

GLOBALIZATION OF PRODUCTION AND THE COMPETITIVENESS OF SMEs IN ASIA AND THE PACIFIC: TRENDS AND PROSPECTS

2.1. The setting

The focus of this section is on the trends and prospects for the competitiveness of the region's SMEs, based on a review of the literature (as distinct from original research). In this context, the key dynamic shaping the prospects of Asia-Pacific SMEs relates to the globalization of production. This is changing the competitive environment for the region's SMEs in both international markets and at home. Therefore, at the core of the story is the need to understand the nature of globalization and its implications for the competitive performance of Asia-Pacific SMEs. From this perspective, small traditional firms serving only small local markets are not of primary interest here, except insofar as they may evolve, or may be forced to evolve, into competitive enterprises in the above context.

As discussed in section 1, there is no consensus on the definition of SMEs; it differs among the economies of Asia and the Pacific with regard to common indicators, such as the number of employees, invested capital, sales volume and revenues, or production capacity. However, two common characteristics of SMEs in the region are: (a) the majority are small, employing fewer than 100 people; and (b) they typically make up over 90 per cent of registered enterprises in any given economy.

It is generally recognized that SMEs play an important role in Asia-Pacific economies in terms of employment and value added, despite the disadvantages of both size and relative sophistication of their operations. However, estimates of their actual contribution to their respective economies in the region vary greatly (see, for example, estimates from the Asian Productivity Organization in table 12). In general, SMEs are seen as supporting competitive and flexible markets through relative ease of entry and exit, and through their role as subcontractors, which supports the restructuring of both public and private enterprises in the region. They are also seen as making important contributions to poverty alleviation, since SMEs often employ poor and low-income workers, frequently providing the primary source of income in lagging regions and rural areas.

Table 12. SMEs among total enterprises, contribution to employment, and total value added, in selected Asia-Pacific economies

(Percentage)

	China	India	Indonesia	Japan	Malaysia	Philippines	Republic of Korea	Thailand
SME establishments	99.7	95.0	100.0 ^a	99.0	94.4	99.6	99.0	98.0
Employment	74.0	80.0	99.0	88.0	40.4	69.1	69.0	55.8
Value added	60.0	40.0	63.1	56.0	26.0	32.0	46.0	47.0

Source: Mark Goh, "High-growth, innovative Asian SMEs for international trade and competitiveness: challenges and solutions for APO member countries" (Tokyo, Asian Productivity Organization, 2007), p. 3, available at www.apo-tokyo.org/rr_papers/index.htm.

^a Actual figure is 99.995 per cent.

There are significant differences in the nature and role of SMEs in the diverse economies of Asia and the Pacific. Many SMEs are in the retail and service sectors, characterized by relatively low-level and stable technology and scale, and generally static performance in local markets. Other SMEs are internationally oriented subcontractors to large enterprises, at varying levels of sophistication of skill and technology. Still others are dynamic entrepreneurial firms active in key new product and service niches, including dynamic start-ups commercializing new products and technologies. As Lall (2000b) notes, the proportion of “modern” SMEs competing on the basis of sophisticated technologies and products varies significantly among the economies of the region.

Very broadly, there is a dualistic pattern of SME development in the Asia-Pacific region, with a small relatively dynamic and competitive SME sector co-existing with a much bigger number of under-performing SMEs. A large proportion of Asia-Pacific SMEs: (a) remain in traditional activities; (b) are characterized by low levels of productivity, relatively simple technology and poor quality products; and (c) compete in small, local markets. A much smaller group has taken advantage of new opportunities offered by globalization, upgrading their products and production processes, entering new product markets, and expanding their domestic market shares. Ayyagari, Beck and Demircug-Kunt (2003), in reviewing the contribution made by SMEs to economies in 76 countries, observed the following relationship between the contribution that SMEs make to GDP and national income: in high-income countries, 51 per cent of GDP was produced by SMEs; in medium-income countries, 39 per cent (this context also includes the more advanced economies of East and South-East Asia); and in low-income countries, only 16 per cent.

For example, SMEs play an important role in job creation in the economies of China, Japan, India, Indonesia, Taiwan Province of China and Viet Nam, where they contribute over 70 per cent of employment, as compared with Malaysia and Thailand, where SMEs contribute less than 60 per cent of employment. The participation of the region’s SMEs in international trade, and therefore the extent of their global integration, also differs widely; export orientation in China, the Republic of Korea, and Taiwan Province of China is rather stronger than that in India, Indonesia, Malaysia and Thailand.

However, this aggregate picture can be somewhat misleading. SMEs based in Penang play a critical role in Malaysia, providing an important foundation for that country’s participation in the global economy in terms of competitive performance in the information, communications and technology (ICT) and electronics sector. In Singapore, SMEs have a relatively modest presence in terms of the number of establishments and contribution to employment, yet they play a key role in diversifying the production structure of the economy and in attracting large multinational enterprises (MNEs, also known as multinational corporations) to the supplier clusters they provide. In China and Viet Nam, SMEs have played an important role in the transition from a centralized planned economy to one that is more decentralized and market-oriented, and in the building of a vibrant domestic business sector. In Taiwan Province of China, SMEs have been critical in the country’s dramatic and sustained overall economic transformation and development. A summary profile of the diverse role of SMEs in the member economies of the Asia-Pacific Economic Cooperation forum is presented in table 13.

Table 13. A summary profile of SMEs in East Asia/the Asia-Pacific Economic Cooperation forum

	Key features	Regional differences and policy issues
Number of enterprises	<ol style="list-style-type: none"> 1. There are about 20 million to 30 million SMEs in East Asia. 2. They account for 98 per cent of all enterprises. 3. Microenterprises account for about 73 per cent of all private sector enterprises. 4. On average there are about 85 people for every SME. 	<ol style="list-style-type: none"> 1. Most of the SMEs are in China (8 million), Japan (5 million) and the Republic of Korea (2.6 million), which together are home to 70 per cent of the SMEs in East Asia. 2. In developed economies there are only about 20 people per SME, but the ratio is above 100 in the developing economies, especially in China, Indonesia, the Philippines and Viet Nam.
Employment	<ol style="list-style-type: none"> 5. SMEs employ about 60 per cent of the private sector workforce, and 30 per cent of the total workforce. 6. Microenterprises employ about 21 per cent of total APEC-wide employment. 7. Over 95 per cent of enterprises employ fewer than 100 people, and over 80 per cent employ fewer than five people. 8. SMEs contribute about 70 per cent of net employment growth. 9. SMEs provide about 80 per cent of employment in the services sector, and about 15 per cent in the manufacturing sector. 10. Women make up about 30 per cent of employers/self-employed in APEC—mainly in microenterprises 	<ol style="list-style-type: none"> 3. In developing economies (below about \$15,000 per head income) SMEs employ about 75 per cent of people; above \$15,000 the level is closer to 50 per cent. Japan is a major exception—SMEs there employ about 80 per cent of the workforce. 4. More developed economies seem to have more medium-sized SMEs, and such SMEs play a greater role. Developing economies seem more likely to have a “missing middle”. 5. In developed economies, most of this growth probably comes from fast-growth firms; in developing economies a higher proportion probably comes from net start-ups.
Output measures (such as sales and value added)	<ol style="list-style-type: none"> 11. SMEs contribute about 50 per cent of sales, value added or output. 	<ol style="list-style-type: none"> 6. The contribution varies from lows of 15 per cent (Singapore) and 30 per cent (Australia) to about 60 per cent for most other economies.

