Trade Knowledge Network

TKN Policy Paper

# The Impacts of Trade Liberalization on Indonesian Small and Medium-sized Enterprises

Tulus Tambunan
2011

International Institute for Sustainable Development
Institut international du développement durable

## Abstract

Recently there has been public and academic debate as to whether small and medium-sized enterprises (SMEs) in developing countries can survive the process of world trade liberalization. This policy paper discusses this issue in the context of Indonesian SMEs. The question is particularly important for Indonesia for two main reasons. Firstly, SMEs have historically been the main players in the Indonesian economy, accounting for more than 90 per cent of all firms across sectors and providing employment for over 90 per cent of the country's workforce, mostly women and youth. Secondly, the Indonesian trade regime has changed from a protected to an open economy. There are concerns that Indonesian SMEs will not survive in the era of trade liberalization. One reason is that they are facing various constraints, including lack of qualified human resource, capital and technology. In fact, only a small portion of Indonesian SMEs export their products, but most of them do so indirectly through intermediate agencies, including large-sized exporting companies. However, there is no evidence to suggest that SMEs in Indonesia have been negatively affected by the shift in Indonesia's trade regime towards trade liberalization.



Published by the International Institute for Sustainable Development

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Winnipeg, Manitoba
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This study is part of a larger TKN project that seeks to better environmental impacts of trade and investment policy in ASEAN, and specifically the Mekong subregion. It was made possible through the generous support of the Swedish Environment Secretariat for Asia (SENSA) which is part of the Swedish International Development Cooperation Agency (SIDA). The project outputs are available on the TKN website.

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## Abbreviations and acronyms

| | |
|---|---|
| ACFTA | ASEAN–China Free Trade Agreement |
| ADB | Asian Development Bank |
| AFTA | ASEAN Free Trade Area |
| ASEAN | Association of Southeast Asian Nations |
| EHP | Early Harvest Program |
| GDP | gross domestic product |
| IMF | International Monetary Fund |
| MIE | microenterprise |
| NTB | non-tariff barrier |
| R&D | research and development |
| SME | small and medium-sized enterprise |
| USD | U.S. dollar |

# Executive summary

The ability of small and medium-sized enterprises (SMEs) to survive in an increasingly globalized marketplace has been the subject of recent debate in public and academic circles. Some commentators are pessimistic, arguing that such enterprises lack the necessary resources, such as technology and skills, to compete in the highly competitive global market. The debate is relevant for Indonesia for at least two reasons. Firstly, SMEs have historically been the key economic actors in the Indonesian economy, accounting for over 90 per cent of the enterprises across all sectors and providing employment opportunities for over 90 per cent of the country's total workforce, mostly women and youth. Secondly, the Indonesian trade regime has shifted significantly from a highly protected market to a more open economic system.

Indeed, data on the structure of enterprises by size indicate that the majority in all sectors of the Indonesian economy are in the SME category, with most in the form of microenterprises (MIEs). Relative to large enterprises, SMEs, particularly MIEs and small enterprises, are often hampered by institutional constraints that limit their ability to grow in size and evolve into more efficient enterprises. Although the constraints may differ by sectors and regions, a number of limitations are common to all SMEs in the country: these include the lack of capital, human resources, technology and information; difficulties in procuring raw materials; weak marketing and distribution capacity; high transportation costs; problems caused by cumbersome and costly bureaucratic procedures (particularly in relation to acquiring licences); and policies and regulations that generate market distortions.

Furthermore, although many Indonesian SMEs are involved in export activities, the majority still supply the domestic market. This is due to a lack of a number of crucial inputs, including technology, skilled workers, knowledge regarding the potential of global markets and the business strategies needed to access them, and the capital to finance export activities, which for most SMEs are crucial not only to obtain the appropriate export licenses, but also to pursue the necessary logistic and promotional activities in foreign markets.

Despite these constraints, there is virtually no evidence that Indonesian SMEs have been negatively affected by the international trade policy reforms that have been pursued by the New Order regime and the country's subsequent governments. The number of SMEs (including MIEs) and their contribution to the overall GDP of the country continues to grow. At the same time, however, there is no clear evidence to suggest that the efficiency effects of international trade liberalization have resulted in an increase in average plant size among Indonesian SMEs. In the longer term, however, efficiencies of scale may become more evident as a result of increasing competitive pressures.

# 1. Introduction

In Indonesia, as in many other developing countries, SMEs have a crucial role to play because of their potential contributions not only to employment creation, particularly for youth and the less educated, but also to the improvement of income distribution, poverty alleviation, rural social and economic development, and the development of entrepreneurship, especially among women in rural areas. Following the emergence of the Asian financial crisis in the late 1990s, the Indonesian government revitalized the role of SMEs by positioning these businesses as the engine for export growth of manufactured goods, either directly or indirectly through subcontracting linkages with large-scale exporting companies, including foreign companies in the country.

Recent debates among policy makers and researchers on the subject of SMEs in developing countries have focused on the ability of such businesses to survive or sustain their existence amid growing pressure from globalization and trade liberalization. Some contributors to the debate are skeptical, given the fact that most SMEs in developing countries lack the necessary resources, particularly technological advances and skills, to remain competitive in the global marketplace. There is little doubt that, in the era of trade liberalization, SMEs in developing countries, including those in Indonesia, can only survive if they possess the capacity for internationalization. Indeed, this is a critical factor to determine the competitiveness of SMEs in the global market (Long, 2003).

The impact of international trade liberalization or trade policy reforms on Indonesia's economic growth and the development of its domestic manufacturing industry have been studied extensively.[1] However, academic and policy analyses on the impacts of trade liberalization on SMEs in the country remain scant. This policy paper, therefore, attempts to fill the gap by examining the impacts of trade liberalization, particularly after the 1997-98 economic crisis period, on the growth of SMEs in Indonesia. Based on key literature on the subject and the most recent country data, this policy paper intends to address the following questions: (1) what is the current state of SME development in Indonesia? (2) how does international trade liberalization affect Indonesian SMEs? and (3) has the growth of exports by SMEs in Indonesia accelerated since the initial engagement of the country in the regional trade liberalization initiative, or the Association of Southeast Asian Nations (ASEAN) Free Trade Area (AFTA) in 1992?[2]

The paper is divided into five sections. In section 2, the discussion begins with an overview of the recent development of SMEs and the constraints they face. Section 3 deals with the export performance of Indonesian SMEs. This is followed by an analysis of the impacts of trade liberalization on the development of SMEs in the country in section 4. Finally, section 5 gives some policy recommendations for supporting the development of Indonesian SMEs in the future.

