

High-growth, Innovative Asian SMEs for International Trade and Competitiveness: Challenges and Solutions for APO Member Countries

Abstract

This paper presents some key recommendations to APO member countries to consider when pursuing appropriate strategies for nurturing high-growth, innovative SMEs for the international stage. Some of the recommendations pertain to industrial clustering to achieve better agglomeration effects, selectively prioritizing financial incentives to fuel innovation, increasing the use of managerial and technical expertise within the APO and elsewhere, fostering greater entrepreneurship and deeper innovation within firms, renewing the focus on training and knowledge development, the sharing of best practices especially for the nascent service industry, and applying the supply chain perspective to service enterprises as they have the greatest propensity for competitiveness.

Key words: SME, Productivity, International trade, Competitiveness

Introduction

In most countries in Asia, international trade represents a significant share of GDP. For example, in 2002, China's trade share in GDP was 55% (www.globalinsights.com). While international trade has been present throughout much of history, albeit on a different scope and scale, its economic, social, and political importance has been on the ascent in recent years. Increasing international trade is the primary meaning of globalization. With globalization, the international trade scene has already changed, particularly that of services, to the extent that large corporations such as IBM are focusing on innovation. As globalization and advances in information technology and telecommunications enable manufacturing and services to be virtual and located at the most optimal sites, they also enable the creation of innovative solutions leveraging cost, economies of scale and scope, and, more importantly, speed to market (measured by meeting customer urgency).

However, where international trade is concerned, it is only goods of sufficient quality and cost that will be able to find customers and secure access to large, stable markets. This phenomenon can, however, severely disadvantage local SMEs since many lack the requisite economies of scale and scope. Sustainable competition thus depends on countries having SMEs that are internationally capable of supplying quality goods and services. This must be complemented by other necessary antecedents such as macroeconomic stability, sound logistics infrastructure, competitiveness of firms, and social cohesion.

International trade has become complex and highly demanding. First, continuous improvement and innovation in quality, price and services have pushed the competition frontier of products and services to an unprecedented level. Second, through the vista of international trade, new pockets of space and opportunity have been created which address the challenges of competitiveness, increase productivity, enhance the formation of industrial clusters and value chains, and necessitate greater technological innovation. Third, exacerbating the situation is an ever-expanding list of stricter regulations and sector- and product-specific clauses that are being added to global as well as regional trade regimes. As such, the success and survival of SMEs in international trade calls for preparations that are far more comprehensive than ever before.

This white paper aims to examine and understand the determinants of competitiveness and other key success factors that ensure the survival of SMEs through sustained innovation in the highly demanding international trade arena. In particular, the paper reviews the significance and contributions of high-growth SMEs in meeting the ever-growing challenges in the international trade arena. Through this, the paper seeks to emphasize the creation of high-growth, innovative SMEs in international markets. Some recommendations and strategic options are given for key decision makers at the regional, national, industry, and enterprise levels.

Research Method

In this paper, secondary data based on statistical evidence drawn from academically accepted sites such as the EIU, WTO, and World Bank are used to substantiate some of the recommendations and verify some of the anecdotal evidence from case studies provided by

participants at a recent APO study meeting on SMEs' Productivity for International Trade and Competitiveness held in Jakarta on 12–15 June 2007.

SMEs

SMEs have an increasingly important role in the process of export-led industrialization in Asia. Table 1 shows that SMEs predominate over large firms, both in number and the share of the labor force employed, and make a significant contribution to growth, despite their inherent disadvantages arising from inconsequential firm size and the lack of industrial experience. SMEs engaged in manufacturing often account for an even larger share of manufacturing employment, which may rise to as high as 80% (more than 70% in Indonesia and Vietnam and 86% in Thailand) (Ayyagari and Beck, 2003). In this context, it is worth noting that SMEs in developing countries are key creators of employment opportunities (and therefore wealth). SMEs also have the potential to become a powerful engine of manufactured export growth and upgrading in Asia.