	Key features	Regional differences and policy issues
Exports	<p>12. SMEs generate about 30 per cent of direct exports (\$930 billion in 2000), much less than the SME contribution to employment (about 60 to 70 per cent) or output (about 50 per cent).</p> <p>13. SMEs contribute indirectly to trade through supply chain relationships with other firms. SME contribution to total trade could rise to 50 per cent.</p>	<p>7. SME exports figures are difficult to verify, but they range from about 5 per cent or less (Indonesia) to about 40 per cent (Republic of Korea) of total exports.</p> <p>8. Tariff cuts have increased total APEC member trade, but the SME contribution to direct exports has remained static or declined. Reductions in tariffs have not benefited SMEs; more emphasis needs to be put on tackling non-tariff barriers if SMEs are to benefit from trade expansion.</p>
Foreign direct investment	<p>14. SMEs generate about 50 per cent of the cases of foreign direct investment, but less than 10 per cent of the value of such investment.</p>	<p>9. SMEs in Japan, the Republic of Korea and Taiwan Province of China contribute most foreign direct investment originating in the East Asian subregion.</p>
Entrepreneurial engine, international potential, and the new economy	<p>15. SMEs already contribute the bulk of growth, and could make a much larger contribution to the Asian regional economy if efforts were made to address impediments to SME internationalization. This could add as much as \$1.18 trillion in trade over a five-year period.</p> <p>16. SMEs are moving towards services and away from agriculture and manufacturing.</p>	<p>10. The developing economies need to create about 50 million to 70 million more SMEs if they are to achieve "benchmark" levels of SME activity.</p> <p>11. To achieve maximum gain from trade it is essential to improve governance with regard to building capacity, reducing transaction costs, promoting further liberalization, addressing non-tariff barriers, increasing Internet access and facilitating trade and investment to improve the capacity of SMEs to export.</p>

	Key features	Regional differences and policy issues
		<p>12. Capacity-building includes: access to finance; improved professional skills (information technology, management, accounting and entrepreneurship); improved business infrastructure; and removal of trade barriers that particularly and adversely affect SMEs.</p> <p>13. E-commerce use by SMEs lags larger enterprises; e-commerce is important for cost saving and growth potential. The usage of technology is a problem due to set-up and usage costs, and a lack of adequate infrastructure and information technology skills.</p>

Source: C. Harvie, "East Asian SME capacity building, competitiveness and market opportunities in a global economy", Economics Working Paper Series, WP 04-15 (University of Wollongong, August 2004), table 8, p. 13.

Abbreviations: APEC, Asia-Pacific Economic Cooperation; SMEs, small and medium-sized enterprises.

As noted in table 13, the corporate landscape of many emerging economies in Asia and the Pacific often exhibit a "missing middle" of competitive SMEs. These economies tend to comprise a relatively small number of large enterprises, and a large number of small, often uncompetitive and static traditional SMEs serving small, local markets (see, for example, Freeman 2008 on Viet Nam). In a global economic environment characterized by trade liberalization, rapidly changing technology, and growing and changing demand for higher quality and differentiated intermediate and final products and services that meet a variety of stringent international standards, traditional SMEs find it difficult to make the upgrades they need to stay competitive even in their domestic markets. Therefore a key challenge facing SMEs and the related role of governments in Asia and the Pacific is to strengthen SME competitiveness in both domestic and international markets, to "fill the missing middle".

2.2. SMEs and competitiveness

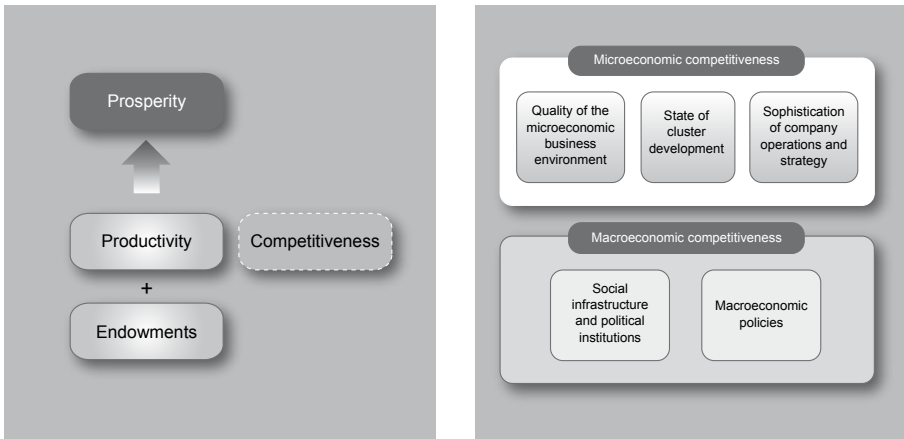
2.2.1. Concept of “competitiveness”

The concept of “competitiveness”, although widely used, can be elusive and subject to considerable debate. In the context of enterprises, the meaning of competitiveness, as well as competitive strategy, is relatively clear. It refers to the ability of firms to compete for markets, resources and revenues, as measured by indicators such as relative market share, growth, profitability or innovation (see, for example, Roberts 2004; Greenwald and Kahn 2005). However, extending the concept from enterprises to economies is subject to considerable debate. Representing nations as competing with each other in world markets, and becoming more competitive or less competitive as economies has been called a “dangerous obsession”, reflecting a misunderstanding of the basic theory of comparative advantage that explains gains from specialization and trade (Krugman 1994).

Partly as a response, competitiveness is generally approached as a multilevel concept where national competitiveness is closely linked to enterprise competitiveness (see, for example, UNCTAD 2005b; Porter and others (2008)). A typical definition of competitiveness at the national level refers to “a nation’s ability to produce goods and services that meet the test of international markets while simultaneously maintaining and expanding real incomes of its people over the long term” (United States Presidential Commission on Industrial Competitiveness, in UNCTAD 2005b, p. 3). National competitiveness, in turn, is seen as a function of a country’s: (a) endowments (such as land, labour and capital); (b) macroeconomic conditions, including a country’s policy and institutional environment; and (c) microeconomic factors, including the quality of a country’s business environment, the relative sophistication of firms’ operations, and the state of a country’s enterprise cluster development (see, for example, Porter and others 2008). This is the general framework used in the rankings for the World Competitiveness Index noted above (see also table 5).

From this perspective, the competitiveness of an economy is seen as ultimately reflecting its productivity. This, in turn, depends on the value of a nation’s products and services, supplied by its enterprises, as measured by the prices they command on international markets, and the efficiency with which these products and services are produced (UNCTAD 2005b; Porter 2008). An economy becomes more competitive through its ability—or, more precisely, through the ability of its enterprises—to increase productivity by using assets (human resources, capital, physical assets, among others) more efficiently. This, in turn, is shaped by a country’s endowments, macroconditions, and microfactors (figure 2). Therefore, getting macrofundamentals right is necessary but not sufficient for strengthening a nation’s competitiveness if, for example, the country’s business environment and/or the quality and operations of its enterprises are weak. At the same time, a lack of physical endowments need not be a binding constraint. Singapore overcame such constraints to become one of the most productive or “competitive” economies in the world through effective policies and institutions that developed its human resources and attracted foreign investment.

Figure 2. Competitiveness and productivity



Source: M. Porter, M. Delgado, C. Ketels, and S. Stern, “Moving to a New Global Competitiveness Index”, in Michael E. Porter and Klaus Schwab, eds., *Global Competitiveness Report 2008-2009* (Geneva, World Economic Forum, 2008), figures 1 and 2, p. 45.