1 See, for example, Erwidodo and Prajogo (1999), Simorangkir (2006) and Oktaviani et al. (2008).

2 This was also the year (1992) in which Indonesia began to reduce or eliminate import tariffs on many goods from other member countries of ASEAN.

# 2. Does international trade liberalization matter?

## 2.1 Literature review on the impacts of trade liberalization on the development of SMEs

There is little doubt that international trade liberalization generates immense competitive challenges for most developing countries, including Indonesia (Dhar, 2008). Since the mid-1990s, many studies have estimated the impacts of trade liberalization on economic growth, employment, poverty, income distribution and the survival of local firms. Nonetheless, the real impact of trade liberalization on the global economy remains a much debated and controversial subject. Theoretically, at an aggregate level, the broad benefits that are generated from international trade reform include the following: improved resource allocation; access to new and better technologies, inputs and intermediate goods; economies of scale and scope; greater domestic competition; and the availability of favourable growth externalities, such as the transfer of know-how (Falvey & Kim, 1992). Raihan (2008) contends that international trade policy reform works by inducing substitution effects in the production and consumption of goods and services through changes in price. These factors in turn influence the level and composition of exports and imports. The change of relative price induced by international trade liberalization causes a more efficient reallocation of resources. Moreover, international trade liberalization also enables the expansion of economic opportunities by enlarging markets and enhancing knowledge spillover.

However, empirical evidence to support these propositions is far from conclusive. For instance, Anderson et al. (1997), Feridhanusetyawan et al. (2000), and Feridhanusetyawan and Pangestu (2002) conclude that among existing liberalization commitments in the Asia-Pacific region, the implementation of the two biggest commitments, namely the Uruguay Round and the Asia-Pacific Economic Cooperation, would greatly benefit Indonesia. AFTA, on the other hand, is expected to contribute little to gains in welfare for many countries in the region, especially the poorer ones. One explanation is that AFTA creates a discriminatory trading block in the ASEAN nations, where trade diversion offsets the potential for trade creation.[3] By now, however, the fear of trade diversion from AFTA is no longer relevant, since most ASEAN members have undertaken unilateral liberalization following the Asian financial crisis in 1997/98.

Pambudi and Chandra (2006) and Hutabarat et al. (2007), meanwhile, contribute to the assessment of the implementation of the ASEAN–China Free Trade Agreement (ACFTA) on the Indonesian economy. The first study highlights a number of important findings. Firstly, based on the initial implementation of the so-called Early Harvest Program (EHP),[4] imports of the commodities included in the agreement (e.g. vegetables, fruits and fish) increased much faster than the country's exports of similar products to China. Secondly, various production costs in the domestic market were expected to increase significantly. Thirdly, the study also foresaw a decline in real GDP, both short term and

3 A more recent study conducted by Oktaviani et al. (2008) on the impacts of AFTA on the ASEAN-6 countries (Indonesia, Malaysia, Philippines, Thailand, Singapore and Vietnam) shows that the Indonesian trade balance, nominal GDP and terms of trade generally experience positive impacts, although the country's real GDP does not change (at almost zero per cent). Generally, this study concludes that Indonesia experiences the smallest welfare improvement among the ASEAN-6 countries.

4 The EHP is a free-trade arrangement within the ACFTA framework that is designed to accelerate the implementation of the China–ASEAN Economic Cooperation Framework Agreement. Under this framework agreement, ASEAN member countries are allowed early access to China's huge domestic market prior to the full implementation of ACFTA. Products covered under the EHP are those from the agricultural sector, including livestock, meat, fish, dairy products, live plants, vegetables, fruits and nuts. For further details on the EHP, see, among others, Embassy of the People's Republic of China in the Republic of the Philippines (2004).

long term, primarily because Indonesia was expected to experience a trade deficit with respect to these commodities. Some provincial regions of the country were also expected to experience larger losses than others. It is important to note that the simulation in the study conducted by Pambudi and Chandra was only done partially, in that it only considered the elimination of tariffs on imported commodities from Indonesia to China. Should the simulation be done on both sides, or the elimination of agricultural imported tariffs in both countries, it is more likely that Indonesia's losses would be greater than the current settings for the simulation would suggest. Furthermore, the second study (Hutabarat et al., 2007) concludes with the following points: Firstly, ACFTA benefits Indonesia only in terms of certain commodities, such as rubber and palm oils, which would see an increase in exports. At the same time, however, Indonesia would also expect some losses in other trade commodities vis-à-vis China, especially in rice, vegetables and oilseeds. Secondly, with respect to AFTA, the study also argues that Indonesian imports from other ASEAN countries would increase, while ASEAN market diversification of Indonesian exports would decline.

Theoretically, trade liberalization affects individual local firms, positively or negatively, in four major ways (Tambunan, 2007; 2008a). The first is through an increase of foreign competition that results from the lowering of import tariffs, quotas and other non-tariff barriers (NTBs). The increased flows of foreign competition and imported goods to the domestic market are expected to push inefficient, unproductive or uncompetitive local firms to improve their competitiveness by eliminating unnecessary cost components, exploiting external economies of scale and scope, and adopting more innovative technologies and better management practices. The openness of an economy to international trade is also correlated with increasing plant size (e.g. efficiency of scale), particularly as local firms adopt more efficient technologies, management, organizational and production methods. This argument is in line with general theory that suggests that size is capable of positively affecting firms' export performance. The new international trade theory posits that market size has a positive impact on economies of scale and that economies of scale provide cost advantages in production, research and development (R&D) activities and marketing efforts.[5] Export marketing literature, on the other hand, suggests that large enterprises have greater resources to gather information on markets in foreign countries and to deal with the uncertainties that prevail in foreign markets.[6] As a general hypothesis, therefore, it is more likely for large enterprises, instead of SMEs (including MIEs), to become export-oriented firms.

The second way in which trade liberalization could affect the development of SMEs is related to the lower production costs that result from cheaper imported inputs. Local firms benefit from lower input costs, which improve their price competitiveness and enable them to compete more effectively in both import and export markets. However, the validity of this hypothesis hinges on two assumptions: (1) that other factors determining competitiveness, such as wages (labour costs) and transportation costs are constant; and (2) that many local firms are dependent on imported inputs because of the absence of domestic production of these inputs, or that trade liberalization pushes prices for inputs lower than those produced in the domestic market.