SMEs use relatively less capital to create jobs compared with those created by larger enterprises. This is a salient feature, especially for developing economies abundant in labor but short of capital. SMEs are claimed to be the main potential source of economic growth and innovation as they are an important source of export revenue in some developing countries, given their lower exchange rate, cheaper cost of production, and government incentives. Such SMEs can contribute up to 60% of total manufacturing exports. Next, the presence of SMEs in the economy tends to increase competition, which promotes greater economic dynamism. However, the value added of SMEs leaves much to be desired. Much need to be done by SMEs, SME associations, and government agencies to translate the export potential of SMEs onto a global platform.

Table 1. Percentage of Asian SMEs among total enterprises, contribution to employment, and percentage of total value added (%)

	Malaysia	Thailand	Philippines	Korea	Japan	China	Indonesia	India
SME establishments	94.4	98	99.6	99	99	99.7	99.995	95

Employment	40.4	55.8	69.1	69	88%	74	99.04.	80
Value added	26	47	32.0	46	56%	60	63.11	40

Sources: JICA and others, taken from www.dti.gov.ph/filedirectory/SMEagenda.ppt.

UNIDO, *International Yearbook of Industrial Statistics 2002*, taken from (Das, 2003) and (Dhungana, 2003), cited in C. Chaminade and J. Vang-Lauridsen, *Innovation Policies for Asian SMEs: An Innovation System Perspective*.

There is a divide between SMEs in developing nations such as many of those found in Asia and the developed nations of the OECD (Vandenberg, 2004). This divide becomes more apparent with globalization, as the competitive advantage of SMEs in developing countries is weakened. The OECD (1997a: 7) reported that the globalization of economic activity affects the development of SMEs in three main ways. First, for about 5–10% of SMEs, globalization opens up new opportunities for export expansion and growth. Such SMEs are already active in overseas markets and estimated to account for about 35% of Asia’s exports. These SMEs have well-developed manufacturing capabilities and are able to reap the benefits of changes in communications, technology, and the organization of production to compete internationally with success. Second, for another 25–50% of SMEs, inward globalization poses new competitive challenges and threats from abroad. Different SMEs from different industries are likely to be affected in different ways. The SMEs that are potentially competitive (with manufacturing capabilities close to global standards) are likely to be pushed into export production and upgrading their manufacturing capabilities. Those less likely or unable to adapt are at risk from the competition induced by globalization and may not survive without significant upgrading to improve output quality, cost competitiveness, and management practices. The remaining SMEs are largely insulated from the effects of globalization and are hence likely to have limited capabilities. These SMEs tend to be relatively small, localized service providers. APO member countries need to be cognizant of this divide and seize every opportunity to achieve greater growth and innovation.

In a separate study, Wignaraja (2003) reported that a dualistic pattern of SME growth and exporting is visible in developing countries whereby a small, relatively dynamic SME sector coexists with a large, underperforming SME sector. The former has taken advantage of the new opportunities offered by globalization and international trade and invested in their manufacturing capabilities to bring them up to world standards on price, quality, and

delivery. Some have even formed industrial groupings with other SMEs or multinational corporations to stimulate the emergence of production networks among firms and increase value addition. These dynamic SMEs have expanded their existing domestic market shares, broken into new export markets, and continuously upgraded their products and processes. Having developed a solid base of competitive capabilities, such SMEs appear set to reap new market and technological opportunities. This then leads to the question: What are the determinants of successful high-growth SMEs that are able to transcend the boundaries of weak productivity and confinement to localized markets?

Growth theory dictates that in the early stages of economic development, economies compete on price and getting the basics right, i.e., 1) the institutional environment that guarantees basic property rights, 2) physical infrastructure, 3) minimum degree of macroeconomic stability, and 4) a good level of basic education and health. At the intermediate level of development, economies need to become more sophisticated. At this level, economies should make a greater effort to improve tertiary forms of education and training. They also need to improve the efficiency of their labor, goods, and financial markets and adopt the most up-to-date technologies (even if those technologies were invented elsewhere). Applying the growth theory to SMEs, SMEs would then need to innovate both in the sense of creating new products and in the sense of creating a more sophisticated business environment (with innovation in business practices). This perspective can help SMEs to understand the various determinants critical for SME growth and success under the complex trade regimes today.

