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# SME Internationalization and Measurement

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Advances in telecommunication and transportation and lower trade barriers have decreased cross-border trade cost and risk for small and medium-sized enterprises (SMEs) and enabled them to pursue international strategies. Generally internationalization refers to the process of increasing involvement in international markets[1].

Internationalization benefits SMEs in many ways. First, it helps SMEs to disperse business risk across different markets. Second, it generates more revenue to invest in technology and production, which are key to SMEs' growth. Third, by cooperating with foreign enterprises, SMEs can gain access to more advanced technology and improve innovative capacity. And fourth, internationalization allows SMEs access to foreign markets, which assists to improve operational efficiency and tap production potential [2]. Internationally active SMEs are also found to grow faster than SMEs that focus only on their domestic market, especially right after entering the foreign market[3].

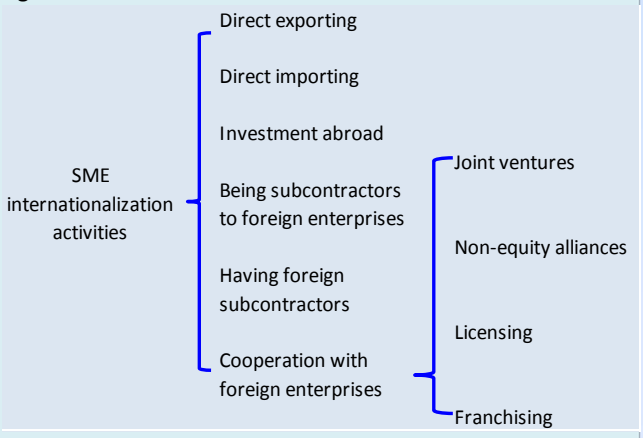
There are concerns however, that international markets are more complex and competitive and SMEs may not have sufficient resources and expertise to deal with international business risks. As noted by the OECD, policymakers can play an essential role in creating a conducive environment for SMEs to minimize such risks. The most significant challenges faced by SMEs in external markets are the compatibility of standards, protection of intellectual property rights, political risk of foreign economies, corruption and graft, as well as transparency of the rule of law[4], all of which can be addressed by governments through properly designed policy packages.

To formulate the appropriate policies for SME internationalization, policymakers will require information about SMEs in their domestic economy. This policy brief looks at the different forms and process of SME internationalization, and discusses a few methods of measuring the degree of internationalization. It then examines the current state of SME internationalization in APEC, and suggests possible ways to measure SME internationalization.

## Forms of internationalization

There is a broad variety in the internationalization activities of SME. They can be classified into six categories, namely: 1) direct exporting; 2) direct importing; 3) investment abroad; 4) being subcontractors to foreign enterprises; 5) having foreign subcontractors; and 6) cooperation with foreign enterprises under joint ventures, non-equity alliances, licensing, and franchising (Figure 1).

**Figure 1 SME Internationalization Activities**




Source: Author based on literature.

### *Direct Exporting and Importing*

Direct exporting and importing of goods and services are the best known forms for SMEs to

[1] L. Welch and R. Luostarinen, 1988.
[2] APEC Policy Support Unit, 2010.
[3] J. Onkelinx and L. Sleuwaegen, 2008.
[4] OECD, 2004.

access international markets, and often SMEs begin their international activities by importing of goods and/or services[5]. Export and import of goods are easy to comprehend - they are goods moving through the borders involving a change of ownership. This includes movements through customs warehouses and free zones.

Export and import of services are more complex. They are defined by the territorial presence of the supplier and the consumer at the time of the transaction. There are four modes of export and import of services[6]:

- Cross border supply: services are produced in one territory and supplied to clients in another territory;
- Consumption abroad: consumers of one territory go to another territory to purchase services;
- Commercial presence: a service supplier from one territory sets up a commercial presence in another territory to provide services; and
- Presence of natural persons: natural persons from one territory go to another territory to provide services.

