

## East Asian Production Networks – The Role and Contribution of SMEs

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### Abstract

The Asia-Pacific region generates over half of global economic activity (54.2%) and about 43.7% of global trade, and is the most dynamic region in the global economy. At the core of this is an increasingly dynamic, vibrant and entrepreneurial small-medium sized enterprise sector. Advances in information and communications technology, market liberalisation and moves towards closer regional economic integration (e.g. ASEAN, and prospective ASEAN+1, ASEAN+3, ASEAN+5 and ASEAN+6 arrangements) provide new opportunities, as well as new challenges, for regional small business entrepreneurs. In conjunction with these developments has come the increased recognition by regional governments, particularly in the wake of the 1997-98 financial and economic crisis, of the need for expanded entrepreneurial activity in the context of small businesses for the generation of regional income, employment, exports, investment, economic growth, poverty alleviation and regional development. This would also facilitate comprehensive restructuring of corporate sectors, with the aim of improving transparency, improving corporate governance, developing globally competitive enterprises, and further developing the region's burgeoning and economically significant production networks.

This paper reviews the contribution of small-medium sized business entrepreneurs in the Asia-Pacific region, the challenges and opportunities they face in the context of globalisation and regional developments, key capacity building areas, government support measures and potential competitiveness strategies for their survival and development.

**Keywords:** Small and medium enterprises, Asia-Pacific region, financial crisis.

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## 1. Introduction

Small-medium sized enterprise entrepreneurs (SMEEs) play a key role in both developed and developing economies in terms of employment generation, output growth, export growth, poverty alleviation, economic empowerment, and the wider distribution of wealth<sup>1</sup>. However, the potential of their enterprises are often not realized due to a number of factors relating to the scale of their businesses. Individual small-medium sized enterprises (SMEs) often have difficulties in achieving economies of scale in the purchase of inputs such as equipment, raw materials, finance and consulting services and are often unable to take advantage of market opportunities that require large production quantities, homogeneous standards and regular supply. Small size is also a constraint on the internalisation of functions such as training, market intelligence, logistics, technology innovation, quality accreditation, while preventing the achievement of a specialised and effective internal division of labour. To preserve their narrow profit margins, small-scale entrepreneurs in developing countries are often unable to introduce innovative improvements to products and processes and this limits their scope to take advantage of new market opportunities arising from the process of regional integration that could specifically include: attempts to gain access to the supply chains of transnational corporations (TNCs), take advantage of the process of regional product fragmentation<sup>2</sup>, and engagement in direct exporting and FDI opportunities. Many of the difficulties facing SMEs in developing countries are not related purely to size but also to their isolation of operation, locationally (regionally) and in terms of interaction with other similar sized enterprises. Hence, closer cooperation between SMEEs and relevant supportive institutions could be the key to overcoming such obstacles.

In this context, there has been concern over the ability of SMEs to remain viable in increasingly globalised markets due to: lack of resources (finance, technology, skilled labour, access to markets, and market information); lack of economies of scale and scope; higher transaction

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<sup>1</sup> See Davis, Haltiwanger and Schuh (1993) and Hallberg (2000) for a useful critique on the contribution of SMEs in these areas.

<sup>2</sup> See for example Kimura and Ando (2005).

costs relative to large enterprises; lack of information, knowledge and experience of international markets; increased market concentration; inability to compete against larger firms in terms of R&D expenditure and innovation; considerable ‘churning’ of small enterprises. Despite these the Asia-Pacific region, and in particular the East Asian region, has seen the rapid growth of SMEs and SMEEs due to: opportunities arising from: the rise of niche markets and the importance of customisation; technological advances that have resulted in discontinuities in production; reduced product life cycles that have made production flexibility more important than the volume of production; subcontracting opportunities arising from the growth of the global production system; opportunities arising from global retail sourcing (‘putting out’ system); the growth of the service sector due to rising affluence in developing and post industrial societies; the importance of knowledge, skills and innovation as sources of competitiveness in the new economy; their reduced bureaucracy and greater flexibility and ability to respond to rapidly changing customer demands; their greater innovation and ability to commercialise innovation, particularly in knowledge and skill intensive sectors where entry costs are lower; their ability to utilise e-commerce to expand market reach and gain access to information; participation in clustering (horizontal and vertical) and networking<sup>1</sup> that can facilitate access to spillovers in the form of knowledge and skilled labour, as well as achieve economies of scale and scope which would be impossible in isolation; flexibility in technology development, adaptation and application; and, finally, recognition by policy makers of the important role that they play in economic development by policy makers, both at the national level and international regional levels (APEC, ASEAN, ADB etc.)

The paper proceeds as follows. Section 2 briefly provides background information on the role and significance of SMEs and SMEEs in the economies of East Asia and APEC more generally. Section 3 discusses

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<sup>1</sup> A network is a group of firms that cooperate on joint project development complementing each other and specialising in order to overcome common problems, achieve collective efficiency and penetrate markets beyond their individual reach. Whether horizontal or vertical, networks can be developed within, or independently of, clusters.

the major barriers to the further development of the SME sector and key areas for SMEE capacity building that will enable this sector to make the maximum gains from regional trade and investment opportunities that will arise with the process of closer regional economic integration. Section 4 discusses the appropriate role of government in supporting the development of SMEs. Section 5 discusses SME and regional competitiveness strategies. Section 6 presents the major conclusions and policy implications from this paper.

## **2. Background – the role and significance of the SME sector and SMEs in East Asian economic development<sup>1</sup>**

SMEs have been recognised as a priority area for the East Asian economies, and more generally within the context of the Asia Pacific Economic Cooperation Forum (APEC), since the 1993 APEC Leaders' meeting in Seattle. Despite being seen as a priority, and the centre of considerable discussion, a clearly enunciated APEC agenda and program of action for SMEs in the region, before the onset of the financial and economic crisis of 1997-98, remained elusive. However, the crisis resulted in many of the countries of East Asia: re-evaluating their industrial policies; placing greater emphasis on improving corporate governance; improving the efficiency and competitiveness of their enterprises; and developing business sectors more able to overcome the vicissitudes of domestic, but more importantly global, market developments (Hall, 1999; Harvie, 2002). The latter is of particular importance in the context of increased economic interdependence and open regionalism. The need to develop more adaptable and flexible economies, and business sectors, has resulted in increased emphasis on the development of the SME sector and the importance of SMEs in this process.