As SMEs are a heterogeneous group, it is fair to assume that in any country only a small subset of SMEs is dynamic, innovative, and high growth oriented. Based on firms having introduced at least one new or improved product or process to the market, about 30–60% of SMEs in the manufacturing sector in the OECD can be characterized as being innovative. Moreover, in some OECD countries such as Belgium, Ireland, Italy, Portugal, and the UK, small manufacturing firms are almost as innovative as the large ones. Similarly, in services, small firms in some OECD countries, for example, in Portugal, Switzerland, and the UK, are equally as innovative and competitive as large enterprises (OECD, 2002).

Competitiveness

At the national level, as shown in Table 2, competitiveness is the extent to which the domestic environment (policy, institutions, and infrastructure) is either conducive or detrimental to entrepreneurship, innovation, and business activities and initiatives (Asasen et al., 2003). Thus, industry-level competitiveness is the extent to which an industry or sector has the potential for high growth and/or to generate an attractive return on investment. These capital resources can manifest either as direct or portfolio investment flows. They can come from local and/or external sources, which may be private, official, or multilateral in nature. At the firm level, competitiveness is the degree of effectiveness, flexibility, and efficiency in the production and delivery of goods and services at a much lower cost than those of the competition, or at a price premium over those from other enterprises. Such a competitive edge, which may be derived from several sources, is supported and/or is leveraged and maximized by three main factors.

The first factor pertains to access to the available store of knowledge, including that of a market, marketing, and technology variety. To be competitive internationally, SMEs in particular need to engage the market continuously, be innovative in their marketing approach, rely heavily on superior branding and brand equity, and be technology savvy, exploiting the digital media where necessary to increase their reach. The second factor relates to the large gains in collective efficiency and flexibility through participation (even on an arm’s length basis) in clusters of firms and/or in networks of inter-firm linkages. Such interactions can be backward integration with suppliers, laterally with other producers and providers, and forward integration with users and consumers. In this regard, SMEs can undertake to grow through a collective effort of the industry cluster rather than choosing to do it alone. This strategy can help accelerate the growth trajectory of SMEs.

Table 2. Competitiveness index rankings

Global Competitiveness Index 2005 and 2006 comparisons ¹					Business Competitiveness Index 2006 and 2005 comparisons ²			
Country/ economy	2006 score	2006 rank	2005 rank	Change 2005– 2006	BCI ranking	Quality of national business environme nt ranking	Company operations and strategy ranking	BCI change 2005–2006
Singapore	5.63	5	5	→	11	11	21	↓

Japan	5.60	7	10	↑	9	9	5	→
Hong Kong	5.46	11	14	↑	10	10	12	↑
Rep. of China	5.41	13	8	↓	21	22	16	↓
Australia	5.29	19	18	↓	18	15	23	↓
Rep. of Korea	5.13	24	19	↓	25	29	22	↓
Malaysia	5.11	26	25	↓	20	20	14	↑
Thailand	4.58	35	33	↓	37	37	30	↓
India	4.44	43	45	↑	27	27	25	↑
Indonesia	4.26	50	69	↑	35	38	26	↑
China	4.24	54	48	↓	64	65	69	↓
Philippines	4.00	71	73	↑	72	76	48	↓
Vietnam	3.89	77	74	↓	82	83	77	↓
Sri Lanka	3.87	79	80	↑	65	68	68	↑
Pakistan	3.66	91	94	↑	67	67	72	→
Mongolia	3.60	92	90	↓	99	98	104	↓
Bangladesh	3.46	99	98	↓	108	110	105	↓
Cambodia	3.39	103	111	↑	107	107	96	→
Nepal	3.26	110	—	n/a	111	113	106	n/a

Sources:

http://www.weforum.org/pdf/Global_Competitiveness_Reports/gcr2006_rankings.xls,
accessed on 31 May 2007.

¹http://www.weforum.org/pdf/Global_Competitiveness_Reports/gcr2006_rankings.xls.