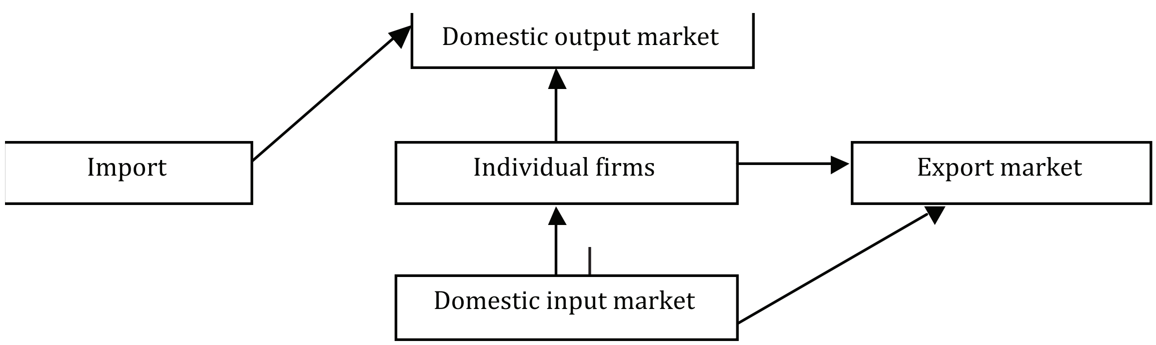
The third way in which trade liberalization could affect the development of SMEs is related to the relative increase of export opportunities. Opening an economy up to international competition not only induces increased efficiency in domestic firms, but also encourages these firms to increase their exports. This view is generally supported by econometric analyses.[7] However, this theoretical view rests on the assumption that other factors determining the ability of a firm to export, such as production capacity, labour and energy costs, and government regulations do not change so as to become unfavourable for SMEs.

5 See, for instance, Tybout (1992) and Bonaccorsi (1992).
6 See, for example, Wakelin (1997).
7 See, for example, Aggarwal (2001) and Tybout et al. (1991).

Finally, the fourth effect of trade liberalization on the development of SMEs is through the reduction of available local inputs. The elimination of export restrictions on unprocessed raw materials is likely to increase the export of goods made from them at the expense of local firms. Theoretically, therefore, if domestic inputs can be sold at better prices abroad than in the domestic market, this would encourage domestic suppliers to sell more abroad than to produce for domestic consumption.

Thus, as illustrated in Figure 1, the combination of lines (a) (i.e. imported goods) and (b) (locally made substitution goods) is the competitive effect of international trade liberalization. If goods and services produced by domestic firms are less competitive in comparison to those imported from other countries, domestic firms are likely to be pushed out of the domestic market. Meanwhile, the combination of lines (c) (imported inputs) and (d) (locally made substitution inputs) is the production cost reduction effect of international trade liberalization. As import tariffs and other NTBs are removed, resulting in cheaper imported inputs than those produced domestically, domestic production costs are likely to decline. Line (e), furthermore, is the export-opportunity effect of firms. In this context, domestic firms accrue greater export opportunities from the imposition of an open economic system. Finally, the combination of lines (d) and (f) (locally made inputs sold abroad) is the domestic input scarcity effect of international trade liberalization. The production cost-reduction effect and the domestic-inputs scarcity effect can be put together as the overall supply-side effect, whereas the combination of the competition effect and the export-opportunity effect can be referred to as the overall demand-side effect of international trade liberalization. The overall supply-side effects can be negative if the second effect is greater than the first one; alternatively, it could be positive if the opposite happens or if one effect is fully compensated for by the other effect.

**Figure 1: Four main ways in which international trade liberalization affects SMEs**




Source: Tambunan (2010)

## 2.2 Some evidence from outside Indonesia

One of the few studies on the effect of trade liberalization on SMEs in China is by Wang and Yao (2002), which shows that gradual changes in the country's trade regime towards liberalization in the late 1970s has led to much more dynamic SMEs. They have not only grown rapidly, but have also added value to the overall Chinese economy. However, another study by Steel and Webster (1991), which used firm-level data in Ghana, suggests that trade liberalization squeezes the profits of SMEs as a result of rising input costs, weak domestic demand and increased competition from foreign firms. Similarly, by using firm-level data for the period 1993–96 in Chad and Gabon, Navaretti et al. (2002) find that the trade reform process, along with the devaluation of the currencies in each country, failed to generate growth for local SMEs. On the contrary, many of these enterprises were found to have suffered from high input costs.

Meanwhile, Valodia and Velia (2004) investigated the relationship between international trade liberalization at the macro level and its micro- or firm-level adjustment effects in the South African manufacturing industry. Their findings suggest that there is a strong relationship between the average firm size and the volume of cross-border trade. More specifically, they find that more than half of the firms that are not engaged in international trade are SMEs. At the opposite extreme, almost half of the firms involved in both importing and exporting are large enterprises employing more than 200 workers. Therefore, it appears that large enterprises have been more successful than their smaller counterparts at integrating their manufacturing activities into the global chain of production (Tambunan, 2008a).

Furthermore, in Tamil Nadu, southern India, Tewari and Goebel (2002) carried out research on the competitiveness of local firms and found two interesting facts. Firstly, there is a considerable variance among SMEs with respect to their competitiveness. Secondly, SMEs that are tied to the low end of the market segments in large urban or metro areas appear to be the most vulnerable to cheap import competition from overseas, suggesting that these SMEs are likely to find trade liberalization to be burdensome. Notably, other SMEs that serve similar market niches in rural areas or in small towns do not face the same pressures as their counterparts in urban areas. Their access to intricate, socially embedded distribution networks that link them to rural markets appears to be a source of strength that non-local competitors find too costly to replicate. The experiences of Latin American countries, on the other hand, suggest that international trade liberalization has ambiguous effects on SMEs in the informal sector. A study carried out by Goldberg and Pavenik (2003), for example, argues that, while in Brazil there is not much evidence of a relationship between trade policies and the development of these enterprises, a case study done in Colombia provides indications that liberal trade policies help to expand the capacity of SMEs to compete with imported goods and services.

Overall, the empirical evidence discussed above makes clear that international trade liberalization does matter to SMEs, although there are no definitive conclusions as to whether the removal of all protective measures and the elimination of NTBs generate positive or negative effects, indirectly or directly, on the development of SMEs.