### **Role and importance of SMEs to the region**

Although SMEs are important across the region there are considerable differences in the role of SMEs in the various economies. For example, SMEs play a larger structural role in Taiwan, China,

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<sup>1</sup> This section draws extensively upon Hall (1995) and Harvie and Lee (2002).

Japan, Thailand and Vietnam where they contribute over 70 percent of employment, than they do in Indonesia or Malaysia where they contribute only around 40 percent. In addition, the contribution of the SME sector to exports, and hence the extent of their global integration, also varies widely. They are relatively more export oriented in China, Korea and Taiwan than they are in Japan, Indonesia, Thailand, Malaysia and Singapore. Similarly, the dynamic role that SMEs play varies widely. For example in Singapore, even though SMEs are not as significant in terms of numbers and employment, they are important in providing a flexible skilled production base that attracts larger multinational corporations (MNCs). The dynamic role that SMEs have played has varied between the various countries. More recently in the case of China, and somewhat reluctantly in the case of Vietnam, entrepreneurial private SMEs and rural enterprises<sup>1</sup>, during the early part of the reform process, have been pivotal in the transition process from a planned to market oriented economy.

They have contributed to more efficient resource allocation, the marketisation of these economies, and are increasingly important in creating new jobs and in expanding exports. In the case of Taiwan, SMEs have played a pivotal role in the country's economic development from the beginning. More recently, however, they have been facing increased competition from SMEs in China and Vietnam, because their traditional low cost base is rapidly being eroded. As a consequence they have had to move up the high technology ladder in order to remain globally competitive. Recognising this requirement the Taiwanese government has been actively assisting in this process.

### **Numbers and contribution to employment**

SMEs have played, and are increasingly playing, an important economic role in the individual economies of East Asia, in the broader regional economy including that of APEC and, more generally still, the global economy. This is especially so from the point of view of creating employment, as a source of innovation, generating exporting opportunities, as the source of future successful medium and large

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<sup>1</sup> The so-called township and village enterprises (TVEs).

enterprises, and as a major source of both domestic and global competition. Developments in information technology and movement towards greater global trade and financial integration, implies even greater opportunities for the further expansion and increased competitiveness of regional SMEs. The process of product fragmentation, whereby trans national corporations (TNCs) are outsourcing input production from across East Asia, is resulting in complex trade and investment relationships across regional economies. This process provides regional SMEs with market opportunities for those most able to take advantage of such a development.

Table 1 indicates the distribution of enterprise numbers by firm size across a number of APEC regional economies, clearly indicating that most SMEs are micro enterprises. That is enterprises employing less than 5 employees. Table 1 suggests that many developing economies in the region have many micro and small SMEs, as well as a dominant large enterprise sector, but they do not have many medium sized enterprises. Hence there is a “missing middle”. This contrasts with the more developed economies where medium sized enterprises contribute significantly to employment, and are a major source of high growth firms that contribute significantly to employment growth.

**Table 1. Number of Private Non-Agricultural SMEs as a Percentage of Firms, Selected APEC Countries, 1999, (%)**

	<i>Micro (&lt;5 employees)</i>	<i>Small (5-19 employees)</i>	<i>Medium (20-99 employees)</i>	<i>All SMEs</i>
Australia	69.9	24.3	4.9	99.1
Chile	82.1	15.0	2.1	99.2
Hong Kong, China	86.8	7.6	4.9	99.3
Japan	56.5	34.7	7.4	98.6
Korea	72.7	17.8	8.6	99.1
Mexico	91.7	6.3	1.6	99.6
New Zealand	84.2	7.1	8.0	99.3
Peru	96.5	3.1	0.3	99.9
Philippines	91.1	8.2	0.4	99.7
Singapore	67.4	24.3	6.1	97.8
Thailand	79.0	18.4	2.0	99.4
USA	60.5	28.9	8.9	98.3

Source: Hall (2002a)

**Table 2 . Contribution of Micro, Small and Medium Sized Enterprises to Private Non-Agricultural Employment, Selected APEC Countries (%)**

	<i>Micro (&lt;5 employees)</i>	<i>Small (5-19 employees)</i>	<i>Medium (20-99 employees)</i>	<i>All SMEs</i>
Australia	25.9	20.9	19.2	66.0
Hong Kong, China	31.1	13.0	24.8	59.4
Japan	13.1	29.9	26.9	69.9
Korea	31.2	11.3	36.2	78.7
Mexico	36.2	13.9	15.2	65.2
New Zealand	23.0	18.0	19.0	60.0
Peru	62.5	16.6	8.8	87.9
Philippines	36.7	25.8	7.1	69.5
Singapore	7.1	16.8	19.2	43.1
USA	5.2	13.6	17.9	36.7

Source: Hall (2002a)

Table 2 indicates that SMEs generally contribute more than 50 percent of employment but this contribution tends to be proportionally more from medium sized businesses, defined as those employing between 20 and 99 people. Medium sized enterprises typically make up only about 4 percent of all enterprises (or about 20 percent of manufacturing enterprises) but they employ about 20 percent of the workforce (or about 30 percent of the manufacturing workforce). Across the region, while there are a considerable number of SMEs, and about 80 percent of these are micro businesses, micro businesses do not contribute proportionally as much to overall employment. Typically only about 10 to 25 percent.

### Contribution to Sales, Output, Value Added

Estimates of SME contribution to economic value added, sales, or output are difficult to obtain for the East Asian region, and more difficult to interpret in comparable terms. The contribution to GDP is particularly difficult to obtain, but SMEs have been typically estimated to contribute somewhere between 30 percent and 60 percent of GDP (Hall, 1995). Hall (2002a) shows that SMEs contribute about 50 percent of value added or sales on average, but that this ranges from about 30 percent to about 70 percent. Small and micro firms make a significant contribution in developing economies (about 50 percent of output in China and the Philippines for example), but less in the more developed

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economies. SME wage payments typically make up over half of GDP in regional economies, and hence are important for domestic demand expansion, and for the generation of savings funds (Hall, 2000, p.2).

### **Contribution to exports**

There is very little information on those SMEs that export and import goods and services. Hence reliable estimates of the proportion of exports generated by SMEs are traditionally difficult to obtain. The proportion of exports produced by SMEs in Asia is, however, large by OECD and world standards. Table 3 draws upon figures presented in Hall (1995, 2000) which shows that, weighted by GDP for the East Asian countries identified, SMEs generally contribute as much as 35 percent of direct exports<sup>1</sup>. However, this does vary widely across countries. Export growth rates are generally higher than GDP growth rates, and, where figures are available, the rate of growth of SME exports is higher than the growth of overall exports. This points to SMEs in Asia having already become significantly internationalized, and becoming more so. It is difficult to gauge the importance of SMEs by size of firm because few countries keep such export statistics. In addition, many SME exports are made indirectly via a larger firm or an agent, and are difficult to attribute to SMEs even when statistics are kept. The indirect contribution to exports is likely to be larger, however, and is probably close to 50 percent for APEC Asian economies.