²www.weforum.org/pdf/Global_Competitiveness_Reports/Reports/gcr_2006/BCI.pdf.

Likewise, the linkages needed for a superior supply chain should be formed by SMEs as soon as possible so that the requisite network to ensure speed to market is available at all times. The third element of competitiveness concerns the firm's own capacity for continual learning for innovation and growth. As mentioned under the growth theory earlier, this is a prerequisite for (knowledge-based and learning-driven) innovation, regardless of whether the progression takes place in product, process, organization, or management within the enterprise and, by extension, in the industries and sectors concerned. High-growth SMEs, whether manufacturing or service based, should capitalize on their comparative advantage of product or niche services and create a culture of organizational lifelong learning to keep pace with the external turbulence. Of crucial importance is the sustained and efficient provision

from both the public and private sectors of relevant and affordable assistance and extension activities, and the generation and replication of appropriate local capabilities and infrastructure for such provisions over time. All these are necessary to meet the needs of an expanding, diversifying, and more sophisticated SME sector in its development and integration process.

However, given the wide range of activities undertaken by SMEs, some may not see international trade and competitiveness with the same lens as the rest of the world as these SMEs function in very diverse markets at all levels, urban, rural, local, national, regional, and even international. Because of their diversity, they possess different levels of skills, capital, innovation, sophistication, and growth orientation. Nevertheless, fast-growing economies tend to have a vibrant SME sector (Beck et al., 2003). A simple correlation shows that the share of employment in SMEs in total employment is positively associated with higher rates of GDP per capita growth (Ayyagari et al., 2003; World Bank, 2004). In short, countries with a high share of employment in SMEs tend to have higher growth in GDP per capita. These studies have further shown that a 1% increase in the share of employment in SMEs in total employment is associated with an increase of 0.07% in GDP growth per capita.

The key questions are: Will competitive markets automatically ensure that less productive firms (presumably SMEs) are forced out, leaving room for only bigger firms with higher productivity but perhaps less potential to create employment? Why is it that SMEs still dominate the economic landscape even in more developed economies? What is their competitive advantage and where should this advantage lie? Should public policy strategies ignore small-scale activities to raise overall productivity? Alternatively, is there a better way to enhance growth in SMEs amid the need for countries to respond to the call for greater international trade and competitiveness?

Challenges to APO Member Countries

At the APO study meeting in Jakarta, some of the above issues were discussed. As the meeting was intended to seek participation and solicit solutions and suggestions at the government, industry, and enterprise levels for SME productivity for international trade and competitiveness, participants were very forthcoming in their views, given their backgrounds

in government agencies or SME associations, with some being SME owners themselves. After careful deliberations and feedback from the question and answer sessions, one issue surfaced. This topic is positioned around the key determinants of productivity and competitiveness for SMEs currently engaged in international trade. One determinant is the need for greater innovation and recognition of the value of service-based SMEs.

In line with this observation is a call for an in-depth study on best practices adopted by the high-growth, innovative SMEs (from the agricultural, technology, and service sectors) that have internationalized successfully. However, the challenge for APO member countries has always been the ability to identify the sector to focus on and harvest the low-hanging fruits. For example, in the case of Indonesia, the government and related agencies have successfully engaged SMEs and encouraged them to adopt new forms of agribusiness not indigenous to the country, for example, cacao farming for export and seaweed production exploiting the comparative advantages present in Indonesia's geography (Hayashi, 2003). As a result, seaweed is now harvested and used as a raw material for 19 other products (from beauty care to herbal products) in the food, facial, and feminine beauty industries, spawning other new streams of SMEs. Further, the participants were reminded of the need to prioritize and focus as SMEs in each sector have very different needs. This mode of industrial cluster funding is clearly a better way of streamlining financial and technical aid to SMEs. Again, in the example of Indonesia, the practice of financially supporting industrial clusters has been adopted innovatively and successfully.

