovation incentives as well as other government mechanisms (such as using public research institutes as intermediaries in innovation systems in Taiwan) and initiatives (like Malaysia's credit rating agencies for SMEs and Singapore's promotion of business angel networks) to overcome or mitigate these shortcomings.

Best Policy Practices for Internationalization of SME Trade and Investment

The ASEAN and East Asia region includes economies at very different levels of development. For example, Thailand is a middle-income country that is extensively integrated into global and regional markets, including through participation in global value chains. By contrast, Myanmar is one of the least-developed economies. It has been relatively isolated for decades, and is now going through an extensive reform process, including a focus on product market integration with the international economy. In both countries, SMEs make up the vast majority of the enterprises and play a key role as sources of jobs and incomes. Although at very different levels of sophistication and competitiveness, SME internationalization is a policy priority for both countries, with particular focus on the ASEAN and East Asia region.

The 'stages of internationalization' framework provides a potentially useful guide to reflect on the implications of the differences for SME internationalization between less-developed economies such as Myanmar, and more-developed economies such as Thailand. In general, the differences are less in the kind of barriers and types of required policy responses, but more in the formulation of the known policies to make sure that they respond to actual needs and that they are feasible in terms of constraints on implementation (e.g., by the relevant agencies and capacities of firms). In the context of the 'stages' framework, it may be possible to go further in considering the likely differences and their implications.

Given the relative lagging state of domestic enterprises in less-developed economies such as Myanmar, far less firms will likely be involved in, and have knowledge of, international activities of any kind. Therefore, the policy emphasis will need to be on the preparation stage. A key challenge and priority is helping SMEs get ready for internationalization, using the various policy measures already noted (e.g., information, financing, and developing enterprise linkages). The needs and measures will be similar, but detailed design and implementation requirements will have to differ to ensure their relevance and effectiveness for domestic SMEs. For example, in the case of information on potential markets and buyers, the use of information technology (IT) is likely to be less effective in economies such as those of Myanmar and Cambodia in terms of SME capabilities and access, and state of infrastructure development (e.g., power, communications). Therefore, more emphasis is likely to be needed on face-to-face activities such as workshops and printed materials. Support for later stages of internationalization—active engagement and growth and expansion—will become relevant and necessary as domestic SMEs internationalize more and more.

Regional cooperation initiatives can complement and enhance country-specific efforts at internationalization. These can be particularly important to less-developed economies given their constraints in resources, experience, and knowledge. The rationale for a regional approach are (i) economies of scale for resources and activities (e.g., training); (ii) leveraging through the sharing of information, knowledge, and experience (e.g., markets, regulations, and business opportunities); (iii) strengthening a region-wide culture of partnership and collaboration between government and business; (iv) updating and adjusting best policy practices based on region-wide learning; and (v) building on the key role and potential of cross-border value chain linkages.

Based on an assessment of the barriers to internationalization and examples of best policy practice, the following actions may be considered for regional cooperation to support SME internationalization:

- *Expand cross-border SME financing mechanisms:* Financing, particularly trade and supply chain finance, is a key constraint on SME internationalization, especially in the wake of the 2008 global economic crisis. Therefore, facilitating the cross-border flows of financing and financial instruments, such as credit, credit guarantees, and particularly trade and supply chain finance, is important to expand SME internationalization. This could include a focus on regional cooperation related to trade and supply chain finance, in the broader context of regional financial sector liberalization and cooperation. An important potential regional initiative is an agency/mechanism for providing SME credit information to reduce credit risks and lower the barriers for SME access to financing given the information gap between lenders and SMEs. Japan's effective SME rating system, the Credit Risk Database Association that uses both quantitative and qualitative information, is a suggestive example.
- *Expand cross-border and regional workshops and training:* Internationalization workshops, particularly targeted at particular value chains of regional importance and market immersion programs, could play an important role in providing practical information and knowledge to regional SMEs given multi-country participation. For example, this could focus on delivering accredited management and technological training leading to regional certification, similar to some of the training programs offered by the Asian Productivity Organization. This can also help support the building of cross-border alliances and partnerships among the participants.