The weighted<sup>2</sup> contribution of international SME exports to the GDP of those economies for which export figures are available is about 4 percent for the OECD countries (6 percent if indirect exports are included), and about 12 percent for the Asian economies. These figures are indicative only. They assume, for example, that where only manufacturing SME export figures are available that these are representative of exports generally in that economy. Similarly the estimates use the indirect export figure for SMEs where this is available, but for most economies it is not. Hence the overall contribution of

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<sup>1</sup> The equivalent figure for selected OECD countries, where estimates and statistics were available, was 26 percent.

<sup>2</sup> By country.

SMEs to exports is likely to have been understated. In addition, SME foreign direct investment (FDI) is usually export oriented, thereby adding further to the potential for regional exports and technology transfer (Hall, 2000, p.2).

**Table 3 . Structural contribution of SMEs to exports 1991-2**

	GDP \$US millions	Exports as per cent of GDP	Share of SMEs in total Exports %
Japan	3 337 191	12	13.5
PRC	435 000	21	40 - 60
Korea	285 000	27	40
Indonesia	128 000	23	10.6
Chinese Taipei	210 000	44	56
Thailand	108 000	29	10
Malaysia	60 000	72	15
Singapore	46 000	138	16
Vietnam	14 000	7	20
weighted contribution	11.7		30 -35%

Source: adapted OECD (1997)

Note: ~ indicate estimate only. M = manufacturing only. Exports are direct exports by SMEs. This understates the true contribution of SMEs to exports.

Weighted contribution. For exports is the sum of GDP multiplied by the percentage of exports multiplied by the percentage of direct SME exports expressed as a percentage of total exports.

### Contribution of SMEs to growth

SMEs make a major contribution to economic and, particularly, employment growth. Most of the available evidence suggests that SMEs contribute about 60 to 70 percent of net employment growth, so they are an important “Entrepreneurial Engine”. This contribution has two main aspects. First, the net addition of new firms, net start-ups, generate economic growth. About 80 to 90 percent of SMEs are micro enterprises, and they “churn”; that is, a significant proportion (between about 5 to 20 percent) “die” each year, while a similar proportion are “born” each year. If there is a net gain of births over deaths then this tends to add to overall economic growth, even though the average micro firm itself does not grow much in size. Second, it is the sustained growth of a relatively small group of successful (or high growth) firms that contributes significantly to economic growth. These firms typically

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survive for more than eight years, and often experience growth rates exceeding 30 percent per annum. It is only a relatively small percentage of SMEs (perhaps 5 percent or less) that contribute significantly to overall growth in this way, but their contribution can be quite large (see Hall, 2002a).

### **Some key observations**

A number of observations can be made about the contribution of SMEs as the Entrepreneurial Engine of East Asia (see Hall, 2002a). *First* it is clear that SMEs do provide the lion's share of growth. Typically, in the economies for which there are reliable data, about 70 percent of employment growth comes from SMEs. Anecdotally, even in economies for which there is no data, SMEs play a major role; for example almost all net employment creation in China, Vietnam and Indonesia in the last five to ten years has been in SMEs. In China and Indonesia, for example, large firms have been net job destroyers as they downsize - a phenomenon also common in Europe and the USA.

Second, the Entrepreneurial Engine is underpowered in much of East Asia, especially in the less developed economies of China, Indonesia, Philippines, Thailand and Vietnam (see Harvie and Lee, 2002). In these economies there are simply fewer SMEs than might be expected. This means that there are fewer start-ups, and the pool of SMEs from which high growth SMEs can emerge is much smaller. Consequently, there is less growth than there would otherwise be. In a *very* rough order of magnitude calculation, for these economies to achieve a benchmark level of 20 people per SME, there would have to be about 70 million new SMEs created (See Table 4). This needs to be compared with the 20 million or so SMEs in *all* of East Asia at present. This means 70 million or more people will need managerial skills and training. Most of these are in China. Table 4 suggests that there is considerable room for advancement in the development of SMEs in countries such as Indonesia and Thailand, two of the three most adversely afflicted economies during the period of the financial and economic crisis. Not surprisingly, these countries have given increased emphasis to SME sector development, with the objective of providing a firm base for sustainable economic recovery, an expansion in employment opportunities, and as a

means of alleviating poverty particularly in some of the more adversely affected regions in these countries. This situation is also similar to that in China and Vietnam, where, for historical, political, and cultural reasons, the development of the SME sector has also been retarded. Hence the sheer potential for SME start-ups in countries such as China, Indonesia and Vietnam could be a major source of job creation and growth for these economies in the future. In economies like Vietnam and Philippines, there need to be about 3 million or more additional entrepreneurs/managers. In the past this would be seen as a government responsibility, but the task is just too enormous to even contemplate for most governments. Changing technology (notably the www, and especially WAP access to the www) are changing this, and making it more feasible for the private sector to train large numbers of entrepreneurs/managers in a relatively short period of time, but it will still need public-private cooperation to achieve the sort of growth that is needed (see Hall, 2002a).

Third, in developing East Asia the bulk of the SME contribution to growth will probably come from net start ups while in developed East Asia the growth contribution will tend to come more from high growth firms. Start-up rates tend to be relatively low, especially in Japan, which is the largest economy in the APEC region. Japan's net start up rate (domestically at least) has been negative for some time. Part of this is due to the country's prolonged economic downturn, and part of it is cultural and institutional inhibitions to risk taking and starting a business. These cultural and institutional factors need to be actively addressed if East Asia is to really make use of the potential of its Entrepreneurial Engine. Fourth, the Entrepreneurial Engine is becoming increasingly internationalized. For example, a small but significant proportion of SMEs in Japan, Korea and Chinese Taipei have already expanded operations abroad; about 13 percent of Japan's manufacturing output is now sourced abroad. It is becoming easier for SMEs to operate across borders. This is partly as a result of efforts to reduce trade and non-trade impediments by the WTO, APEC and ASEAN. It is also part of the general globalisation of business occurring as a result of improved communications (particularly e-commerce and the web), other technological and social changes, and product fragmentation. This SME

internationalisation is not limited to specific regions, such as East Asia, but is more global.