Innovation is already recognized as an essential component of the economic growth process in many APO member countries. This paper defines innovation as the development, deployment, and economic utilization of new products, processes, and services (OECD, 1999). As countries and economies become more integrated and interdependent, the ability of firms (SMEs included) to seize global business opportunities by commercializing new products and processes faster than their competitors is critical in raising the economic wealth of a nation. In this regard, SMEs face a number of impediments to their growth and survival including limited access to financing. Access to financing has been identified in many business surveys as one of the most significant obstacles to the survival and growth of SMEs including the innovative ones. Moreover, limited market power, the lack of management skills, high share of intangible assets, the absence of adequate accounting track records, and

insufficient assets all tend to increase the risk profile of SMEs and curtail innovation and hence growth.

High-growth, innovative SMEs are in short supply. The reasons for this are apparent when one considers that the returns on innovative activities are often skewed and highly uncertain. SMEs by virtue of their firm size tend to veer on the side of commercial caution and financial safety. Second, innovative activities can sometimes be intangible. This attribute makes the assessment of the monetary values of such activities and returns difficult before they become commercially successful. As innovation may involve the continuous development of new products and use of new processes in untested markets, the payback period is highly uncertain, thereby making the assessment of their monetary values difficult before they become commercially successful. Moreover, innovation has little salvage value, as the innovation cycle is a complex process often involving a nonlinear path. The financing of this cycle needs a series of capital injections, and failure to finance adequately any part of the cycle may cause the firm to fail instead of growing. Thus, to implement or even recommend government programs to close perceived financing gaps faced by innovative SMEs can be a very risky policy decision with uncertain outcomes. This consideration makes it difficult to frame a mutually agreeable financing contract.

Recommendations

While different APO member countries have adopted different approaches to grow and innovate SMEs for greater competitiveness, some popular strategic models include those of industrial clusters and cooperatives. Both models help to mitigate the isolation effect and size disadvantage of SMEs and both can help to generate greater productivity through faster innovation diffusion and hence better competitiveness internationally.

Clustering is the agglomeration of small firms in physical proximity to one another in the same or related industries (Boari, 2001: 2). Employing this concept can help balance the competitiveness of an individual SME with cooperation among SMEs. This form of industrial organization has a definitive role as some of the most traditional industries, such as garments and footwear, have been able to survive in international environments. In turn, this cooperation can be instrumental not only in increasing the efficiency of the individual firm, but

also in increasing the collective efficiency of the cluster. Used prudently, clustering is a means of overcoming the competitive disadvantages that confront indigenous SMEs acting independently in relation to the global, mobile, larger firms. Clearly, the major disadvantage SMEs face is that they often lack the potential for economies of scale, that is, the ability to use their existing labor and machinery to respond to sharp and sudden increases in demand. Their output thus tends to be low. This, in turn, keeps both productivity and wages low. When groups of SMEs pool both their factors of production as well as share demand in the market, they can achieve greater economies of scale to the benefit of profits, productivity gains, and other positive network effects. Clustering can help to increase the quality and reduce the costs of inputs. For example, during procurement, SMEs can collectively purchase inputs and thus negotiate a better price, which, in turn, is reflected in lower input costs. There are also advantages in sharing or pooling a number of other business needs. Obtaining such efficiency leverage in the supply chain clearly reaps downstream rewards for SMEs. For example, SMEs can now share the cost of training and specialist expertise (and the local labor pool), which is a cost-effective way of improving the skill levels and disseminating technological know-how. Next, clustering effectively increases the size of the market and reduces the cost of market access when participating in commercial relations with larger firms to gain wider market access, and hence leads to better output and profits.

There is also a host of ancillary advantages when a fragmented competitive environment is overcome through clustering, such as access to credit markets on terms that are more favorable. The advantages, moreover, need not be economic alone. They can be part and parcel of a participative local community or industry development strategy. In discussing clusters, it is appropriate to invoke the concept of protected stability, i.e., when SMEs collaborate, they are as a collective whole better protected against the volatility or instability of external markets.