Competitiveness is then ultimately an enterprise-level concept, referring to the relative performance of firms in particular product markets. It is the ability of a country’s enterprises to sustain superior market positions and profitability relative to their domestic and international competitors by producing products and services of superior quality and functionality, at competitive prices, delivered on time to both domestic and international buyers. Dynamic competitiveness—competitiveness over the longer term—refers to the ability of enterprises to respond flexibly, quickly and in a sustained manner to changes in demand, technology and resource availability and to the actions of competing firms. This can be achieved through adjustments in, among other things: (a) the efficiency of the production process; (b) product differentiation; and (c) innovative capacity, including both process and product innovation, and by developing entirely new markets for existing and new products.¹⁵

In summary, many interacting factors, at different levels, shape the competitive performance of an enterprise, including: (a) its resources (people, skills, physical capital and technology, among other things); (b) its market power, for example through branding and customer loyalty; (c) its capacity to respond effectively to competitors, including to potential substitutes for its products; (d) its capability and flexibility to respond to changing circumstances, for example in the availability of key resources, capacity for process and product innovation; (e) its capability to create new market niches; (f) the business environment which conditions its performance, such as the process of business licensing that controls ease of entry (see, for example, Freeman 2008); (g) the policy and regulatory environment, for example tax policy, competition laws and export/import procedures; and (h) supporting services provided by both public and private organizations, for example

¹⁵ In this context, non-price competitiveness is potentially more important in the long run than price competitiveness. It allows an enterprise to shift the demand curve for its products and services outward, instead of simply moving the demand curve down through lower costs and prices (ADB 2003).

the quality of physical infrastructure and logistics systems, and both general and specific skill-related education services.

2.2.2. Competitiveness and exports

Traditionally, performance on international markets, or export competitiveness, is often taken as the key indicator of competitiveness. Export performance is seen to reflect the ability of domestic enterprises to compete on international markets as measured in terms of the scale of exports, relative prices commanded by domestic firms, diversification of exports, and the (changing) technology and skill content of exported products and services. The rationale for exports as the key indicator of competitiveness includes:

- Export price and demand is perceived as less influenced by Government policies, and therefore may be a more appropriate reflection of actual enterprise competitive performance;
- Exports provide key information essential for the competitiveness of enterprises (and therefore economies), for example on technology, on market demand and on leading competitors in the industry;
- Exports allow for scale economies, which can be a critical factor in enterprise competitiveness.

The global environment is changing in fundamental ways—including the very nature of exports. This has important implications for the competitive performance of enterprises in general, and SMEs in particular, in both domestic and international markets. It is a world characterized by policy liberalization, accelerating technological change, more intense and diversified market demands, and increasing mobility of capital, all leading to a more complex and demanding competitive environment at home and abroad. Traditional modes of competition based on low costs and prices are no longer sufficient for sustained success, as global production is characterized by large shifts in location, patterns of comparative advantage, and in the structure of global industries. The new competition in a widening range of product markets is more intensive and is waged over a wider range of factors, in both export and domestic markets. Price continues to be important, but competition and the prospects of firms are increasingly driven by factors such as: (a) the capacity to meet a variety of stringent global product and process standards; (b) flexibility and innovation; (c) design and differentiation; (d) reliability and timeliness; and (e) networking—the capacity to collaborate and/or form strategic alliances and partnerships with both similar firms and vertically linked enterprises.

The basic competitive challenge to Asia-Pacific SMEs in the emerging global environment is how to participate in global markets in a way that leads to sustained income growth. This is a twofold challenge: (a) Can SMEs participate effectively in production for regional and global markets, as well as in their home markets?; and (b) Can they achieve sustained income growth by upgrading over time through product and process innovation that increases pricing power and value creation? A related third challenge is: If domestic SMEs cannot or choose not to access international markets, is the emerging global environment changing the way they have to do business at home? Before looking more closely at the changing global environment and its implications for the competitive performance of Asia-Pacific SMEs, it is useful to touch briefly on the traditional constraints on SME competitive performance.

2.2.3. Traditional constraints on the competitiveness of Asia-Pacific SMEs: an overview

The competitive performance of Asia-Pacific SMEs has been constrained by a range of well-known and studied factors (see, for example, Asasen, Asasen and Chuangcham 2003; Beck 2007; Harvie and Lee 2003; Ferranti and Ody 2007; Goh 2007; Lall 2000a). They include the following:

- Small firms are generally faced with higher costs in purchasing inputs such as equipment, raw materials, finance and business services. Smaller enterprises do not have the scale and/or bargaining power of larger firms;
- SMEs are characterized by limited managerial capacity and skills in areas such as operations management, accounting, financial management, marketing and strategy;
- Small firms are constrained by their ability to obtain information on potential markets and buyers. ICT can, in principle, loosen these constraints. However, Internet and e-commerce use among Asia-Pacific SMEs is generally lagging behind larger enterprises because of factors such as high set-up costs, lack of adequate infrastructure, and scarcity of ICT skills;
- SMEs are limited in their capabilities to respond to market opportunities in terms of meeting demands for large volumes, standards and certification, and regularity of supply. For example, the transaction costs of large buyers in dealing with many SMEs are very high, limiting their interest in sourcing from many individual small firms; while SMEs find it difficult to meet the requirements and costs of certification necessary for the standards demanded by such buyers;
- SMEs are faced with constraints in accessing factors and support services such as training and skill development, market intelligence, logistics, technology and financing. For example, with respect to human resource needs, basic education and in-firm training is no longer sufficient, as the emerging competitive setting requires increasingly higher levels of specialized training. Constraints on accessing financing are particularly important, limiting the capacity of small firms to invest in upgrading their skills and capabilities, to grow, and, more fundamentally, to meet the working capital needs necessary to carry on their day-to-day operations;
- Regulatory and policy environments often impose limitations and high fixed costs on SMEs. In comparison with larger firms, they generally demand a higher proportion of a small enterprise's resources on a continuing basis—including management time—for learning rules and regulations, and for modifying operations for compliance with such regulatory requirements.

These traditional constraints on the competitive performance of Asia-Pacific SMEs generally become even more pronounced (sometimes in modified form) in the context of the challenges of globalization, which, in turn, also poses new challenges for the competitiveness of enterprises.

2.3. Competing in a changing global economy

2.3.1. Drivers of a changing global economy

Globalization is the product of political, economic, and technological forces that have accelerated since the early 1980s. The focus here is on the nature and effects of globalization involving changes in the organization and location of the production of goods and tradable services. From this perspective, globalization is transforming the nature and location of international production, trade and investment (see, for example, Baldwin 2006a, Dicken 2007, and Grossman and Rossi-Hansberg 2006). In the process, it is changing the competitive environment for business in general, and for Asia-Pacific SMEs in particular, bringing significant new opportunities, as well as increasingly intense competition and new challenges. The key drivers of (economic) globalization include the following:

- *Policy liberalization*, which is: (a) reducing import, export and investment constraints; (b) providing new options for the geographic location of production; and (c) integrating and expanding fragmented markets for both intermediate and final products, and in the process is creating regional and global opportunities for firms, including SMEs;
- *Accelerating technological change*, which, in areas such as transport, telecommunications and information technology, supported by managerial innovation for coordination: (a) lowers costs; (b) reduces distance and time; (c) extends the reach of firms; and (d) allows the simultaneous fragmentation, geographic dispersion and coordination of production;
- *Increasing mobility of capital*, which is diversifying options for competitive local producers. Foreign direct investment is taking advantage of cross-border factor cost differences and local supplies of technology and skilled personnel; it is also providing new opportunities for domestic SME suppliers. At the same time, increasing portfolio capital flows can loosen constraints on financing for potentially competitive domestic enterprises;¹⁶
- *Demands of increasing competition*, which are creating simultaneous pressures for lower cost, higher quality, shorter delivery time and wider choice, thus changing the structure of industries. In some cases, this is leading to increasing consolidation for competitive scale (for example in semi-conductors and pharmaceuticals), and, in many other cases, to greater fragmentation and geographic diffusion of production (for example in electronics/ICT). In an increasingly fragmented global production environment, competition is becoming less restricted to individual enterprises, and more observable between networks of linked firms that include SMEs as key suppliers (for example Nokia + its network of suppliers vs. Motorola + its networks of suppliers).

¹⁶ The risks of the increasing mobility of capital and integration of capital markets is well understood in an Asia that still vividly remembers the experience of the "Asian Crisis" of the late 1990s, and that is presently experiencing the on-going global financial crisis triggered by the subprime problem in the United States, which has significantly constrained the availability of global credit.