**Table 4 . Estimated benchmark SME numbers in developing East Asia (millions)**

	population	estimated number of SMEs now	benchmark SMEs if ratio is 20 people per SME	Additional SMEs needed to meet benchmark
China	1244.2	8.0	62.2	54.2
Indonesia	203.4	2.0	10.2	8.2
Philippines	71.4	0.5	3.6	3.1
Thailand	59.7	0.67	3.0	2.3
Vietnam	76.5	0.5	3.8	3.3
Totals	1655.2	11.7	82.8	71.1

Source: Hall (2002a)

Table 5 elaborates upon and provides a summary of key common features, differences and policy issues, in the profile of SMEs in East Asia/APEC discussed in this section.

**Table 5 . A Summary Profile of SMEs in East Asia/APEC**

	Key features	Regional differences and policy issues
Numbers of Enterprises	<ol style="list-style-type: none"> <li>1. There are about 20 to 30 million SMEs in East Asia.</li> <li>2. They account for 98% of all enterprises.</li> <li>3. Micro-enterprises account for about 73% of all private sector enterprises.</li> <li>4. On average there are about 85 people for every SME.</li> </ol>	<ol style="list-style-type: none"> <li>1. Most of the SMEs are in China (8 million) and Japan (5 million) and Korea (2.6 million) which together have 70% of the SMEs in East Asia.</li> <li>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, Vietnam, Philippines and Indonesia.</li> </ol>
Employment	<ol style="list-style-type: none"> <li>5. SMEs employ about 60% of the private sector workforce, and 30% of the total workforce.</li> <li>6. Micro-enterprises employ about 21% of total APEC wide employment.</li> <li>7. Over 95% of enterprises employ less than 100 people, and over 80% employ less than 5 people.</li> <li>8. SMEs contribute about 70% of net employment growth.</li> <li>9. SMEs provide about 80% of employment in the services sector, and about 15% in the manufacturing sector.</li> <li>10. Women make up about 30% of employers/self employed in APEC – mainly in micro-enterprises</li> </ol>	<ol style="list-style-type: none"> <li>3. In developing economies (below about \$15,000 USD per head income) SMEs employ about 75% of people, above \$15,000 the level is closer to 50%. Japan is a major exception - Japan's SMEs employ around 80% of the workforce.</li> <li>4. More developed economies seem to have more medium sized SMEs and they play a greater role. Developing economies seem more likely to have a "missing middle".</li> <li>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.</li> </ol>

Output measures (sales, value added etc)	11. SMEs contribute about 50% of sales, value added or output.	6. The contribution varies from lows of 15% (Singapore ) and 30% (Australia) to about 60% for most other economies.
Exports	12. SMEs generate about 30% of direct exports (US\$930 billion in 2000), much less than the SME contribution to employment (about 60% to 70%) or output (about 50%). 13. SMEs contribute indirectly to trade through supply chain relationships with other firms. SME contribution to total trade could rise to 50%.	7. SME exports figures are difficult to verify, but they range from about 5% or less (Indonesia) to around 40% (Korea) of total exports. 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.
FDI	14. SMEs generate about 50% of cases of FDI, but only less than 10% of value of FDI.	9. Korean, Japanese and Chinese Taipei SMEs contribute most FDI originating in the East Asian region.
Entrepreneurial Engine, international potential, and the new economy.	15. SMEs already contribute the bulk of growth, and SMEs could make a much bigger 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 5 year period. 16. SMEs moving towards services and away from agriculture and manufacturing.	10. The developing economies need to create about 50 to 70 million more SMEs if they are to achieve “benchmark” levels of SME activity. 11. To achieve maximum gain from trade it is essential to improve governance, 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. 12. Capacity building includes: access to finance; improved professional skills (IT, management, accounting and entrepreneurship); improved business infrastructure; removal of trade barriers that particularly adversely affect SMEs. 13. E-commerce use of SMEs lags larger enterprises. Important for cost saving and growth potential. Usage of technology a problem due to: set up and usage costs; lack of adequate infrastructure and IT skills.

Source: Hall (2002a, 2002b), supplemented by information from APEC (2002), and by the author.

### 3. Impact of the global financial crisis on regional SMEs

The recent global and financial economic crisis severely impacted the business sector of most regional economies, and exposed many ongoing structural and competitiveness weaknesses. SMEs. .

#### 4. SME capacity building

In order for SMEs to fully participate in the process of globalisation their entrepreneurs need to develop capacities that will enable them to be internationally competitive in global markets. This will involve building upon the advantages possessed by them – entrepreneurial spirit, flexibility, resourcefulness, and an ability to identify business opportunities and market niches based upon their unique products and services. Despite this SMEs face a number of barriers in their development – their small size means that they have limited resources and access to finance, they lack economies of scale, they have high relative costs in accessing and utilising information technology, they have skill deficiencies in the utilisation of IT, they have entrepreneurial, managerial, accounting and marketing skill deficiencies, they lack information on market opportunities, they incur high transaction costs including that arising from accessing transport infrastructure and in the cost of transportation, achieving quality accreditation, they lack skills in dealing with customers both in the domestic market and in the export market, they have limited knowledge about language and culture as well as the legal and bureaucratic issues involved in exporting, they may experience a lack of business infrastructure support and in some countries may be discriminated against relative to large firms.

Building capacity, improving governance, reducing transaction costs, promoting further market liberalisation, addressing non-tariff barriers, increasing internet access, and facilitating trade and investment are all directly relevant to improving the capacity of small businesses and their entrepreneurs to exploit export market opportunities and for their regional growth.

A useful way of highlighting barriers faced by SMEs and their entrepreneurs in the process of internationalising, is in the context of the **integrative model** summarised in Figure 1. Here, barriers facing SMEs are classified into **internal resource factors** (finance, technology, skilled labour, market access and market information), **psychological factors** (entrepreneur characteristics that determine attitudes and perceptions towards risk, benefits from internationalization, trust, self-esteem, self-efficacy, receptivity to new ideas, desire, commitment and motivation towards internationalization, as well as the overall business

culture of the enterprise) and **external factors** (government policy, domestic market conditions, overseas market conditions) that determine the strategy of the business including the decision to internationalise. In this context the importance of the SMEE is given explicit recognition, rather than treating the enterprise as a black box.

### **Internal resource factors**

The Ottawa meeting of APEC in September 1997 emphasised the five key internal resource factors for the capacity building of SMEs. These being access to: markets; technology; human resources; financing; and information.