A study on European SMEs has shown that importing is more common than exporting, and that importing often triggers exporting by SMEs[7].

***Investment Abroad***

Investment abroad covers both foreign direct investment (FDI) and foreign portfolio investment (FPI). FDI reflects the investment of an enterprise from one economy to an enterprise in another economy in a long-term relationship. It involves direct acquistition of a foreign firm, construction of a facility, and setting up of proper fixtures, machinery and equipments. FDI usually requires direct or indirect ownership of 10% or more voting power in the foreign enterprise and a significant degree of influence on its management. If the investing enterprise controls 100% ownership of the invested firm, such FDI could be called a wholly owned subsidiary.

FPI involves purchasing a share or a security of a foreign enterprise, which amounts to less than 10% equity of the invested enterprise, and hence no ensued voting power[8]. Compared with FDI, FPI offers greater liquidity should the SME investor choose to liquidate its investment or not to engage in the control and management of the invested enterprise. However, FPI requires the investor to have specialized knowledge in order to monitor the foreign financial markets and the performance of the portfolios abroad, which SMEs may find challenging and costly. Therefore, although FPI offers more flexibility than FDI, FPI is not very common in the internationalization activities of SMEs.

***Being Subcontractors to Foreign Enterprises***

As production networks and value chains expand, businesses become increasingly global, and more and more SMEs are drawn into these systems as subcontractors to multinational enterprises. Subconstracting refers to the sourcing of different parts of a product or process from different companies. A subcontractor provides commissioned work, such as specific parts and components, processes and services, or in some cases finished products[9].

Being either higher- or lower-tier subcontractors[10], SMEs experience greater specialization in production networks or global value chains. This opens up opportunities for SMEs to achieve economies of scale and scope[11]. For example, in Indonesia, Remula Inti Rekayasa has been providing stanless steel tanks to Coca Cola and other multinational companies to store liquids[12].

***Having Foreign Subcontractors***

Instead of being subcontractors, SMEs could have foreign subcontractors which is another means of internationalization. This usually starts with the appointment of foreign sales representatitves and distribution agents. Although the number of SMEs with foreign subcontractors is significant[13], this

[5] European Commission, 2010.
[6] WTO, online.
[7] European Commission, 2003.
[8] UNCTAD, 2009.
[9] F. Kimura, 2001.
[10] In a production network or value chain, large firms provide semi-final products as first-tier or higher-tier suppliers, and SMEs which support large firms are lower-tier suppliers.
[11] OECD, 2004.
[12] APEC, 2013.
[13] Seven percent of surveyed European SMEs have foreign subcontractors (European Commission, 2010).

form of internationalization is a recent phenomenon and has not been widely documented and studied.

***Cooperation with Foreign Enterprises***

Besides the above activities, SMEs also engage in cooperation with foreign enterprises to internationalize. According to studies conducted on European SMEs, international cooperation contributes significantly to SMEs' competitiveness[14].

*1) Joint Ventures*

A joint venture is an entity set up by two or more independent firms, who share the control over the joint venture and are jointly accountable for the costs and profits. In the context of SME internationalization, at least one independent firm is a local SME and the other is a foreign firm. Contrary to FDI where the investor could have total managerial control, the control of a joint venture is distributed among investing firms. In certain cases, joint venture is the only way for SMEs to gain access to foreign markets.

*2) Non-equity Alliance*

Non-equity alliance is also called strategic alliance. It is characterized as a formal agreement between two or more independent firms for a common strategic goal[15]. A non-equity alliance does not involve equity arrangement, hence it has no impact on control or management. Partners provide strategic resources to each other, such as products, distribution channels, manufacturing service, capital, know-how and intellectual assets. Non-equity alliance with foreign enterprises helps to lower the business risk for SMEs to enter into a new market.

*3) Licensing*

Licensing refers to a local SME giving a foreign enterprise access to its intangible property for a certain time period in return for a royalty fee from the receiver[16]. Licensing is usually short-term oriented, and is more prevalent in the pharmaceutical sector.