As a consequence of these broad drivers of change, the number of products and tradable services that are conceived, manufactured and consumed entirely in one country—or in one enterprise—is rapidly shrinking. Globalization is reducing the dominance of any single location in the production process. International production is increasingly organized in the form of global value chains (GVCs) and related international production networks (IPNs) that together present new forms of integration into the global economy for enterprises and economies.¹⁷

2.3.2. Globalization of production: selected issues¹⁸

Organization of international production. Global value chains and associated production networks are emerging as the organizing framework for production, investment, and trade in an expanding range of product groups, such as garments, agro-industry, furniture, automobiles/auto parts, consumer electronics, telecommunications and ICT, as well as services (see UNCTAD 2002). This has resulted in increased task-and/or product-related specialization by firms in the production of goods and services, and a corresponding acceleration of growth in intra-industry and intra-product trade, as compared with traditional trade in final products. However, it should be noted that, while specialized and fragmented production (integrated through global value chains and production networks) is a key dynamic driving the evolution of international business, there are firms that compete effectively on global product markets with widely different organizational strategies, retaining a range of activities in-house and/or onshore.¹⁹

Opportunities for SMEs. The trend, however, has been toward the GVC/IPN framework for organizing international production. Although many MNEs continue to provide a variety of products and services on global markets, they now increasingly purchase inputs and components from smaller companies (SMEs) in widely dispersed locations that serve particular industry niches. Global export markets increasingly involve exports of parts, components and services within the framework of GVCs and associated production networks. In this context, many companies, particularly smaller enterprises, are finding that success and “creating value” may be achieved through specialization in a limited set of activities, outputs and market niches. For example, even simple components such as radiator caps can be produced for regional and global markets by a supplier in the production networks of Toyota or Ford Motor Company. Specialized niche markets, such as organic fruit and vegetables, can be regional and even global in nature through access to global retailers such as Carrefour or Tesco. Two dimensions of particular importance to SMEs in the context of GVCs/IPNs relate to the key role of global standards and the emergence of new types of enterprises for organizing global production.

Role of standards. Product and process standards are increasingly shaping production, especially within the framework of global value chains. There is growing pressure in key markets, such as the United States and European Union, for global producers to adjust their operations to reflect not only profitability, but also social and environmental objectives (corporate social responsibility requirements, for example). In addition, within the framework of GVCs, standards play the key role in ensuring product

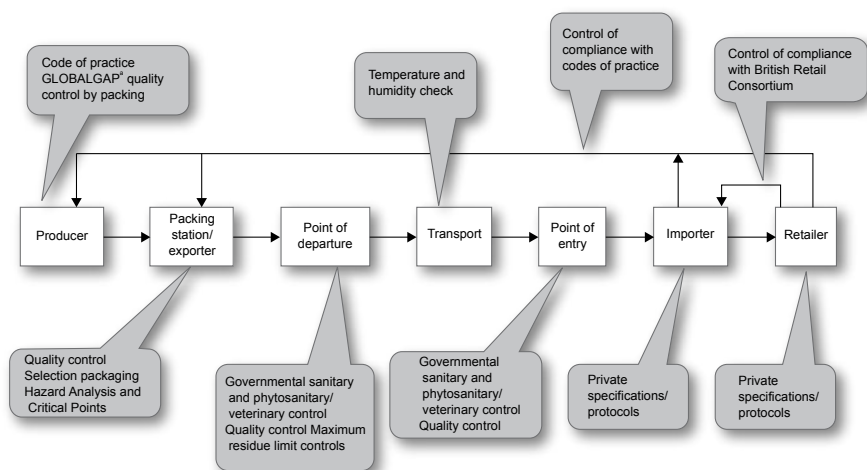
¹⁷ See Abonyi (2007) for an introduction, discussion and examples of the concepts of global value chains and related international production networks.

¹⁸ Based on Abonyi (2007).

¹⁹ Examples include Intel in ICT/electronics, and Zara in apparel/garments.

and process consistency and reliability along the chain (figure 3). Therefore, producers wishing to participate within GVCs increasingly have to meet the stringent requirements of a growing multiplicity of standards in a wide range of industries (wood furniture, automobiles and electronics, among others). Meeting a multiplicity of strict global standards is of particular challenge to SMEs, given their general constraints. Examples of the diversity of standards include: (a) internationally agreed standards, such as ISO 9000 (quality), ISO 14000 (environment), SA 8000 (labour) and G3 for cellular phones; (b) industry-specific standards, such as phytosanitary standards and hazard analysis and critical point in the food industry; (c) region-specific standards, such as QS 9000 (quality in autos originating in the United States); and (d) firm-specific standards, supporting brand names (for example, the Volkswagen quality standard, Carrefour’s in-house brand standards).

Figure 3. Food safety and quality standards in the global value chains for fresh fruit and vegetables



Source: Sabine Willems, Eva Roth, Jan van Roekel, “Changing European public and private food safety and quality requirements: challenges for developing country fresh produce and fish exporters”, World Bank Agriculture and Rural Development Discussion Paper (Washington D.C., World Bank, 2005), p. 23.

^a Formerly known as EurepGAP.

Emergence of global suppliers. Lead firms in a growing number of industries are becoming increasingly reliant on global suppliers, often based close to home but supported by subcontractors globally, to organize international production. This spreads the risks and lowers the costs of doing business for lead firms. Global suppliers, in turn, are reorganizing networks within value chains, redefining the role and relationships of lower-level suppliers/producers further back in the chain. In this context, lead firms and their supporting global suppliers are increasingly looking for firms that already have the requisite production capabilities, not firms that need to be brought up to required standards—posing new challenges to both enterprises and governments in the Asia-Pacific region. This reorganization of networks, although most pronounced in electronics and automobiles, is becoming a factor in an increasingly wider range of industries. Examples of global suppliers include Flextronics International in electronics/ICT and Li

& Fung in apparel/garments. As a consequence, global suppliers are emerging as key global investors, with significant influence on the export competitiveness of host countries and on the fortunes of SMEs, as reflected in the Flextronics investment in a major industrial park in Chennai, India. These global suppliers, whose core strategic function includes integrating production across borders, are looking for domestic suppliers with internationally competitive capabilities, as well as support systems that facilitate the smooth, continuous exchange of parts and components (well developed logistics systems and efficient import/export procedures, for example).

Central role of trade facilitation in the global supplier system. Within the framework of global value chains, a central challenge of integrating production involves shipping products, particularly parts and components, among geographically distributed production sites. Ensuring the ease of the import and export of products and services in the context of particular global value chains and networks is of critical importance for the competitive performance of domestic enterprises in individual economies. This is particularly important for SMEs as existing and/or potential suppliers within the framework of global value chains and production networks. This relates to the efficiency and effectiveness of a country's logistics systems and its import/export procedures in the context of specific value chains where domestic enterprises are active. Returning to the *Doing Business 2009* survey, one of its 10 components ranks countries on the procedural requirements for export and import standard goods, in terms of: (a) the number of documents required; (b) the time required; and (c) the cost entailed. Table 14 shows the results for the Asian-Pacific economies included in the survey.