**Access to markets.** SMEs are recognized as facing special problems relating to their size and that, in the context of rapid trade liberalization, they need to develop capacities to take advantage of opportunities arising from a more open regional trading system. The Internet is regarded as being of particular importance in this regard, as is the need to identify appropriate partners for joint ventures or strategic alliances, to harmonise standards and professional qualifications, including investment laws and taxation procedures, and the protection of intellectual property rights. Despite cuts in average tariffs in APEC from 12 percent in 1995 to 8 percent in 2000 that resulted in an estimated growth rate in merchandise exports



of 4.7 percent per annum during 1995-2000, there is a perception that small businesses have been unable to fully exploit opportunities to export. The SME contribution to direct exports has remained static or declined. Reductions in tariffs have not benefited SMEs, and more emphasis by regional governments needs to be put on tackling non-tariff barriers (customs procedures, mobility of business people, standards of labeling requirements, access to finance, recognition of professional qualifications, consumer protection particularly regarding on line transactions, and intellectual property rights) if SMEs are to benefit from trade expansion and to enhance their exporting capacity. Greater participation by SMEs in trade is likely to generate a number of benefits. With access to a larger market, individual firms will be able to benefit from economies of scale and generate additional revenue (APEC, 2002). In terms of efficiency, firms which expose themselves to more intense competition in global markets can acquire new skills, new technology and new marketing techniques. Exporters tend to apply knowledge and technologies at a faster rate and more innovatively than non-exporters. This can result in greater efficiency and productivity. A larger number of SME exporters assist skill and technology applications by spreading these over many small buyers and speeding up a multiplier effect, which extends the gains over the entire economy and not just firms that export. Ultimately, the economy will benefit from more flexible and environmentally responsive firms, higher growth rates and long-term improvements in productivity and employment levels. Exporting has a positive effect on living standards, as competition drives firms to invest in staff development, which in turn improves productivity, wages and working conditions. Exporting also encourages cultural diversity and the building of relationships and reputations with other countries.

- **Access to technology.** In a knowledge-based economy, applications of information and communications technology can be a great leveller for SMEs. However, when SMEs have limited access or understanding of these technologies, their prospects of acquiring and utilising these for their benefit is reduced. In terms of the Internet, e-commerce use amongst small businesses is currently lagging behind their larger

counterparts (OECD, 2000c). However, many small businesses view e-commerce as providing cost savings and growth potential and the gap relative to larger enterprises is closing, but further action by regional governments will be required (in terms of improved infrastructure, cost, and IT training, as well as information relating to business opportunities that e-commerce can generate). Enhancing the role and participation of small businesses in the global marketplace through e-commerce will be of critical importance. E-commerce presents small businesses with the opportunity to compensate for their traditional weakness in areas such as access to new export markets and competing with larger firms. It can provide global opportunities by enabling the flow of ideas across national boundaries, improving the flow of information and linking increased numbers of buyers and sellers. This provides opportunities for greater numbers of trading partners dealing in goods and increasingly in services. Studies suggest that small businesses with higher levels of e-commerce capabilities are more likely to identify using e-commerce to reach international markets as an important benefit. Hence the desire to export for many SMEs may have a fundamental influence on promoting the rapid development of more advanced e-commerce capabilities. For many small businesses in the Asia-Pacific region, integrating the development of e-commerce into their future strategies for accessing international markets is seen as being crucial. E-commerce also has the potential to lead to cost savings and efficiency gains. Raising the awareness as well as the understanding of the benefits to be obtained from e-commerce will be important in increasing its uptake by small business. To incorporate the technology into their operations small business needs to find ways to deal with high set-up costs, as well as lack of adequate infrastructure and IT skills. If these can be overcome small business will play an important part in the region's 'new economy' at least as much as it will for more traditional forms of commerce. In this regard the role of the government is likely to be crucial. This includes: development of the telecommunications infrastructure; addressing legal and liability concerns; ensuring that fair taxation practices are applied to e-commerce; addressing security issues; and raising the awareness of the business benefits of e-commerce, including the potential for export growth.

- **Access to human resources.** Human resource development for SMEs requires a comprehensive approach including: social structures and systems such as broad educational reforms; encouragement of entrepreneurship, business skills acquisition and innovation in society; mechanisms for self learning and ongoing training and enhancement of human resources; and appropriate governmental support programs. Among small and micro enterprises a shortage of skills in information technology and cost are major hindrances to business growth. Consequently, staff training in IT as well as in skills required to successfully enter export markets are required. Improved IT skills would enable: more efficient management of the business; workload sharing; and the development of more market opportunities including that of exports. Other desired exporting skills include language and cultural expertise, as well as legal and logistical knowledge.
- **Access to financing.** The opportunity to access small amounts of finance can be an important catalyst for small businesses to get access to the resources they need to gain a foothold in the market. This is particularly critical for micro-enterprises. Many SMEs lack awareness of financing resources and programs available from commercial banks and other private sector and government sources, and have difficulty defining and articulating their financing needs. Financial institutions, however, need to be more responsive to their needs.
- **Access to information.** Accurate and timely information on, for example, market opportunities, financial assistance and access to technology is crucial for SMEs to compete and grow in a global market environment. This is an important role that both the government and relevant business organizations can play.

In addition to these key areas for capacity building, there is also the need to encourage the development of business networks, including the development of strategic alliances and joint ventures, and enhancing the innovative capacity of SMEs.

• **Inter-firm networking.** Entrepreneurs who develop and maintain ties with other entrepreneurs tend to outperform those who do not. A network is a group of firms using combined resources to cooperate on joint projects. Business networks take different forms and serve different objectives. Some are structured and formal, even having their own legal personality. Others are informal, where, for instance, groups of firms share ideas or develop broad forms of cooperation. Some aim at general information sharing while others address more specific objectives (such as joint export ventures). Soft networks generally encompass a larger number of firms than hard networks, with membership often open to all that meet a minimum requirement (such as payment of an annual fee). Networks have come to encompass agreements with research bodies, education and training institutions and public authorities. Hard networks are more commercially focused, involving a limited number of pre-selected firms, sometimes formally and tightly linked through a joint venture/strategic alliance. Networks can allow accelerated learning. Moreover, peer based learning – which networks permit – is the learning medium of choice for many small firms. Furthermore, to innovate, entrepreneurs often need to re-configure relations with suppliers, which networks can facilitate. Networks can allow the sharing of overhead costs and the exploitation of specific scale economies present in collective action. Networks need not be geographically concentrated. Once trust among participants is established, and the strategic direction agreed, operation dialogue could be facilitated through electronic means.