# 3. SMEs in Indonesia

## 3.1 Brief overview of the development of Indonesian SMEs

Historically, Indonesian SMEs have always been the main players in domestic economic activities, accounting for more than 90 per cent of all firms across sectors (refer to Table 1) and providing employment for over 90 per cent of the country's workforce (refer to Table 2), mostly women and youth. The majority of SMEs are MIEs, which are dominated by self-employed individuals without wage-paid workers. These tiny enterprises are scattered widely throughout rural areas and therefore are likely to play an important role in helping to develop the skills of villagers, particularly women, as entrepreneurs. However, many MIEs are established by poor households or individuals who cannot find better job opportunities elsewhere, either as their primary or secondary (supplementary) source of income. Therefore, the presence of many MIEs in both rural and urban areas in Indonesia is considered to be the result of the country's current unemployment or poverty problem and is not seen as the reflection of an entrepreneurial spirit (Tambunan, 2006; 2008b; 2009).

**Table 1: Total enterprises by size in all Indonesian economic sectors, 2000–08 ('000)**

| Size | 2000 | 2001 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|
| MIEs & small enterprises | 39,705 | 39,883.1 | 43,372.9 | 44,684.4 | 47,006.9 | 48,822.9 | 47,720.3 | 52,327.9 |
| Medium-sized enterprises | 78.8 | 80.97 | 87.4 | 93.04 | 95.9 | 106.7 | 120.3 | 39.7 |
| Large enterprises | 5.7 | 5.9 | 6.5 | 6.7 | 6.8 | 7.2 | 4.5 | 4.4 |
| Total | 39,789.5 | 39,969.97 | 43,466.8 | 44,784.14 | 47,109.6 | 48,936.8 | 49,845.1 | 52,372 |

Sources: Ministry of Cooperative, Small and Medium Enterprises (n.d.); Central Bureau for Statistics (n.d.)

**Table 2: The structure of Indonesian enterprises by size and sector, 2008 (no. of workers)**

| | MIEs | Small enterprises | Medium-sized enterprises | Large enterprises | Total |
|---|---|---|---|---|---|
| Agriculture | 41,749,303 | 66,780 | 643,981 | 229,571 | 42,689,635 |
| Mining | 591,120 | 28,762 | 21,581 | 78,847 | 720,310 |
| Manufacture | 7,853,435 | 1,145,066 | 1,464,915 | 1,898,674 | 12,362,090 |
| Electricity, gas % water supply | 51,583 | 19,917 | 31,036 | 54,233 | 156,769 |
| Construction | 576,783 | 137,555 | 51,757 | 31,016 | 797,111 |
| Trade, hotels & restaurants | 22,168,835 | 1,672,351, | 472,876 | 179,895 | 24,493,957 |
| Transport & communication | 3,496,493 | 145,336 | 111,854 | 98,191 | 3,851,874 |
| Finance, rent & services | 2,063,747 | 313,921 | 279,877 | 156,064 | 2,813,609 |
| Services | 5,096,412 | 462,683 | 178,311 | 49,723 | 5,787,129 |
| Total | 83,647,711 | 3,992,371 | 3,256,188 | 2,776,214 | 93,672,484 |

Sources: Ministry of Cooperative, Small and Medium Enterprises (n.d.); Central Bureau for Statistics (n.d.)

The majority of SMEs in Indonesia are involved in the agricultural sector. As can be seen in Table 2, among approximately 42.7 million labourers employed by the agricultural sector in 2008, 99.5 per cent worked for SMEs. The second most important sector for SMEs is trade, hotels and restaurants. In the manufacturing sector, these enterprises, especially MIEs and small enterprises, generally engage in simple traditional economic activities, including furniture making, textiles, garments, footwear, and food and beverages. Only a small number of SMEs are involved in the production of machinery, production tools and automotive components. In the automotive industry, most SMEs operate through a subcontracting system that involves several multinational car companies in Indonesia, mainly from Japan, such as Toyota and Honda.[8]

SMEs accounted for around 58 per cent of GDP in the 2006–08 period. However, their higher GDP

8 This structure of SMEs by sector is not, however, unique to Indonesia: it is also a key feature of SME categorization in many developing countries, particularly in those where the level of industrialization remains relatively low.

contribution compared to larger enterprises is not due to higher productivity, but because they are more numerous. In fact, SMEs in developing countries such as Indonesia are often characterized by low productivity, which is mainly caused by their lack of capital, access to technology, and human capital (Tambunan, 2009).

**Table 3: GDP share of Indonesian SMEs and large enterprises by sector, 2006–08**

| Sector | Size | GDP share at constant 2000 prices (%) | | |
|---|---|---|---|---|
| | | 2006 | 2007 | 2008 |
| Agriculture | SMEs | 13.60 | 13.26 | 13.65 |
| | Large enterprises | 0.60 | 0.57 | 0.58 |
| Mining | SMEs | 1.02 | 1.04 | 1.09 |
| | Large enterprises | 8.07 | 7.69 | 7.54 |
| Manufacturing | SMEs | 6.99 | 6.81 | 8.62 |
| | Large enterprises | 20.84 | 20.59 | 19.30 |
| Electricity, gas & water supplies | SMEs | 0.06 | 0.06 | 0.06 |
| | Large enterprises | 0.60 | 0.63 | 0.69 |
| Construction | SMEs | 4.04 | 4.15 | 2.48 |
| | Large enterprises | 2.04 | 2.06 | 4.07 |
| Trade, hotels & restaurants | SMEs | 16.27 | 16.60 | 17.44 |
| | Large enterprises | 0.65 | 0.66 | 0.74 |
| Transport & communication | SMEs | 3.32 | 3.29 | 3.43 |
| | Large enterprises | 3.45 | 3.99 | 4.89 |
| Finance, rent & services | SMEs | 5.89 | 5.96 | 6.33 |
| | Large enterprises | 3.32 | 3.39 | 3.62 |
| Other services | SMEs | 4.86 | 4.92 | 5.23 |
| | Large enterprises | 3.3 | 4.33 | 0.24 |
| GDP | SMEs | 56.06 | 56.09 | 58.33 |
| | Large enterprises | 43.94 | 43.91 | 41.67 |
| GDP (non-oil and gas) | | 100 | 100 | 100 |

Sources: Ministry of Cooperative, Small and Medium Enterprises (n.d.); Central Bureau for Statistics (n.d.)

## 3.2 Main constraints faced by Indonesian SMEs

As in other developing countries, Indonesian SMEs, particularly MIEs and small enterprises, are often hampered by institutional constraints. Although these constraints may differ across sectors and regions, there are a number of common problems, including the lack of capital, human resources, technology and information; difficulties in procuring raw materials; weak marketing and distribution capacity; high transportation costs; cumbersome and costly bureaucratic procedures (particularly in obtaining licenses to operate); and policies and regulations that generate market distortions. All these are often referred to as external constraints to the growth of SMEs.