Table 14. *Doing Business 2009*: exporting and importing in Asia and the Pacific

Economy	Documents for export	Days to export	Cost to export one container (US\$)	Documents for import	Days to import	Cost to import one container (US\$)
Average for East Asia and the Pacific	6.7	23.3	902	7.1	24.5	948.5
Average for South Asia	8.5	33.0	1 339	9.0	32.5	1 487.3
Afghanistan	12	74	3 000	11	77	2 600
Australia	6	9	1 200	6	12	1 239
Azerbaijan	9	48	3 075	14	56	3 420
Bangladesh	6	28	970	8	32	1 375
Bhutan	8	38	1 210	11	38	2 140
Brunei	6	28	630	6	19	708
Cambodia	11	22	732	11	30	872
China	7	21	460	6	24	545
Fiji	13	24	654	13	24	630
Hong Kong, China	4	6	625	4	5	633

India	8	17	945	9	20	960
Indonesia	5	21	704	6	27	660
Japan	4	10	989	5	11	1 047
Kazakhstan	11	89	3 005	13	76	3 055
Kiribati	6	21	1 070	7	21	1 070
Kyrgyzstan	13	64	3 000	13	75	3 250
Lao People's Democratic Republic	9	50	1 860	10	50	2 040
Malaysia	7	18	450	7	14	450
Maldives	8	21	1 348	9	20	1 348
Marshall Islands	5	21	875	5	33	875
Micronesia (Federated States of)	3	30	1 255	6	30	1 255
Mongolia	8	49	2 131	8	49	2 274
Nepal	9	41	1 764	10	35	1 900
New Zealand	7	10	868	5	9	850
Pakistan	9	24	611	8	18	680
Palau	6	29	1 170	10	33	1 132
Papua New Guinea	7	26	664	9	29	722
Philippines	8	16	816	8	16	819
Republic of Korea	4	8	767	6	8	747
Samoa	7	27	820	7	31	848
Singapore	4	5	456	4	3	439
Solomon Islands	7	24	1 011	4	21	1 194
Sri Lanka	8	21	865	6	20	895
Taiwan Province of China	7	13	757	7	12	769
Tajikistan	10	82	3 150	10	83	4 550
Thailand	4	14	625	3	13	795
Timor-Leste	6	25	1 010	7	26	1 015
Uzbekistan	7	80	3 100	11	104	4 600
Vanuatu	7	26	1 497	9	30	1 392
Viet Nam	6	24	734	8	23	901

Source: World Bank, *Doing Business 2009* (Washington D.C., 2009).

These country figures are quite striking in their diversity, but the basic message in the context of this paper is clear. A SME operating in a country that takes more than 10 times longer than another country to go through the regulatory steps to export a single container is at a substantial disadvantage when serving international customers. This is true for a wide range of industries, from garments to electronics/ICT, where the anticipated delivery cycles have become remarkably short, delays are not readily tolerated, and the ability to meet tight deadlines is a key determinant in attracting (and retaining) customers.

Similarly, an SME is at a clear competitive disadvantage if it operates in a country where the cost to export a single container is eight times higher than it is than another country. Typically, that additional cost will have to be absorbed by the SME, in a lower price per item, to mitigate the additional shipping costs incurred, if at all possible.²⁰ That in turn lessens considerably the profit margin and potentially the viability of the enterprise. Even for an SME that does not export its output, but relies on imported inputs, higher shipping costs will lower the threshold of profitability.

Furthermore, multinational enterprises contemplating where to invest in a new plant (Flextronics in electronics/ICT, for example), or from where to source (Li & Fung in apparel and garments, for example) will also consider these trade costs and time issues when seeking supplier locations. Thus, for SMEs in the host country aspiring to establish business linkages with foreign-invested projects in the context of expanding domestic markets, the cost and time of exporting and importing can have an impact, even if their own businesses entail absolutely no external trading activity. Put another way, pro-SME efforts expended in this field will have a positive impact far beyond SMEs alone, and can even help in attracting foreign direct investment (FDI) inflows.

One indicative example is that of Intel in Viet Nam. Intel, a specialized and important global supplier in the electronics/ICT industry, manufactures and ships parts and components globally from geographically distributed locations. It recently decided to build a \$1 billion chip-assembly plant near Ho Chi Minh City. Upon completion, the chip plant will undoubtedly wish to locally source a number of inputs—both products and services—from Vietnamese companies.

Intel's decision to locate its newest Asian chip plant in Viet Nam was taken despite the fact that the country's port infrastructure is becoming heavily congested. This is because, fortunately for Intel (and Viet Nam), the wafers that the plant will process can be imported by air, and not by sea. Nonetheless, Intel cannot afford to face delays with shipping, given the time sensitivities of its own clients. As a result, it has embarked on a project to assist the customs authority of Viet Nam to introduce an e-customs platform, operating 24 hours a day, seven days a week. This e-customs initiative is possible because: (a) Intel's investment is so large that technical assistance of this kind is a viable proposition; and (b) the host country Government was willing to make additional commitments in order to attract Intel's \$1 billion investment. However, this is not true of

²⁰ The case of IKEA is a good example of this issue. Principally based in Europe, IKEA sources products for its stores from around the globe, and has offices located in numerous countries to fulfil this sourcing function. In cases where two IKEA sourcing offices in different countries are both able to contract a respective local firm to produce a particular item of similar quality, then the main determining factor is price. But it is not the price of the item in the country of manufacture, but the price on arrival in Europe, including shipping costs, that matters. So, if an SME in country A can ship the item to Europe for less than an SME in country B, simply due to lower container or port costs, for example, then the SME in country B has no choice but to provide the same item at a lower price, to offset the higher shipping costs it faces.

most foreign-invested projects, which tend to be smaller in scale and less high profile in nature. Thus, the combination of congested ports and unreliable customs procedures could well prompt a potential investor to select a different country to host a new plant. If this had happened in the case of Intel and Viet Nam, one can only speculate on the significance of the loss for some Vietnamese SMEs, in terms of a lost opportunity to establish linkages with and learn from a leading global technology company.

As the international production system evolves, the key role of GVCs and IPNs in a growing number of industries provides an increasingly effective mechanism for Asia-Pacific SMEs to access global and regional markets as suppliers within global value chains and associated networks. The globalization of production therefore offers Asia-Pacific SMEs new opportunities for internationalization beyond the traditional export of final goods. These enterprises can be suppliers to MNEs outside their home countries as exporters of parts and components, and they can also be domestic suppliers to exporting MNEs in the domestic market—provided they meet the required global standards. However Asia-Pacific SMEs choose to participate in such value chains and networks, they must be able to deliver a specified product, in the right quantity, with the required quality, at the right time and meet an expanding range of increasingly stringent global market standards, for example on labour conditions and the environment. The payoffs from participating in GVCs and IPNs can be potentially high for SMEs, but generally so are the requirements for entry.

2.3.3. Impact of the globalization of production on East Asian enterprises²¹

The impact of the globalization of production in Asia and the Pacific has been most pronounced to date in East Asia (including, as used here, South-East Asia).²² Expanding trade between East Asia and the rest of the world has reflected the region's growing importance in the global trading system. East Asia's share of world trade has increased from about 10 per cent in the 1970s to more than 25 per cent in 2006, overtaking the North American Free Trade Agreement's share of about 20 per cent (though still lagging the European Union's share of around a third of world trade). This interregional trade is dominated by final goods, primarily for key markets such as the United States and the European Union. However, the region's demand for its final products is expected to continue to expand in the future, as there is an increasing focus on domestic consumers and markets.

Market-driven trade and investment integration has moved forward in East Asia without formal intergovernmental or region-wide agreements; it has, however, been facilitated by (mostly ad hoc) policy liberalization. Intraregional trade has expanded as a share of the region's total trade, increasing from about 35 per cent in 1980 to over 55 per cent by 2006.²³ This is driven by the growth of intra-industry trade in parts and components; the share of which in total regional trade is estimated to have increased from 55 per cent in 1990 to 78 per cent by 2005. Export profiles of countries increasingly match import profiles of other economies in the region, reflecting growing production complementarity and integration. Supporting trade expansion and integration, FDI to East

²¹ See Abonyi (2008) for a discussion of the integration of East Asian production in the more general context of Asian integration and cooperation.

²² There are also significant links to global value chains from suppliers in other parts of Asia and the Pacific, for example, garment producers in Bangladesh; sports equipment and surgical instruments from Pakistan (Sialkot); and particularly business services from India. However, as a subregion, the participation and integration of East (South-East) Asian producers has been the most pronounced and advanced to date.

²³ See IMF (2007) and ADB (2007).