• **Innovation.** Recent studies have shown that despite the fact that a very small fraction of total business R&D in the developed economies is accounted for by SMEs, they contribute greatly to the innovation system by introducing new products and adapting existing products to the needs of their customers (OECD, 2000a). Small firms account for a disproportionate share of new product innovations despite their low R&D expenditures (Acs and Audretsch, 1990). In addition, they have also been innovative in terms of improved designs and product processes and in the adoption of new technologies. Investment in innovative activities is on the rise in SMEs and is increasing at a faster rate than that

for large firms. Scherer (1988) has suggested that SMEs possess a number of advantages relative to large firms when it comes to innovative activity. First, they are less bureaucratic than highly structured organisations. Second, many advances in technology accumulate on a myriad of detailed inventions involving individual components, materials and fabrications techniques. The sales possibilities for making such narrow, detailed advances are often too small to interest large firms. Third, it is easier to sustain high interest in innovation in small organisations where the links between challenges, staff and potential rewards are tight. Firms in the developed high cost economies can no longer compete in labour intensive areas of production where they have lost their comparative advantage, but rather must shift into knowledge based economic activities where comparative advantage is compatible with both high wages and high levels of employment. This emerging comparative advantage is based on innovative activity. For the developed economies of East Asia their future international competitiveness will also depend upon their ability to develop a capacity in knowledge intensive firms, many of which will be SMEs based upon the experience of the developed OECD economies.

Table 6 provides a summary of key SME barriers found to be significant in the context of developing and transitional economies in the region. But, as suggested by Figure 1, psychological factors derived from the characteristics and experience of the SMEE (e.g. age, gender, education, training, work experience, travel experience etc.) are also likely to play a critical role in determining the business strategy of the business and its attitude toward internationalisation.

**Table 6 . SME capacity building barriers in developing and transitional economies in East Asia**

<b>1. Access to land</b>
<b>2. Access to finance</b> (supply and demand factors) – high risk (risk premium) and high transactions cost. Lack of instruments for managing risk. SME lending institutions strengthened
<b>3. Compliance costs</b> (administrative/regulation costs)
<b>4. Legal framework</b> (lacking in transparency, intellectual property rights, enforcement of contracts, bankruptcy, no basic SME Law)
<b>5. Access to technology</b> (availability and cost, computers, internet, e-commerce)
<b>6. Access to information</b> on business opportunities
<b>7. Access to markets</b> (e.g. government procurement)
<b>8. Access to Business Development Support (Advisory) Services</b> accounting, consulting, marketing services)
<b>9. International competitiveness</b> – lack economies of scale
<b>10. Relatively high transaction costs</b> – transport infrastructure and transport costs
<b>11. Accreditation costs</b> – to achieve technical, labour and environmental standards (ISO9000, ISO14000 etc.)
<b>12. Market failure</b>
<b>13. Fairness, transparency and consistency in the taxation of private firms</b>
<b>14. Access to skilled human resources</b>
<b>15. Entrepreneurial skills and training</b>
<b>16. Societal attitudes</b>
<b>17. Lack of, and cost of, infrastructure</b>
<b>18. Costs of becoming formal rather than remaining informal</b>
<b>19. Discrimination</b> – pro big business approach, corruption, no SME Ministry or government department

## 5. Government's role and support for SMEs

The role of government is crucial in supporting the further development of the private SME sector in both developing and transitional economies. Its primary objective should be to provide an enabling environment that will facilitate capacity building in the sector. Such a role should focus upon the establishment of a conducive macroeconomic environment and enhancement of the micro-environment within which the private sector, specifically SMEs, operates. A summary of the key issues is contained in Table 7.

At the macroeconomic level establishing and maintaining economic stability is an essential foundation for sustainable growth and development. Low budget deficits and inflation are key prerequisites for the development of a sound private sector and the establishment of new businesses. A pro business environment with clear recognition of the rights of private enterprises including intellectual property rights is essential for the development of domestic private enterprises and for the attraction of FDI. A stable, transparent and competitive exchange rate is also seen by many private enterprises as essential. Government can create business opportunities for its domestic private enterprises by participating in regional trading arrangements and the WTO. Establishing a broad national development and poverty strategy that embeds strategies for the private sector and SMEs is also important. Through the educational and training system provide and encourage the acquisition of business skills in such areas as finance, marketing, management and accounting, and, finally, ensure the health and productivity of its workers by means of access to good health facilities in both the cities and countryside.

At the microeconomic level a number of tasks will be required of the government. These include: simplifying and making more transparent the legal and regulatory systems; reducing the compliance and transaction costs for private sector businesses; reducing the costs of firms moving from the informal to formal sectors; continue and speed up ongoing market reforms and deregulation; ensure good corporate governance; tackle corruption; enhance access to finance; provide suitable infrastructure; ensure sufficient skilled workers enter the labour

market; ensure a level playing field treatment for all enterprises; encourage the appreciation of enterprise in society; commit and maintain multi sector ownership of enterprises; develop an institutional environment where contracts are enforced and property rights are established and clear; ensure that legislation and regulation are gender insensitive; introduce land/bankruptcy legislation that ensures access to land for SMEs and clear land use rights, and eliminates unduly high penalties on entrepreneurs and lenders arising from SME failure; and encourage the establishment of industry organizations that will represent the interests of members and provide market information.

Government assistance can also play an important role in the business and exporting success of SMEs through access to finance, infrastructure provision, the provision of training programs, reducing bureaucracy and establishing a pro-business environment, staging of seminars and trade fairs, addressing non tariff barriers, increasing internet access, facilitate trade and investment, and remove trade barriers that particularly adversely affect SMEs. Support at the local level through investment in infrastructure that assists directly the business efficiency of small business is important. Examples include transport and information technology infrastructure, both of which are important for export success. Policy makers also need to focus on removing barriers affecting trade. Barriers to trade for small businesses are not just tariff related, however, but also involve issues of product presentation standards, *warehousing* and financial transactions. Because small businesses lack the economies of scale and the internal expertise of larger businesses they need more practical external support.