Table 4 highlights some of the main constraints faced by MIEs and small enterprises in the Indonesian manufacturing industry based on a survey. Surprisingly, not all surveyed producers consider lack of capital as their most serious business constraint. Those facing capital constraints are primarily MIEs located in rural or backward areas where access to financial credit from banks or various existing government-sponsored SME credit schemes is either minimal or absent. Consequently, these MIEs depend fully on their savings, funding from relatives and credit from informal lenders to finance their daily business operations.

**Table 4: Number of small enterprises and MIEs in the Indonesian manufacturing industry by main obstacles faced, 2005**

| | Small enterprises | MIEs | Total |
|---|---|---|---|
| Have no serious obstacles | 46,485 | 627,650 | 674,135 |
| Have serious obstacles: | 192,097 | 1,862,468 | 2,054,565 |
| Lack or high prices of raw materials | 20,362 | 400,915 | 421,277 |
| Marketing difficulties | 77,175 | 552,231 | 629,406 |
| Lack of capital | 71,001 | 643,628 | 714,629 |
| Transportation/distribution obstacles | 5,027 | 49,918 | 54,945 |
| High price or short supply of energy | 4,605 | 50,815 | 55,420 |
| High labour cost | 2,335 | 14,315 | 16,650 |
| Other key constraints | 11,592 | 150,646 | 162,238 |
| Total enterprises surveyed | 238,582 | 2,490,118 | 2,728,700 |

Source: Tambunan (2008a)

Another key constraint faced by Indonesian SMEs is cumbersome business regulations and restrictions. The policy-generated barriers to domestic competition and trade are particularly harmful to business growth. Policy-generated barriers generally include barriers to inter-provincial and inter-islands trade, as well as the proliferation of several state and private monopolies that have existed since the initiation of the so-called New Order era under the Suharto regime (1966–98).[9] As a result of these, SMEs are often confronted with extremely limited access to certain economic activities that are exclusively granted to large enterprises forming cartels and monopolies. It was only after the 1997–98 Asian financial crisis that Indonesia, with the assistance of the International Monetary Fund (IMF), was able to commence large-scale economic reforms that affected nearly all aspects of the daily operations of all the enterprises in the country.

## 3.3 Export performance of Indonesian SMEs

Although many SMEs in Indonesia are involved in export activities, the economic focus of the majority of the country's SMEs is the domestic market. There are several reasons for this, including (1) the lack of technology; (2) the lack of skilled workers; (3) minimal knowledge about market potential (including existing market demand) and global business strategies; and (4) minimum access to capital to finance their export activities, which for most SMEs, particularly MIEs and small enterprises, is not only critical in dealing with export licenses, but also important for supporting their logistic and promotional activities.[10]

9 Following the country's independence from Holland in 1945, Indonesia was led by its first president, Sukarno, until 1966. The Sukarno era is popularly known as the Old Order era. Under Sukarno, Indonesia adopted nationalist economic policies, including in the area of trade and investment, which led to the nationalization of many foreign-owned enterprises, particularly those of the Dutch. Following Sukarno's removal in 1966, President Suharto shifted the country's foreign economic policy to one that pushed for a more liberal economic environment. The new policy stance of the Suharto regime was known as the New Order.

10 The first two reasons limit the ability of Indonesia's SMEs to produce highly competitive products that meet global standards.

**Table 5: Share of SMEs' contribution to total exports in selected Asian developing countries, 1990–2006**

| Country | Average SME share of exports (%) |
|---|---|
| China | 60 |
| Taiwan | 56 |
| India | 40 |
| Thailand | 40 |
| Pakistan | 25 |
| Vietnam | 20 |
| Indonesia | 17 |
| Singapore | 16 |
| Malaysia | 15 |

Source: Tambunan (2009)

Based on various official sources, Tambunan (2009) gathered information concerning SMEs' contribution to total exports in some other Asian developing countries to compare them with Indonesia. As shown in Table 5, SMEs in China contributed on average 60 per cent to the country's total merchandise exports in the period 1990–2006, while those in Taiwan contributed about 56 per cent. In South Asia, meanwhile, the export share of Indian SMEs for the same period was close to 40 per cent. In a number of manufacturing sectors, such as sport goods and garments, the contribution of such enterprises to the country's overall exports was as high as 90–100 per cent. For the past three decades, furthermore, the fastest growing export industries in Pakistan have been dominated by SMEs. Important export contributions from the Pakistani SMEs emanate from subsectors such as weaving and other textiles and surgical equipment. In total, these subsectors generate up to 25 per cent of manufacturing export earnings, or about US$2.5 billion in 2005.

**Table 6: Exports of Indonesian SMEs, 2006–08 (US$ million)**

| Year | Non-oil and gas exports | | | | |
|---|---|---|---|---|---|
| | MIEs | Small enterprises | Medium-sized enterprises | Large enterprises | Total |
| 2006 | 1,347.7 | 2,936.5 | 7,910.8 | 65,623.2 | 77,818.2 |
| 2007 | 1,502.5 | 3,466.2 | 9,332.6 | 75,000.0 | 89,301.3 |
| 2008 | 2,024.7 | 4,414.8 | 11,936.4 | 91,509.1 | 109,885.0 |

Sources: Ministry of Cooperative, Small and Medium Enterprises (n.d.); Central Bureau for Statistics (n.d.)

Nevertheless, based on the database of the Ministry of Cooperative, Small and Medium Enterprises of the Republic of Indonesia, the total value of Indonesian SMEs' exports continued to grow over the last decade or so. In 2000, for instance, total exports by SMEs amounted to almost US$7,544.9 million, and increased by more than 50 per cent to almost US$12,195.1 million in 2006 and US$17,375.9 million in 2008. Yet the contribution of SMEs to total exports remains smaller than their larger counterparts. In 1990, for example, SMEs' contribution to total exports (excluding oil and gas) was around 11.1 per cent, and increased to approximately 20 per cent in 2008. This figure is much lower than the increase of 80 per cent experienced by large enterprises.