Asia has expanded even faster, from 7 per cent of total world FDI inflows in 1980 to 13 per cent in 2006; with outflows also increasing to 12 per cent of world total outflows (up from 5 per cent) over this same period (UNCTAD 2008). Much of the FDI flows are intraregional, for example from Japan and newly industrialized economies to the Association of Southeast Asian Nations (ASEAN) and China, as well as intra-ASEAN and from ASEAN to China; this further strengthens the regional economic integration process. The result is an increasingly integrated East Asian economy of expanding *intraregional* trade dominated by parts and components, feeding growing *interregional* trade of final goods with markets in North America and the European Union.

Table 15. Expansion of intra-East Asian trade, 1990-2005: the example of machinery and machine parts

(Percentage)

Exports		Parts and components			Machinery final goods			Total		
		Share		Real growth	Share		Real growth	Share		Real growth
from	to	1990	2005		1990	2005		1990	2005	
China	ASEAN4 ^a	5	13	3 038	3	9	3 145	4	11	861
	NIEs3 ^b	88	64	789	94	69	581	75	60	218
	Japan	7	24	3 817	4	22	5 586	21	29	444
	East Asia	100	100	1 122	100	100	829	100	100	294
ASEAN4	China	0	13	33 332	1	16	16 530	4	15	1 133
	ASEAN4	8	18	1 743	9	19	1 560	8	19	640
	NIEs3	69	49	461	68	38	368	39	39	223
	Japan	24	21	589	22	27	906	49	28	83
	East Asia	100	100	688	100	100	730	100	100	224
NIEs3	China	32	54	1 457	30	43	566	30	50	622
	ASEAN4	28	20	544	26	23	318	25	22	276
	NIEs3	21	17	641	25	18	240	18	15	284
	Japan	19	9	325	19	16	315	27	12	99
	East Asia	100	100	812	100	100	373	100	100	335
Japan	China	5	34	2 230	8	32	482	9	34	868
	ASEAN4	35	26	141	33	21	-6	32	23	78
	NIEs3	60	40	121	59	47	20	59	43	81
	East Asia	100	100	229	100	100	48	100	100	150
East Asia	East Asia	100	100	541	100	100	323	100	100	251

Source: M. Ando and F. Kimura, "Fragmentation in East Asia: Further Evidence" (January 2007), p. 32.

Abbreviations: ASEAN, Association of Southeast Asian Nations; NIEs, newly industrialized economies.

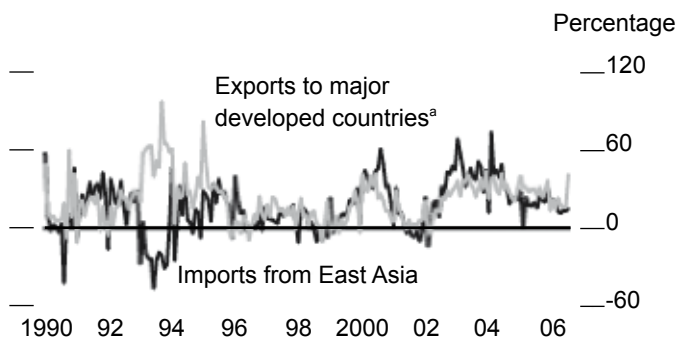
^a Refers to Indonesia, Malaysia, Philippines and Thailand.

^b Refers to Republic of Korea, Singapore and Taiwan Province of China.

China plays a central role in global triangular trade and related regional integration. It imports intermediate products, mostly from other East Asian economies, and assembles and then exports final goods to global markets (figure 4). To date, the domestic value added in China to manufactured exports has been a relatively modest share, estimated as averaging around 20 per cent,²⁴ though it is expected to rise over time. As a result, China runs a trade deficit with East Asia and a surplus with the United States. This reflects complementarity between the globally oriented assembly industries in China, and the country's East Asian suppliers of parts and intermediate products. Labels on many of China's manufactured exports should read as "Made in East Asia", in order to reflect more accurately their true origins and the related regional production integration process.

There are indications of increasing sophistication in the domestic manufacturing industry of China and a corresponding slowing of imported components, but the extent and implications of this trend are not yet clear.²⁵ This dynamic is also an indication of China as both an opportunity and a challenge to the economies of the region. While China has been an opportunity for potentially competitive Asia-Pacific SMEs in some industries, both in terms of the integration of regional production and its expanding domestic market, the country has also presented an important competitive challenge, particularly in labour intensive industries. The "China challenge", particularly in terms of pricing, has forced enterprises in the region to improve their productivity and performance, or to establish a China presence. As China begins to "move up the value chain", so will the China challenge. However, there are also indications that emerging constraints in the Chinese economy in areas such as labour as well as product and process quality are providing new opportunities for competitive enterprises in the Asia-Pacific region at both the "higher end" of the value chain and in traditional labour-intensive activities.²⁶

Figure 4. Correlation between growth in exports from China to major developed countries and imports from East Asia to China



Source: Asian Development Bank, *Asian Development Outlook 2007* (Manila, 2007).

^a European Union, Japan and the United States of America.

²⁴ See, for example, Lau and others (2006) and Koopman, Wang and Shang-jin (2008).

²⁵ See, for example, Li Cui and Syed (2007).

²⁶ See, for example, Gaulier, Lemoine and Ünal-Kesenci (2005) and Athukorala (2007).

MNEs from outside the region, such as Apple, Cisco Systems, Dell, Hewlett-Packard Co. and Levi Strauss & Co., have been key participants (direct/indirect) in and beneficiaries of the regional production integration process. For example, MNEs accounted for close to 60 per cent of total exports from China in 2005, thus playing a central role in connecting East Asia's increasingly integrated production system to global markets (ADB 2007). These MNEs, along with Asia-based large enterprises such as Acer, Lenovo, Li & Fung and Hon Hai Precision Industry, are using local SMEs as key suppliers. This is particularly pronounced in industries such as electronics/ICT, apparel/garments, autos/auto parts, and agro-industry. Therefore regional production integration, driven by the globalization of production, is providing expanding opportunities for Asian suppliers at all levels to access international markets. (For a discussion of regional enterprise and production integration, see Ando and Kimura 2007 and ADB 2007).

2.4. Implications for the prospects of Asia-Pacific SMEs

The globalization of production and the related production integration in (East) Asia have important implications for the growth prospects and competitive performance of Asia-Pacific SMEs. On the one hand, by facilitating linkages with foreign buyers and large MNEs—from within and outside the region—the forces of globalization loosen the constraints of domestic economies and markets, and provide local SMEs potential access to globally distributed assets, including information, technology, skills, capital and markets. On the other hand, globalization also brings about more intense competition in home markets from imports, new foreign investors, and expanding large domestic enterprises.

The globalization of production seems to affect SMEs in three ways, according to studies by the Organization for Economic Cooperation and Development (OECD) of SME adjustment to globalization in 18 OECD and 8 East Asian countries (OECD 2007 and 1997, see also Goh 2007):²⁷

- For a relatively small group that already have near internationally competitive capabilities (estimated by OECD at around 5 to 10 per cent of SMEs in the sample countries), globalization opens new opportunities to access international markets through linkages with foreign buyers, or as suppliers to MNEs;
- For a larger group (estimated by OECD at 25 to 50 per cent of SMEs), globalization poses challenges at home. SMEs that are potentially competitive in terms of the capability to meet international standards are likely to be forced into export-oriented production (as suppliers to MNEs, for example) or will have to upgrade their capabilities to remain competitive at in the domestic market. Lagging SMEs in this group will not remain viable without significant upgrading in products, production processes and management capabilities;
- For the remaining SMEs (about 40 per cent of the total) that are in traditional activities, particularly small-scale services, with relatively simple technology serving small, local markets, the pressures of the globalization of production are less immediate and urgent; they may be relatively insulated from the opportunities and threats of globalization. However, although less urgent, the

²⁷ As Wignaraja (2003) notes, there are no comprehensive cross-country studies of this type available on the effects of globalization on SMEs in developing countries, and very few such studies on individual countries, including in Asia and the Pacific.

competitive pressures are not necessarily absent for such firms. For example, the entry of global retailers such as Carrefour, Tesco and, increasingly, Wal-Mart into domestic markets in Asia and the Pacific is changing fundamentally the local competitive environment of small, locally oriented producers and retailers, as reflected in the case of Thailand. These enterprises are then forced to find a viable competitive strategy in this radically new environment, or face going out of business. It is not clear how far or how deep the winds of global change will sweep the traditional SMEs of the region.