## **6. SMEs and regional competitiveness strategies**

The ability of SMEs to create, access and commercialise knowledge on global markets has become an imperative source of competitiveness in global markets. Based on the experiences of developed country members of the OECD, some of the principle competitiveness strategies that have been used by innovative SMEs in these countries at the regional and national levels have included the following (see OECD 2000a, p.11):

**Table 7 . Summary – Role of Government**

<b>Macroeconomic environment</b>	<b>Microeconomic environment</b>
1. Economic stability	1. Simplified legal/regulatory systems
2. Low budget deficits	2. Lower compliance (administrative costs) and transaction costs for small business and especially in regard to exporting
3. Low inflation	3. Low formalizing costs (easy and transparent firm registration, business licensing requirements minimized, and tax costs))
4. Pro business environment	4. Continue and speed up ongoing market reforms, liberalization and deregulation
5. Stable/competitive exchange rate	5. Improve the export capacity of SMEs by addressing non tariff barriers, increase internet access, facilitate trade and investment, and remove trade barriers that particularly adversely affect SMEs.
6. Trade negotiations and reducing trade barriers (ASEAN, WTO)	6. Good corporate governance
7. Economic integration	7. Absence of corruption (transaction costs)
8. Broad National Development and Poverty Strategy, embedding strategies for the private sector and SMEs (SEDS).	8. Access to finance (use of SME assets as collateral)
9. Education/training and health system	9. Provision of suitable infrastructure – communications, transport and utilities
	10. Skilled workforce
	11. Level playing field treatment of all enterprises
	12. Appreciation of enterprise in society
	13. Establish multi-sector ownership
	14. Develop an institutional environment where contracts are enforced and property rights established and clear
	15. Legislation and regulation gender insensitive
	16. Land/bankruptcy legislation that ensures access to land for SMEs and clear land use rights, and eliminates unduly high penalties on entrepreneurs and lenders arising from SME failure.
	17. Encourage the establishment of industry organizations that will represent the interests of members and provide market information.
	18. Identify existing regional networks and regional competitive advantage and use this as the basis for building a competitive regional cluster.

Source: Author

- Innovation strategy, in which SMEs try to appropriate returns from their knowledge base (which may or may not involve own investments in R&D).
- Information technology strategy, which makes innovative uses of information technology in order to reduce SME costs and increase productivity.
- Niche strategy, in which SMEs choose to become sophisticated global players in a narrow product line.
- Network strategy, in which SMEs work and co-operate with other firms, be they SMEs or large enterprises, in order to improve their ability to access and absorb innovations.
- Cluster strategy, in which SMEs locate in close proximity with competitors in order to take advantage of knowledge spill-overs, especially in the early stages of the industrial lifecycle (key strategy at the regional level).
- Foreign direct investment strategy, in which SMEs exploit firm specific ownership advantages overseas.
- Supply chain strategy (production networks), where SMEs attempt to take advantage of TNC outsourcing, arising from the fragmentation of production, by linking in to the supply chain of large companies (particularly at the high value adding end). This can enable access to technology and new management skills, however it also requires SMEs to achieve the level of technology, quality and reliability of supply demanded by large companies.

Membership of clusters and inter-firm networks can enhance the productivity, rate of innovation and competitive performance of firms (OECD, 2000b). Clusters and networks can allow small firms to combine the advantages of small scale (flexibility) with the benefits of large scale (economies of scale). A clusters policy provides a framework for dialogue and cooperation between firms, the public sector (local and regional governments) and non-governmental organisations. This dialogue can lead to efficiency enhancing collaboration amongst firms, such as in joint marketing initiatives, the creation of mutual credit guarantee associations, joint design and sponsorship of training, a more efficient division of labour amongst firms etc. In a period of

globalisation, inter-firm networks hold the promise of allowing small firms to compete on a par with larger companies. Networks can allow firms to engage in accelerated – and peer based – learning. They can facilitate the re-configuration of relationships with suppliers, and offer scope for increased efficiency through collective action. As with clusters, networks can pave the way for greater specialisation amongst small firms, opening opportunities for economies of scope and scale. While not all networks need be geographically concentrated, networking of different sorts is central to the competitive advantage derived from membership of a cluster.

The idea that there are gains in clustering goes back to Alfred Marshall's analysis of industrial districts in the UK. Marshall stressed the economies which 'can often be secured by the concentration of many small businesses of a similar character in particular localities' (Principles of Economics, 8<sup>th</sup> edition, 1920, p.221)<sup>1</sup>. He refers to such gains as 'external economies' and sees them as particularly relevant to small firms. The concept of external economies is introduced by Marshall in order to draw out (1) why and how the location of industry matters, and (2) why and how small firms can be efficient and competitive. He means a cluster with a deep inter-firm division of labour. Schmitz (1995) argues that until fairly recently the phenomenon of industrial groupings had largely been ignored by mainstream economics. The exception to this being Krugman (1991) who, following Marshall (1920), identified three specific external economies that impacted upon a firm's choice of a given geographical setting:

- the existence of a pool of adequate labour
- the existence of specialised suppliers,
- the possibility of external spill-overs, the rapid transfer of know-how and ideas

These three conditions tend to be present primarily in industrial districts or, using more contemporary nomenclature - clusters. For example, the work of Piore and Sabel (1984), Pyke, Becattini and Sengenberger (1990) and Pyke and Sengenberger (1992) presented the

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<sup>1</sup> See also Weber (1929).

Italian experience as a particular model of industrial development in which the emergence of linkages and cooperation between SMEs provides economies of scale and scope. Far from being handicapped by size, clusters of SMEs (it was argued) have the advantages of flexibility and responsiveness, enabling them to become more competitive than large firms. In developing countries this need has become particularly pressing as trade liberalisation and deregulation increase competitive pressures and reduce the direct subsidies and protection which states can offer to SMEs.

The concept of external economies<sup>1</sup> is essential to understand the efficiency advantages which small firms derive from clustering. There remained the problem, however, that the concept is restricted to unplanned gains or losses. As stated by Mishan (1971, p.2), 'the essential feature of the concept of an external effect is that the effect produced is not a deliberate creation but an unintended or incidental by-product of some otherwise legitimate activity'. While such incidental effects are of considerable importance in the establishment and development of contemporary industrial districts, it is also important to emphasize consciously pursued joint action (see for example Brusco, 1990; Piore and Sabel, 1984). Such joint action can be of two types, individual firms cooperating (for example, sharing equipment or developing a new product) and groups of firms joining forces in business associations, joint organisation of a presence at a trade fair aimed at entering a foreign market, producer consortia and their equivalent. Hence Schmitz (1995) argues for the addition of a fourth element to the three already mentioned - that of **collective efficiency**. Collective efficiency can be defined as the competitive advantages derived from local external economies (incidental) and collaborative action, and emphasises that competitiveness can neither be understood nor enhanced by focusing on individual firms alone. While the first three factors are examples of local economies and occur in clusters spontaneously, that is without a voluntary decision by firms to engage in cooperation with others, it is

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<sup>1</sup> Samuelson views external economies as a type of inefficiency that does not allow a firm to appropriate, via the price of its goods, all the advantages derived from its economic process: some of it goes to other firms, since the walls of a cluster are likely to be porous.

the voluntary, planned, cooperation which can provide a key driving force to firms located in a given cluster<sup>1</sup>.