**Table 7: Top ten manufactured exports of Indonesian SMEs, 2009–10**

| Ranking | Product | 2009 | | January–June 2010 | |
|---|---|---|---|---|---|
| | | Vol. (million kg) | Value (US$ million) | Vol. (million kg) | Value (US$ million) |
| 1 | Manufactured palm/palm oil | 20,737.9 | 12,924.9 | 8,068.0 | 6,124.2 |
| 2 | Textiles | 1,757.4 | 9,245.1 | 963.0 | 5,295.7 |
| 3 | Iron, steel, machinery & automotive | 2,829.3 | 8,701.1 | 1,504.7 | 5,242.4 |
| 4 | Rubber-based products | 2,506.8 | 5,020.2 | 1,404.2 | 4,415.3 |
| 5 | Electronics | 339.8 | 7,899.6 | 179.6 | 4,320.9 |
| 6 | Manufactured copper, tin, etc. | 508.1 | 5,241.5 | 262.7 | 3,002.8 |
| 7 | Pulp & paper | 6,530.9 | 4,272.4 | 3,318.2 | 2,718.4 |
| 8 | Wood products | 3,184.2 | 3,441 | 2,250.0 | 2,262.7 |
| 9 | Basic metals | 4,003.7 | 3,168.3 | 2,305.7 | 2,245.7 |
| 10 | Food & beverages | 1,612.8 | 2,569.3 | 789.8 | 1,463.0 |

Source: Ministry of Industry (n.d.)

**Table 8: Development of Indonesian SMEs' exports of textiles and textile products, 2000–06**

| Year | Volume (billion kg) | Value (US$billion) |
|---|---|---|
| 2000 | 1.8 | 8.4 |
| 2001 | 1.7 | 7.7 |
| 2002 | 1.8 | 6.9 |
| 2003 | 1.6 | 7.1 |
| 2004 | 1.6 | 7.7 |
| 2005 | 1.8 | 8.6 |
| 2006 | 1.9 | 9.4 |

Source: Miranti (2007)

Within the SME category, medium-sized enterprises are much stronger than MIEs and small enterprises in terms of exports. In 1990, for instance, the share of medium-sized enterprises of total exports was recorded at 8.9 per cent, compared to 2.2 per cent for MIEs and small enterprises together. In 2008 the comparison was 10.86 per cent for medium-sized enterprises and 5.9 per cent for MIEs and small enterprises combined (refer to Table 6). In the manufacturing industry, meanwhile, Indonesian SMEs export a variety of products, and their top ten exported goods are presented in Table 7. Based on its value in 2010, manufactured palm oil was first among these ten goods, which was exported primarily to euro-zone countries, Japan and the United States. Second were textiles and textile products. The most important foreign markets for Indonesian textiles and textile products are the United States and some countries in the euro zone. As illustrated in Table 8, Indonesia's export volumes of textiles and textile products in 2006 reached nearly 1.9 billion kg, with a total value of US$9.4 billion.

One important characteristic of SMEs in developing countries is that they tend to produce similar products that form a cluster. Clusters of SMEs are common in Indonesia, particularly in the manufacturing sector. This clustering tends to emerge in small town and villages, or in confined parts of large cities. Most clusters of SMEs are based on the traditional activities of local communities that produce specific products (Tambunan, 2005), while the majority of small enterprises and MIEs are more likely to cluster geographically around certain manufacturing subsectors. Based on the most recent data from the Ministry of Cooperative, Small and Medium Enterprises, in 2005 alone a total of 450 SME clusters were assisted by the government, some of which were export-oriented. Furthermore, data shown in Table 9 indicates that Java had the largest proportion of SME clusters in 2005, as well as export-oriented SME clusters. This simply suggests that SMEs in the island are more export-oriented than in other parts of the country.

**Table 9: Exporting clusters in Indonesia by province, 2005**

| Provinces | Total clusters | Exporting clusters* | | |
|---|---|---|---|---|
| | | No. of clusters | Total firms | Total workers |
| Nanggroe, Aceh Darussalam | 9 | 2 | 68 | 205 |
| North Sumatra | 16 | 5 | 211 | 724 |
| West Sumatra | 6 | n.a. | n.a. | n.a. |
| Riau | 11 | 3 | 166 | 367 |
| Jambi | 14 | 4 | 182 | 580 |
| South Sumatra | 17 | n.a. | n.a. | n.a. |
| Bengkulu | 6 | 1 | 36 | 109 |
| Lampung | 16 | 4 | 206 | 530 |
| Jakarta | 6 | 2 | 210 | 295 |
| West Java | 35 | 11 | 593 | 2,292 |
| Central Java | 59 | 20 | 1,558 | 7,803 |
| Yogyakarta | 18 | 8 | 600 | 1,676 |
| East Java | 71 | 10 | 499 | 1,976 |
| Banten | 9 | 1 | 55 | 388 |
| Bali | 17 | 7 | 515 | 1,484 |
| West Nusa Tenggara | 15 | 6 | 509 | 4,635 |
| East Nusa Tenggara | 6 | 3 | 99 | 412 |
| West Kalimantan | 10 | 1 | 30 | 91 |
| Central Kalimantan | 11 | n.a. | n.a. | n.a. |
| South Kalimantan | 17 | 1 | 50 | 150 |
| East Kalimantan | 17 | 2 | 73 | 250 |
| North Sulawesi | 3 | n.a. | n.a. | n.a. |
| Central Sulawesi | 11 | n.a. | n.a. | n.a. |
| South Sulawesi | 26 | n.a. | n.a. | n.a. |
| Southeast Sulawesi | 6 | 2 | 80 | 205 |
| Gorontalo | 5 | n.a. | n.a. | n.a. |
| West Sulawesi | 4 | 1 | 69 | 90 |
| Maluku | 4 | n.a. | n.a. | n.a. |
| North Maluku | 1 | n.a. | n.a. | n.a. |
| West Papua | 1 | n.a. | n.a. | n.a. |
| Papua | 3 | 1 | 30 | 90 |

* These also serve local/national markets.

Source: Ministry of Cooperative, Small and Medium Enterprises (n.d.)