The proportion of SMEs in the above three categories will vary depending on the level of development of specific economies in the Asia-Pacific region and the capabilities of their respective SMEs. In the more developed economies of East and South-East Asia that have a generally good base of SMEs with the potential to become internationally competitive, the pattern of adjustment can be expected to be similar to the above, for example in terms of the proportion of SMEs in the first two categories. The less developed and lagging economies of South-East Asia (such as Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam), Central Asia, South Asia and the Pacific are likely to have a smaller proportion of such SMEs that can take advantage of the new product market opportunities offered by the globalization of production. Therefore they are likely to have a correspondingly larger group of SMEs at risk from the increased competition resulting from globalization that requires significant upgrading, as well as a larger group of SMEs that may be relatively insulated from the effects globalization.

This leads to the central question: What factors are likely to increase the prospect of Asia-Pacific SMEs participating in the globalization of production in a way that leads to sustained income growth? That is, how can Asia-Pacific enterprises in the first and second categories identified by the OECD study—particularly the second—transcend the constraints of weak productivity and confinement to local markets? And what are the corresponding implications for government and public policy, and for international donors? Before considering these questions, it is important to examine not only the opportunities, but also the risks of the participation of Asia-Pacific SMEs in global production systems.

2.4.1. Potential risks and constraints for Asia-Pacific SME suppliers

To be a supplier to or an affiliate of an MNE can be a significant challenge for a local SME. To qualify as a subcontractor, a local supplier generally has to meet tough business standards and make potentially large up front investments to get its production process and products ready. Significant retooling of a company's assets and workforce is generally required, and in order to do this, some cash-flow commitments are inevitable.

Up-front investments can be highly specific to the product requirements of the MNE and, as such, could be financially risky for the investing firm if subsequent purchase orders or contracts are not forthcoming. The specificity of upfront investment may place the local SME supplier in a "lock-in" position to a particular international buyer, and therefore potentially in a significantly disadvantaged negotiating position. The higher the specificity or the more specialized the investment, the greater the scope for the MNE buyer to renegotiate the contract for a better deal. Multiple sourcing opportunities of the MNE can further exacerbate this lock-in problem as the MNE can easily turn to alternative local suppliers who have also invested in specialized assets upfront and may be ready and willing to fulfil supply contracts at more competitive terms.

In comparison with larger domestic suppliers, local SMEs, as noted, may not have: (a) the requisite cash-flows and/or the access to financing for the needed upfront investment; (b) the availability of a skilled, educated and trained workforce; or (c) the negotiating proficiency of larger suppliers when dealing with MNEs. Furthermore, larger domestic enterprises with significant scale economies may be able to offer lower prices than SMEs for the same quality, reliability and standards. Such economies would exist where the product to be supplied is standardized and more generic. Advantages of scale economies are less likely where products involved are more idiosyncratic and the size of delivery more limited.

To obtain a supply license or contract, firms must adhere to a new set of rules or codes of conduct—the global standards noted earlier. As recent examples in the toy and food industries have shown, significant attention is being placed on the traceability and the social and ethical provision of inputs and services. As noted, MNE-designated and potential suppliers must comply with a wider range of new and more restrictive standards. It is likely to be relatively more costly for smaller firms to put in place the required capabilities and receive “the good housekeeping seal of approval” from international buyers. Larger suppliers may be able to better manage this large fixed cost of doing business with MNEs as they can better realize scale economies.

While improving the capacity to meet global standards and the corresponding upgrading of the delivery codes of SME suppliers could result in a pool of more competitive global suppliers in the longer run, a more immediate effect of this additional challenge to supplying MNEs is that it could cause a skewing of supply opportunities against SMEs. Ultimately, the ability to become a designated supplier and participant in the MNE global value chain depends on the capacity of indigenous SMEs to overcome the constraints of smallness and newness.

At the same time, there are now indications that the offshoring activities of United States, European and even Japanese multinationals may be scaled back. Soaring oil prices, currency depreciation and rising wages are some of the reasons why multinational executives are rethinking their offshore activities. According to a recent analysis (Goel, Moussavi and Srivatsan 2008, 1) of a recent *McKinsey Quarterly* study:

The production of high-tech goods has moved steadily from the United States to Asia over the last decade. The reason is familiar: lower wages, a stable global economy, and rapidly growing local markets. These factors combined to make nations such as China and Malaysia favored manufacturing locations. In the last two years, however, the favorable economic winds that carried offshoring forward have turned turbulent. The new conditions are undermining some of the factors that made manufacturers of every stripe, including those in high-tech, move production offshore.

The *McKinsey Quarterly* (2008) conducted a series of interviews with senior executives of international firms on their global supply chain strategies. When asked to identify factors that contribute most to the setting of their global supply chain strategy, executives interviewed indicated that supply chain risk is rising sharply, and pointed to the greater complexity of products and services as the key influencing factor. Global supply

chain managers are now facing new complexity challenges and more turbulent economic conditions, which make cross-border sourcing more problematic. MNEs need to balance the benefits that offshoring can offer against the growing risk of more complicated offshoring transactions. The possible scaling back of the offshoring of multinationals could have a significant impact on the prospects for Asia-Pacific SME suppliers. As multinationals rethink their outsourcing strategies and contemplate scaling back, it is even more important that local SMEs become more relevant to multinationals, and be able to offer the kind of cost-saving and efficiency benefits that make offshoring economical. Domestic SMEs will need to offer clear advantages that create value for multinationals in order for them to be included in the production networks of MNEs.

2.4.2. Implications of the globalization of production for SMEs: summing up

The emergence of global value chains and production networks has a number of important policy-related implications for the competitive performance of enterprises, in addition to the general competitiveness factors discussed above:

- *Understanding value chains.* Global value chains and related production networks require a basic change in mindset by public and private decision makers. Competitive performance is shaped to a significant extent by activities and relationships outside individual enterprises, and relates to linkages within particular value chains. Therefore the traditional focus on strengthening enterprise-level productivity is not sufficient for improving the competitive performance of firms within a GVC framework. It also requires improving value-chain related linkages, or “network efficiencies”, and the related policy, institutional and business environments. For example, a focus on GVC-related interfirm logistics is required, particularly as related to SMEs, as is a focus on improving import/export procedures for particular value chain-related products;
- *Opportunities—and risks—for new entrants, particularly SMEs.* As noted, the organization of production within the framework of global value chains and networks allows specialization by small enterprises based on a single function or a few functions and/or parts and components. It also enables a focus on regional and even global niche markets. However, given the risks of lock-in, a key challenge for SMEs is to find ways to upgrade over time (for example through product and process innovation)²⁸ within value chains in order to gain pricing power and flexibility and to add value;
- *Opportunities for value creation.* In the context of GVCs, enterprise core capabilities in a given industry’s value chain are the key to competitive performance; less important is the choice of industry or sector—there are few truly “sunset/sunrise industries”. From the perspective of enterprises, particularly SMEs with their particular constraints, creating value is not restricted to possessing global brands or participating in high-technology industries. It is possible to create value and to be a competitive supplier anywhere along an industry value chain through specialization and upgrading. In one vivid example, suppliers of key personal computer components have higher profit margins than global brands such as Dell and Acer;

²⁸ For a discussion of various options for upgrading, see Abonyi (2007).