From a policy making perspective the importance of such voluntary cooperation implies the need for clusters to contain a large number of firms, and the establishment of institutions that promote, organise and manage that cooperation. A clearer understanding of what brings about this collective efficiency is, therefore, of importance for policy. Stress on collective efficiency, however, should not be interpreted to mean denying competition among firms. Rivalry is often particularly severe amongst clustering producers, but this need not stop them from joint forces to overcome common bottlenecks in infrastructure, input supply or access to distant markets. It is the combination of competition and cooperation which drives the search for improvement. Hence the role of government is potentially very important in this regard.

Although most of the literature on clusters emphasises their success in enhancing the production process of individual firms, it is also worth emphasising that successful clusters provide commercial and distribution advantages. For example distant buyers would go to a cluster since they find in that place a variety of products on offer, thus facilitating cluster firm's access to distant clients. Another example is that of product quality certification processes, a marketing tool, which need a collectively-certifying institution. Hence there are commercial as well as production aspects of clusters that are essential for their success.

## 7. Conclusions and policy implications

This paper has reviewed the strategic importance of SMEs and SMEEs to economic development, growth and integration in East Asia and the Asia-Pacific region more generally, the importance of building their capacity, the role of government in their development and

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<sup>1</sup> Rabellotti (1995) argues that external economies range from static gains such as easy availability of inputs, to dynamic gains such as the fast spread of new ideas of how to innovate. Being in the same sector and location also facilitates taking joint action which again can range from more static concerns such as associations defending local producers in disputes with government or dynamic concerns such as taking groups of local producers to foreign trade fairs in the search for new markets.

competitiveness strategies emphasising the importance of networks and clusters. Their potential contribution to trade and investment in the East Asian/Asia-Pacific region is substantial, and if issues adversely affecting their export contribution and competitiveness can be overcome they are likely to play a pivotal role in facilitating further regional economic integration. A number of key issues for policy makers were identified.

First, SMEs and SMEEs are important to economic growth, and are especially important to jobs and job creation. SMEs already contribute over half the private sector jobs in the East Asian region, and about 70 percent of new job creation seems to be coming from SMEs. In developing economies the contribution of SMEs to employment tends to be higher, around 70 percent of the workforce, but as economies develop to higher income per head levels the contribution to employment by SMEs tends to decline to around 50 percent. In developing economies the jobs tend to be created more by start-ups, but in the developed economies jobs seem to be created more by high growth SMEs. It is important for policy makers to understand and to foster the way this Entrepreneurial Engine works and evolves.

Second, the Entrepreneurial Engine in developing East Asia is underpowered. That is the job creating potential of SMEs is less than it could be. There are about 2 billion people in East Asia, and about 20 million SMEs. In most of the developed economies there are about 20 people per SME, but in developing East Asia there are about 100 people per SME. This means that the ability to create jobs by start-ups is greater, and the pool of SMEs from which fast growth SMEs emerge is smaller. This is largely due to historical and political reasons; for example, China and Vietnam have only recently pursued policies to stimulate SME growth, and there is considerable opportunity for their expansion. Policy makers in both the developing and developed economies need to work with the private sector to address this aspect of catch up. Expanded ASEAN integration to include that of China presents major market opportunities for the regional SME sector.

Third, from a global perspective SMEs, and SMEEs, have more opportunities now than ever before, but they seem to be growing only at about the same rate as the international economy. SMEs contribute

about 30 percent or so of direct exports, about what they contributed at the start of the 1990s, which is less than what might be expected in an increasingly globalised economy and with increased trade opportunities through product fragmentation in East Asia. Part of the problem here is the paucity of statistics on SME international activity. Part of it is that the trade barriers that *have* been addressed so far by APEC and WTO tend to favour larger trading firms, and do not address the more specific non-border non-trade impediments that SMEs tend to be obstructed by when operating across borders. These impediments need to be identified and addressed more aggressively.

Fourth, SMEs have tended to become more important economically and politically. SMEs are given political recognition by most national and provincial governments because they employ so many people. However, politically, SMEs have tended to be taken for granted by many national governments because they are a relatively weak domestic political force. It is only in the last decade that SMEs have had the real choice of being able to internationalise, just as larger enterprises did in the 1950s and 1960s. SMEs, especially those fast growth SMEs that contribute much to economic and employment growth, can increasingly decide where to locate their business activity. This is very much a two edged sword for policy makers. However, they need to see that as much as 70 percent of the longer term growth for their economies comes from SMEs, and that there is a need to work together to build an attractive and conducive entrepreneurial business environment in the region, and, more specifically, in their own economies.

Fifth, key to the future success of SMEs will be capacity building which will enable them to take advantage of the market opportunities that arise from the process of globalisation and from greater economic integration within East Asia and APEC more generally. In particular, SMEs and regional governments will need to focus upon attaining greater access to: markets, technology, skilled human resources, finance and information. In addition, their competitiveness and capacity can be further enhanced through the nurturing of networks and becoming more innovative both in terms of new products and services as well as processes. The role of government is crucial. It will be required to find means for enhancing SME access to finance, new technology and

encouraging the take-up of e-commerce by SMEs through improved telecommunications infrastructure, providing training programs in the requisite skills for SMEs, opening up domestic markets and reducing non tariff barriers in trade with other countries.

Finally, the view that SMEs would be swept away with the process of globalisation and modernisation has not materialised. They have now become the main targets of policies aimed at creating growth and employment in both developed and developing countries. In addition, globalisation has strengthened the role and importance of the region at the national level as the base for economic growth based upon Porter's concept of Competitive Advantage, which recognises the role and importance of innovation and knowledge for economic growth based around the establishment of regional clusters of SMEs. These are important for the transferal of tacit knowledge, attaining economies of scale, pooling of resources and knowledge, accessing skilled labour, accessing business services and providing the basis for competition with larger enterprises. Such clustering can provide assistance in overcoming locational disadvantages. Closer regional economic integration presents numerous market opportunities, and, with appropriate policy action, the SME sector is in a good position to gain significantly from this.

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