Among the largest export-oriented SME clusters in Indonesia is the furniture cluster in the district of Jepara, in the province of Central Java. Sandee et al. (2000) provide an interesting story about the successful development of this cluster. The district of Jepara has the largest furniture industry not only in Central Java, but also in the country. In the mid-1990s, this specific cluster employed over 40,000 permanent workers in more than 2,000 SMEs and 100 large enterprises scattered across 80 villages. From the mid-1980s, the cluster received a major boost from the emergence of a furniture export industry, with the top ten firms controlling up to 50 per cent of exports, which suggests the domestic orientation of this subsector. At the time, Jepara's exports were aimed at the low-income segment of the markets in the countries they were targeting, with key competition coming from China, Vietnam and Cambodia. The strong export performance allowed the cluster to weather the drop in domestic demand as a result of the 1997–98 Asian financial crisis. The furniture export industry also benefited from the improvement of the harbour in the capital of Central Java, Semarang, which facilitated door-to-door container transports; improved credit facilities; and saw greater participation of foreign buyers, traders, wholesalers and producers in the industry. In addition, the visits of foreign tourists to Jepara also played an important role in boosting the export capacity of this cluster. Foreign tourists, who have contributed as much as 25 per cent of the total furniture exports of Jepara, became a major intermediary between Indonesian firms and international customers, and played an important role in the expansion of order-driven production tailored to quickly changing customer preferences.

One important feature of Indonesian export-oriented SMEs is that the majority do not pursue exports directly, but instead go through intermediaries, such as traders, exporting companies, trading houses or subcontracting arrangements where SMEs manufacture semi-final products that are then completed by larger enterprises (e.g. the processing of raw materials into ready-made foods in the food industry that would take place in SMEs, and would later be packaged by large enterprises). It is also suggested by a report produced by the Asian Development Bank (ADB, 2002) that the relatively low representation of Indonesian SMEs in exports compared to their larger counterparts is mainly due to the fact that a significant part of SMEs' exports simply go unrecorded, because they occur indirectly through international trade networks or subcontracting arrangements with intermediaries, as mentioned earlier. These intermediary agencies usually collect products from or give orders to SMEs, and thus play an important role in deciding designs, prices, technologies and the timing of production. Such SMEs are involved in so-called buyer-driven commodity chains.

Intermediaries link SMEs to international markets and provide a range of bundled services to the latter that include the pre-financing of production, market access, technology and skills upgrading, advice on designs, advice on patent rights, and so on. In these networks, SMEs and their workers receive compensation mainly for their skills and hours worked. The enterprises have very limited involvement in activities outside direct production, while much input provision, marketing output and involvement in upgrading their enterprises are limited, since most of the decisions on their development are taken by buyers. In the case of food exports, for instance, smallholders and fishermen who grow food crops or collect seafood and fish depend on the processing and exporting capacity of larger firms. This explains in part why Indonesian data indicates that the export share of SMEs is relatively low.

# 4. Evidence from Indonesia of the impacts of international trade on SMEs

Despite many existing studies on Indonesian regional and internatonal trade, as well as on Indonesian SMEs, there has been a limited focus on the impacts of international trade on SMEs in the country. One of the first attempts to examine the issue was a study conducted by Berry and Levy (1994). Although this study was not targeted specifically at examining the impact of trade liberalization on the export performance of Indonesian SMEs, the authors carried out extensive field interviews with numerous public and not-for-profit agencies dealing with SME-related issues in 1992. Their field interviews were targeted at three subsectors of the manufacturing industry, which involved garments in Jakarta and Bandung (West Java), rattan furniture in Jakarta and Surabaya (East Java), and carved wooden furniture in Jepara (Central Java). A set of interviews carried out with rattan products exporters revealed that all but one of the firms sampled exported 90 per cent or more of their output, while the majority of these enterprises began their exporting activities in the same year that they started production. Most of them started to export or increased their export share of their total production, since the Indonesian government imposed bans on the export of unprocessed and semi-processed rattan in 1986 and 1988–89, respectively. It appeared, therefore, that these bans were the driving force for the increase in rattan furniture exports among Indonesian SMEs.[11] This study (Berry & Levey, 1994) seems to suggest that the overall supply-side effect (e.g. the domestic input scarcity effect) is the most important determining factor rather than the overall demand-side effects for the export activities of their sampled exporters.

Many other cases of the domestic inputs scarcity effect of international trade liberalization demonstrate how the removal of restrictions on the export of raw materials has created difficulties for local SMEs. For example, several times during the 1980s and 1990s, many SMEs in the three largest metal-working industry clusters in the country (Tegal and Ceper in Central Java and Pasuruan in East Java) had to close their businesses due to a lack of raw materials. The materials needed to support the metal industries in these three cities were exported mainly to China, leading to the scarcity of these materials for SMEs in the local market (Tambunan, 2007; 2008a). Another case in point was the recent scarcity of materials for producing water pumps, which created difficulties for subcontractors working for the leading electronics company in Indonesia, P.T. Panasonic Manufacturing Indonesia.[12]

Shortly after the 1997–98 Asian financial crisis, Dierman at al. (1998) attempted to assess the impact of international trade and investment policy reforms as a result of the IMF-sponsored economic reforms under the Letter of Intent on SMEs in the Indonesian manufacturing industry. Focusing on several groups of industries, such as textile and garments, their study shows that the likely impact of trade and investment liberalization varies by subsectors or groups within an industry. SMEs that were placed under government protectionist measures during the pre-crisis period were expected to be more adversely affected than those in the less protected ones. The explanation for this is that, theoretically, both SMEs and large enterprises in protected industries, such as the automotive industry, electronic consumer goods, food, and textile and garments during the Suharto era, were not at all competitive. Apart from protection from imported goods, these industries also received many forms of incentives from the government. In contrast, enterprises in the less protected industries were better able to deal with competition pressures from imported goods (Tambunan, 2007). This case may suggest that the

11 Indonesia has been one of the major suppliers of raw rattan to major rattan furniture-exporting countries, such as Taiwan and the Philippines. The Indonesian government imposed these restrictions in an effort to "jump-start" the country's rattan product industry.

12 Interview with Daniel Suhardiman, group manager of P.T. Panasonic Manufacturing Indonesia, 2005.

overall demand-side effect is more obvious than the overall supply-side effect.

However, the above-mentioned assessment has some serious limitations. The most important one is the fact that the analysis was based on secondary data and a survey of literature on SME development in various groups of industries during the crisis period. The research omitted the importance of field surveys or in-depth interviews with relevant stakeholders in the industries under study. Therefore, the increased production costs due to higher prices of imported inputs caused by the huge depreciation of the rupiah against the US dollar, instead of the reduction or removal of tariffs and other NTBs, is the likely reason why SMEs went bankrupt during this period (Tambunan, 2007).