While the concept of clusters does not usually refer to an ownership structure, the concept of a co-operative does. A cooperative is a firm or a collective of firms, owned by members, and involved in the production, distribution, or consumption of products. A common feature that cooperatives share with clusters is the organizational concept of overcoming the disadvantages of atomistic competition through a model of inter-firm cooperation. For reasons of space, the discussion of cooperatives is deferred to another paper.

There are other noteworthy recommendations for key decisionmakers in APO member countries to consider. First, concentrate policies for promoting the availability of risk capital to innovative SMEs, especially in the early stages of product financing. This should help to induce and incentivize innovation. Public-sector funds could be used to leverage private-sector financing to reduce any financing gap. Countries should also recognize the need for proximity between the suppliers of funds (banks) and those who require finance. Such equity programs should be created in parallel to the development and support of regional and local business angel networks as well as business incubators nearby.

Second, using the growth theory approach, increase the managerial and technical expertise of intermediaries such as consultants whose role is to develop SMEs for deeper innovation. In this regard, the respective agencies at the national level could consider facilitating the international transfer of institutional infrastructure and expertise. Expertise should be shared on a regional basis, either through the APO as a facilitator or other clearinghouses. Copayment arrangements could be instituted to encourage the judicious use of such resources.

As the topic of discussion is innovative, high-growth SMEs, which can compete on a sustainable basis to reach world-class status, the third recommendation involves sustaining an entrepreneurial and innovative culture within enterprises. In the medium to long term, SMEs should be capable of producing innovative products and services, using information and technology to add value to new products and services, developing and using brands to increase the knowledge components of their products, and utilizing superior distribution channels. To achieve this, more local entrepreneurship and innovation are needed in all sectors, not just in traditional areas such as trading but also in new areas including high-tech manufacturing, creative services, and Internet and e-commerce. One example of this effort to attain world-class status is Singapore.

To groom high-growth, innovative SMEs, Singapore has recently committed to spending S\$20 million by partnering with three local universities to provide customized postgraduate and executive development courses that focus on the business management needs of SMEs and are pivotal to the upgrading of local SMEs. The partners have developed specific modules such as management and growth dynamics of family businesses, contemporary issues of SMEs, and managing for initial public offerings. This is a response to the urgent need for SMEs to enhance their capabilities to grow faster and smarter, and to tap SPRING's

resources and its strong network of partners when necessary. Through SPRING, about S\$3.9 billion has been allocated from 2006 to 2010 to help SMEs grow their businesses (<http://www.spring.gov.sg/Content/PrintPage.aspx?group=nw&id=bac549db-314a-4b73-8813-4c4d94af9bcc>). This forms the fourth recommendation: APO members should encourage and sponsor promising SME owners and managers to attend such courses already established in countries such as Singapore to benefit from the knowledge dissemination and networking of similar SMEs.

Fifth, the APO can also consider helping service-based SMEs to upgrade the quality of their services to international standards through nifty innovation and best practice sharing. As services will become a dominant area of growth for many countries, the time to begin focusing on the service industry is now. Many SMEs, due to their less formal structure (as opposed to multinational corporations), will be in a better position to assimilate the innovative practices of service firms in other developed countries in Asia. The next decade will be the decade of the service firm, and the APO has a strategic opportunity to entrench this trend firmly within Asia and help SMEs achieve the gold standard in this area.

Finally, the sixth recommendation is related to the service supply chains, which have not been well mapped within Asia. There is a need to survey, understand, and communicate what it takes to execute services innovatively within the context of a maturing Asia. Aspects of research that could be considered in this recommendation include the hospitality sector, healthcare services, the silver age movement, etc. In this regard, innovation is applied to the network of enterprises and shared among enterprises within the context of a supply chain rather than a single focal firm.

Conclusion

Over the past two decades, globalization has engendered a new international environment for SME exports from Asia. The process of world economic integration has resulted in a broadening and deepening of interrelationships between international trade and foreign investment flows. Several influences, especially those of falling trade barriers, increasing technological progress, migrations of technical and professional manpower, and highly mobile multinational corporations seeking new investments, have combined to speed up

globalization. The result is an international porous marketplace for goods and services that appears indifferent to national borders and state regulations.