- *New paths to innovation.* Global value chains provide a framework for creating globally innovated products, which allow the combination of activities and technologies from diverse sources without having such capabilities in house. A dramatic example is the iPod, where Apple came up with the original concept for the product and combined the components all from outside suppliers around the world.²⁹ It means that even a small firm with an innovative idea can leverage the resources of other firms (including other SMEs) to develop the concept and bring it to market;
- *Match the best—or outsource to the best.* International buyers and MNEs in global value chains have options to source globally. Therefore, SME suppliers have to be able to match the performance of the best in their class in order to become and remain suppliers within the framework of GVCs. As stressed earlier, this requires not only efficiencies in production activities, but also the capability to meet a variety of stringent global standards. Meeting some standards will also require network efficiencies beyond the boundaries of the firm. For example, delivering products on time, as is essential within the GVC framework of integrating parts and components, is dependent on inter-firm logistics systems, and efficiencies in import/export procedures;
- *New types of financing needs.* As noted, it is likely that SMEs aiming to become suppliers in GVCs will have to fund significant investments, for example, in new technology and skills. Given the general constraints on SME financing, this is an important constraint for small firms. Furthermore, participation in production networks has new financing implications, with potential risks for SMEs. For example, there has been a noticeable shift from the use of letters of credit, which allow bank financing of SME working capital needs to unsecured, open-account trade finance; this shift places significant burdens and risks on smaller suppliers lower in the production network.³⁰ However, there is increasing awareness that pushing costs and risks down the supply chain to smaller firms can risk the competitive performance of the network as a whole;³¹
- *Competition among networks—not only enterprises.* As noted, competition within the framework of global value chains occurs, to a large extent, among networks of firms. For example, in the automotive industry it is not just Toyota that competes with Ford, but Toyota and its supplier network that competes with Ford and its supplier network; similarly, it is Nike and its suppliers that compete against Reebok and Adidas and their respective suppliers. It is in this context that competitiveness is a function of inter-firm or network efficiency, and not only individual enterprise productivity and performance. The network is only as competitive as its weakest link—and its weakest (inter-firm) linkages.

The underlying trend of the globalization of production is changing the basic prospects for the competitiveness of Asia-Pacific SMEs on international and domestic product markets. For SMEs that are in traditional activities, and that use relatively simple technology, operate with low levels of skills and serve relatively stable and small, localized markets, the opportunities and threats of globalization may be less urgent and pronounced. For those SMEs that are already at near-internationally competitive capabilities and

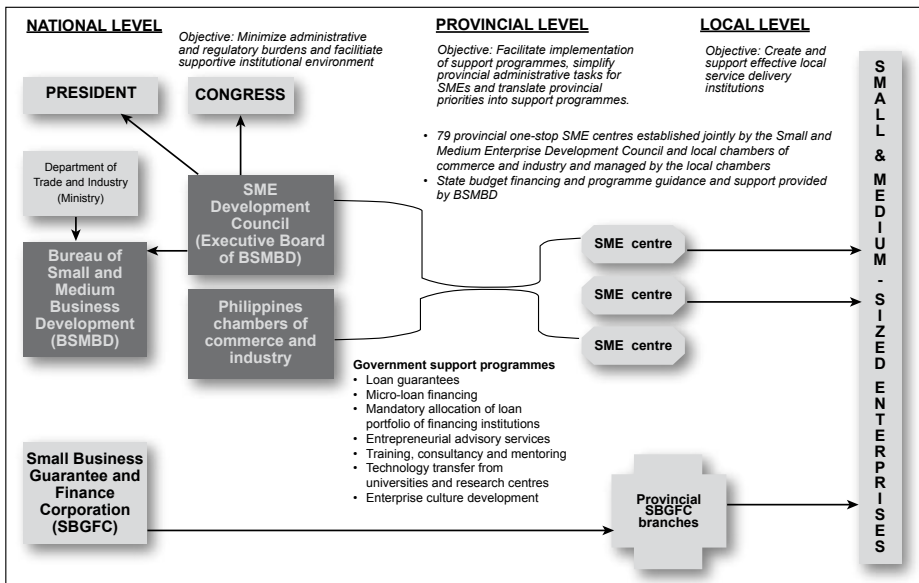
²⁹ See Linden, Kraemer and Dedrick (2007).

³⁰ See, for example, Aron (2007).

³¹ See, for example, Global Business Intelligence (2007).

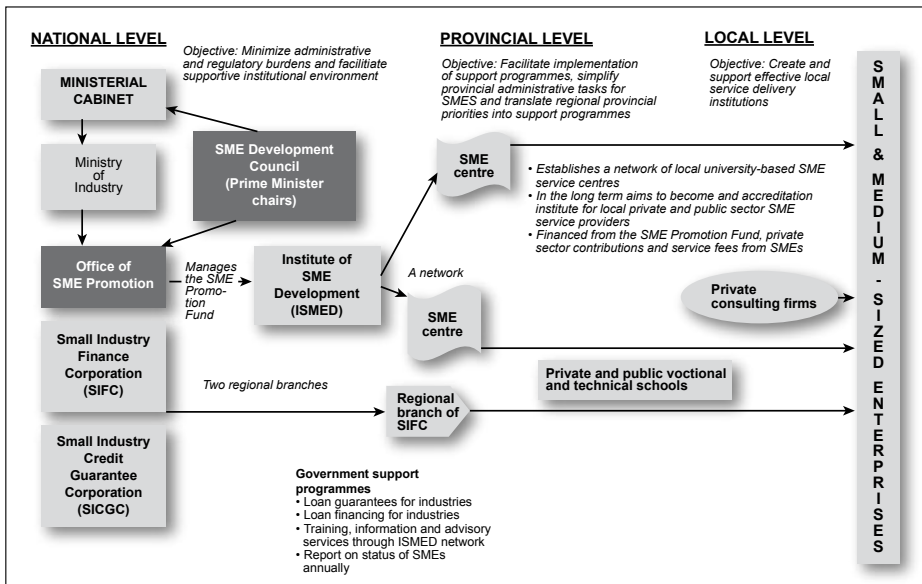
are active in export-related markets, the challenges of globalization pose both new opportunities and threats, as they must adjust their capabilities and performance to remain internationally competitive in an increasingly complex and demanding environment. Perhaps facing the biggest challenge—and opportunity—is a middle group of Asia-Pacific SMEs, at present active primarily in their home markets but that have the potential to be competitive on a larger scale. The globalization of production is likely to force these small firms to change in order to remain viable, either because of pressures to undertake export-oriented production (for example as suppliers to MNEs), or to face new foreign competitive entrants into their home markets. Either way, the competitive prospects of these SMEs will hinge on their abilities to upgrade their performance—in production process, products, and management capabilities—to meet international standards. Although competitiveness is fundamentally an enterprise-level concept, this poses new challenges collectively to enterprises, governments and donors. The importance of this issue is increasingly recognized by the countries of the region, as reflected in the comprehensive institutional frameworks to support SMEs in the Philippines and Thailand (figures 5 and 6).

Figure 5. Institutional support for the development of small and medium-sized enterprises: the Philippines



Source: Organization for Economic Cooperation and Development, "Promoting SMEs for development", background document for the Second OECD Conference of Ministers Responsible for Small and Medium-Sized Enterprises (SMEs) on Promoting Entrepreneurship and Innovative SMEs in a Global Economy: Towards a More Responsible and Inclusive Globalisation, Istanbul, 3-5 June 2004, annex 1, figure 6.

Figure 6. Institutional support for the development of small and medium-sized enterprises: Thailand



Source: Organization for Economic Cooperation and Development, "Promoting SMEs for development", background document for the Second OECD Conference of Ministers Responsible for Small and Medium-Sized Enterprises (SMEs) on Promoting Entrepreneurship and Innovative SMEs in a Global Economy: Towards a More Responsible and Inclusive Globalisation., Istanbul, 3-5 June 2004, annex 1, figure 7.