Other studies on SMEs in Indonesia, however, concluded that most SME development programs (e.g. subsidized credit, various training programs, external trade promotions and subcontracting schemes) were not very successful in their implementation. These studies argue instead that friendly macroeconomic policies, including friendly trade policies (e.g. those that provide more opportunities to export and easier access to imported raw materials and other necessary inputs), were the key contributor to SME growth during the post-1997–98 Asian financial crisis period. For example, in their analysis, Hine and Kelly (1997) state that many factors, including the level of trade protection (e.g. tariffs and NTBs); exchange rate policies, red-tape and other unnecessary administration procedures; and multilateral, regional and bilateral trade agreements indirectly or directly affect the ability of SMEs to access global markets, or, at least, to keep their domestic market share. Similarly, Sandee et al. (2002) argue that the macroeconomic environment, which was shaped by international trade policies, was an important determinant of the sustainability of SME activities. Furthermore, Dierman (2004), based on his analysis of the effects of macro- and micro-policy environments on rural industries in Indonesia, contends that a significant number of macro policies, such as trade (protectionist) policies, placed additional costs and other burdens on rural industries. He adds that macroeconomic policies that helped to create a favourable economic environment, including those introduced in trade-related areas, and were not biased against the SMEs, provided the best stimulus for SME growth.

The studies cited above were generally in agreement that, in the absence of policies that discriminate against SMEs, a free-trade regime will likely generate more benefits than burdens for these enterprises in the long-term. Moreover, relying on protectionist policies that restricted certain activities of domestic SMEs actually helped contribute to the abuse of local market power and, by insulating firms from competition, made them less able to penetrate foreign markets or develop improvements in technology, productivity and efficiency (Thee, 2000).

Other interesting studies that examined the relationship between international trade liberalization and the development of SMEs in Indonesia were carried out by Sulandjari and Rupidara (2002) and Loebis and Schmitz (2005). Both studies investigated the wood furniture industry cluster in Jepara, Central Java. Their main research question was whether SMEs and their workers were able to gain from producing for the global market, and whether such gains were sustainable. Both studies found that the cluster made significant gains by participating in export-oriented activities. Some of the recorded gains from these studies included growth in the number of enterprises and the number of available jobs, as well as a relative increase in workers' earnings. Again, this is additional evidence illustrating the positive side of the effects of international trade policy reforms on SMEs.

However, when touching upon the issue of the sustainability of the gains, both studies found that the industry's prospects for further growth were questionable. On the input side, the industry is likely to suffer from the increasing scarcity and rising costs of raw materials. On the output side, meanwhile, the industry can be expected to suffer from the intensification of competition from China, Vietnam and other countries. Overall, both studies conclude that SMEs' gains from trade liberalization are not sustainable for a number of reasons, one of the most important being the viability of exports that were dependent on wood, which was not only freely exported, but was also under stress from illegal logging. Nevertheless, both studies also argue that stopping the process of liberalization would be counterproductive for SMEs in the industry, particularly because the intensification of price competition in the international market would likely push these enterprises to use cheaper, illegal wood. However, generalizing these findings to other clusters might not be wise, since different clusters may encounter different sets of problems.

In sum, there is no strong indication that SMEs in Indonesia have been negatively affected by the international trade policy reforms introduced by the Indonesian government since the beginning of the New Order era. As Table 1 has shown, the number of SMEs (including MIEs) continues to grow every year. Also, Table 3 indicates that not only is the GDP share of SMEs higher than that of large enterprises, it also tends to increase. So there seems to be a positive correlation between the growth of SMEs and trade liberalization (reflected by the growth in SMEs' contribution to total external trade as a percentage of GDP). At the same time, however, there is also no clear evidence to suggest that the efficiency effects of international trade liberalization have resulted in an increase in average plant size among Indonesian SMEs. Therefore, the Indonesian case study appears to be consistent with the findings of Tybout (2000), who argues that international trade liberalization may work against the efficiencies of scale of SMEs, at least in the short run. In the long run, efficiencies of scale may become more important due to the increasing competitive pressures.

# 5. Conclusion: key findings and policy recommendations

In Indonesia, SMEs account for more than 90 per cent of all firms and provide employment for over 90 per cent of the country's workforce, mostly women and youth. The owners of the majority of these enterprises are self-employed, with the main concentration being in the agricultural sector. SMEs that operate in the manufacturing industry, such as those in the food, beverages and wood products subsectors, generally still use relatively low-level technologies. While growing in number, most of Indonesia's SMEs, particularly MIEs and small enterprises, are still confronted with the problems of limited access to raw materials (primarily due to the limited availability or high prices of such raw materials), a lack of marketing expertise, and the limited amount of capital available to grow their business operations. Another key important finding of this study is that, in general, Indonesian SMEs are not yet strong in exporting activities, particularly given the lack of four crucial inputs: (1) technology, (2) skilled workers, (3) knowledge regarding market potential and global business strategies, and (4) capital to finance their export activities. Among exporting SMEs, the majority of these enterprises do not directly export their products; rather, they reach foreign markets via intermediaries, such as traders, exporting companies or trading houses, or through subcontracting arrangements with large enterprises. Overall, there is virtually no evidence to suggest that SMEs in Indonesia have been negatively affected by trade liberalization resulting from the gradual introduction of trade policy reforms throughout the contemporary economic history of the country.

Based on these key findings, below are some policy recommendations to encourage the growth of Indonesian SMEs in a context of increasing trade liberalization:

1. SMEs should improve their human resources and technological capability to increase their innovation capacity and, hence, their competitiveness. In this respect, local universities, and training and R&D institutes should be more proactive in supporting such enterprises, especially in the following areas: innovations in products and production processes; technical assistance and training on marketing; and the promotion of networks, new technologies, new materials, co-labeling/standarization, safe working conditions, and an understanding of current international trade regulations and policies. Moreover, provincial governments should also provide support to facilitate cooperation between SMEs and universities in each of their respective regions. Such support can be provided in various forms, including tax incentives, soft loans, R&D grants, and bonuses or vouchers for researchers.

2. Horizontal coordination among government agencies and vertical coordination between the central and local governments in assisting SMEs, which traditionally have been weak, should be strengthened. The Ministry of Cooperative, Small and Medium Enterprises in particular should play a more active role as the national coordinating agency for all SME development programs in the country. This is important in order to prevent overlapping programs/activities organized by different agencies of the kind that often occur in the country.

3. The government should continue to promote subcontracting production linkages between SMEs and large enterprises, including foreign companies, through both regulations and incentives (such as tax incentives) for foreign companies to encourage them to use components, spare parts or semi-final goods made by local SMEs. For this purpose, however, the Indonesian government should first support the capacity building of local SMEs so as to enable them to be efficient and globally competitive local suppliers or subcontractors.

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