There are abundant opportunities in a world of change. Smaller and younger enterprises can gain advantage over their larger rivals by networking with each other in attempting to seize or hold market share. A network of companies that can work in partnership with each other will be that much more likely to succeed in changing the world than an enterprise trying to go it alone against many of the larger incumbents. Trade and competitiveness are not a zero-sum game. Many nations (and SMEs) can improve their prosperity if they can learn, unlearn, and relearn how to innovate and grow faster than the external environment. The central challenge, then, is how to create the conditions for rapid, sustained innovation and growth. A range of policy initiatives taken to enhance the vitality and competitiveness of the SME sector in APO member countries has been identified. The Singapore experience suggests that there are no quick fixes to building SME competitiveness. Finally, we note that Singapore and some of the developed Asian economies took at least a decade to create a notable base of SME exporters with appropriate policy frameworks and support institutions in place after much fine-tuning.

References

http://www.weforum.org/pdf/Global_Competitiveness_Reports/Reports/GCR_05_06/GCI_Rankings_pdf.pdf, accessed on 31 May 2007.

PSB unveils national plan for SMEs. *Productivity Digest*, 2000, cover feature, accessed from http://www.spring.gov.sg/newsarchive/epublications/pd/2000_02/03.html on 31 May 2007.

Asasen, C., K. Asasen, and N. Chuangcham (2003). A proposed ASEAN policy blueprint for SME development 2004–2014. REPSF Project 02/005 33, 145 pp.

Ayyagari, M. and T. Beck (2003) Small and medium enterprises across the globe: A new database. Washington, D.C., World Bank, World Bank Policy Research Working Paper No. 3127.

Beck, T., A. Demirguc-Kunt, and R. Levine (2003) SMEs, growth and poverty: Cross-country evidence. World Bank, paper prepared for the Conference on Small and Medium Enterprises, 24 October (<http://www.worldbank.org/research/bios/tbeck/sme.pdf>).

Boari, C. (2001) Industrial clusters, focal firms, and economic dynamism: a perspective from Italy. Washington, D.C.: World Bank Institute (mimeographed).

Chaminade, C. and J. Vang-Lauridsen (2006) Innovation policies for Asian SMEs: an innovation system perspective, 32 pp., accessed on 31 May 2007 from http://www.proact2006.fi/chapter_images/303_Ref_B133_Chaminade_&_Vang.pdf.

Das, T. (2003) Promoting resource-based export oriented SMEs in Asia and the Pacific, *Investment Promotion and Enterprise Development Bulletin for Asia and the Pacific* 1: 33–76.

Dhungana, B. (2003) Strengthening the competitiveness of small and medium enterprises in the globalization process: prospects and challenges. *Investment Promotion and Enterprise Development Bulletin for Asia and the Pacific* 1: 1–32.

Hayashi, M. (2003) Development of SMEs in the Indonesian economy. Australian National University, Research School of Pacific and Asian Studies, Technical Report Working Papers in Trade and Development No. 2003/01.

OECD (1997a) *Globalization and Small and Medium Enterprises*, Vol. 1: Synthesis Report, Paris: OECD.

OECD (1997b) *Globalization and Small and Medium Enterprises*, Vol. 2: Country Studies, Paris: OECD.

OECD (1999) *Boosting Innovation: The Cluster Approach*, Paris: OECD.

OECD (2002). *OECD Small and Medium Enterprise Outlook*, Paris: OECD.

United Nations Industrial Development Organization (UNIDO) (2001) *Integrating SME Subglobal Value Chains: Towards Partnership for Development*, Vienna: UNIDO.

Vandenberg, P. (2004) Productivity, decent employment and poverty: Conceptual and practical issues related to small enterprises. Geneva, ILO, IFP/SEED Working Paper No. 67.

Wignaraja, G. (2003) Promoting SME exports from developing countries. Report prepared for OECD, accessed on 31 May 2007 from [//www.oecd.org/dataoecd/12/54/20167784.pdf](http://www.oecd.org/dataoecd/12/54/20167784.pdf).