- *Establish comprehensive, SME user-friendly online information portal:* To respond to the information barrier, and allow greater sharing of market and business-related information, a region-wide online SME-oriented portal could play an important role. It could include information on market and industry trends, and key issues; business opportunities and related leads; business matching on a region-wide basis; comprehensive listing of the region's enterprises in key value chains to facilitate identification of potential partners/suppliers/buyers; comprehensive information on rules, regulations, and procedures in the region's markets; and a list of internationalization-related advisory services and associated organizations and individuals in the region. The European Union's (EU) SME Internationalization Portal provides a useful example. It is a database that lists semi-public providers of specialized services (e.g., local chambers of commerce) for companies planning to enter international markets; and links to other EU-backed sources of support and advice such as the European Commission's Market Access Database that provides market access information for individual non-EU growth markets.
- *Establish the ASEAN Economic Community (AEC) SME Business Centres to support SMEs exporting (directly and indirectly) and investing in the region:* These centres, established in selected locations in the AEC, would provide support and assistance to SMEs for doing business in AEC and East Asian markets. This can include (i) business development services (e.g., focused market information, business and marketing advice, matchmaking support, and physical facilities such as desk/secretarial support and meeting rooms); (ii) legal services support (e.g., access to practical legal information, referral to service providers such as lawyers and tax advisors); (iii) standards and technical issues (e.g., information on required certification, quality, and labeling); and (iv) human resources–related support (e.g., access to specialized skills including languages, and referral to training sessions and expertise). The EU business centres, particularly the EU SME Centre in China, could provide useful experience and guidance.
- *Establish a regional 'SME Internationalization Best Practices Centre':* There have been many SME internationalization best practices studies, and even more on general SME best practices. An AEC/East Asia best practices centre that can be easily accessed and used by firms could serve an important role in supporting SME internationalization. It could provide

extensive and practical information to the region's SMEs on best (and worst) practices, including case studies focusing on specific firms, in particular value chains and markets; a practical and supported framework for self-assessment of existing operations; and strategies for firms on adapting and implementing best practices. Ideally, over time, this could be linked to regional advisory services such as the suggested AEC SME business centres.

- *SME internationalization through cross-border value chain linkages:* There is strong interest in many of the region's economies in strengthening cross-border economic linkages, particularly involving border areas. Such cross-border linkages in key value chains can contribute to the development of local communities; product market diversification; and the upgrading of participating economies and firms, including SMEs. This could be especially effective in linkages between less-developed economies such as Myanmar, and more-developed economies such as Thailand. The garment and textile value chain provides an example – building on the agglomeration of garment and textile SMEs in Mae Sot (Thailand), and a planned industrial zone in Myawaddy (Myanmar) to take advantage of proximity to Thailand. Firms in Myawaddy (e.g., Thai and other Asian investors) can provide low-cost labour for lower-value and lower-skill activities such as cut/make/trim (CMT); while SMEs in Mae Sot can provide materials and parts for CMT activities and focus on higher-value and higher-skill activities such as quality assurance, packaging, and shipping (logistics services). Such cross-border cooperation can provide opportunities for SMEs in Myanmar and Thailand to internationalize, starting in a more limited and manageable way, with neighbouring countries and expanding over time within the framework of global value chains.

Innovation and University Entrepreneurship: Experiences from Japan

Approximately a decade has passed since the incorporation of national universities. During the past 10 years, different kinds of initiatives for academic entrepreneurship have been taking place, although most of them do not seem to have produced good role models for university entrepreneurship.

Japanese universities have learned a lot from universities outside of Japan, particularly from leading universities in the world including University of California at Berkeley, Stanford University, Massachusetts Institute of Technology, University of Cambridge, University of Oxford, and Imperial College London, among others.

With some solid and successful examples of academic entrepreneurship such as PeptiDream, the innovation ecosystem practices at The University of Tokyo could be an effective model in Japan for university-based entrepreneurship and innovation. Its tripartite structure, consisting of the university's Office of Science Entrepreneurship and Enterprise Development Program, currently the Office of Innovation and Entrepreneurship; TODAI TLO Ltd., the technology transfer office dedicated to the university; and the University of Tokyo Edge Capital Co. Ltd. (UTEC), a venture capital arm dedicated to the university, plays a collective role in encouraging university entrepreneurship. The university's initiatives in entrepreneurship education, incubation, mentoring and consulting, and graduate entrepreneurs' networking, as a joint effort with the Alumni Office, help cultivate university entrepreneurship. The Asian Entrepreneurship Award program and the extension of the innovation model to the Kashiwa-no-ha Campus of the University of Tokyo are models for partnership involving local governments, corporate sponsors, great research universities in Asia, and entrepreneurs from Asian countries and economies. The evolution of the innovation ecosystem at the University of Tokyo is moving forward to the goal that the university will contribute more to the world through innovation based on university entrepreneurship.