*4) Franchising*

Franchising refers to a local SME acquiring the right from a foreign enterprise to conduct a particular business activity based on a royalty payment. The local SME would provide certain goods and services under the name of the foreign enterprise. Franchising is usually long-term oriented[17].

Although of a different nature, these internationalization activities can complement and support one other – SMEs could and usually carry out more than one type of internationalization activity simutaneously.

## Internationalization Process

The Uppsala Internationalization Model, developed in 1970s, is the earliest theory on the specific sequences that SMEs follow to access international markets. It describes a gradual process to internationalize - starting from intermittent exporting, and then exporting via agents, and then moving on to cooperation with foreign firms via sale subsidiaries, joint ventures, licensing and franchising, and eventually achieving FDI in the overseas markets[18].

Later on, complementary to the Uppsala Model, the Network Theory Model was developed at the time when global production networks and value chains became more prominent. The Model places all the firms into networks of suppliers, subcontractors, customers and other market actors[19], and SMEs start to internationalize from selling to or buying from multinational companies via global production networks or value chains.

The internationalization process has implications on the grouping of SMEs. Both the Uppsala Model and the Network Theory Model describe an incremental process for SMEs to internationalize, i.e. SMEs start as domestic firms, and gradually develop their international business capacity and become active in the international markets. Firms that fall under this group are classified as "incremental internationalization SMEs".

Other SMEs start with a global vision and devote resources towards international activities from the onset. These are classified as "born-global SMEs",

[14] European Commission, 2003.
[15] M. Ibrahim, 2011.
[16] C. Hill, 2007.
[17] Ibid.
[18] J. Johansson and J. Vahlne, 1977; OECD, 2004.
[19] J. Johansson and L-G Mattson, 1988.

and they are usually in knowledge-intensive sectors and supply niche markets[20].

For these two groups, the main barriers to access international markets are different, and policies to assist them would therefore require different approaches. In the case of incremental internationalization SMEs, since cost is a major factor in decision making, the governments can implement trade facilitation measures for SMEs; remove information barriers; and guide them in meeting corresponding standards. For born-global SMEs, lack of financial resources is often a main concern. Policies facilitating access to credit would thus be relevant for these SMEs[21].

## Measuring Internationalization

For policy makers, it will be helpful to have an idea about the degree of SME internationalization in their respective economies. A good understanding of the process and extent of internationalization could make policies more specific and targeted. Internationalization is also closely linked with industrial development strategies aiming to improve economic competitiveness. Indeed, research by the European Commission found that "innovation and internationalization share a positive causal effect in competitiveness [22]." Successful born-global SMEs are good examples of this.

Measuring SME internationalization though is a challenging task. Various attempts have been made to measure international activities at the micro and macro levels. However, the reliability and validity of these measurements are debatable. Although over 97% of the companies in the APEC region are SMEs [23], obtaining data on SMEs' business activities is not easy. On one hand, SMEs are usually not part of any representative business association promoting their interests, and many of them do not necessarily keep detailed records of their activities. On the other hand, business patterns are constantly evolving and this makes it difficult to find a sound methodology to measure the degree of internationalization across time.

### *Micro Level*

There have been attempts to construct internationalization indices, reflecting features such as the structure, activities, and evolution of firms overseas. For example, the United Nations Conference on Trade and Development (UNCTAD) constructed the Transnationality Index as a synthetic measurement on international operations of multinational enterprises [24]. It combines the share of foreign assets in total assets; share of foreign sales in total sales; and share of foreign employment in total employment, with equal weights to reflect the spread of the firms' businesses in overseas markets.

However, internationalization is much more complex than can be encapusulated in a single index, thus other measurements tend to adopt a discrete or mixed approach combining quantitative and qualitative elements. The most comprehensive so far is the measurement by Dunning and Lundan. They use seven indicators to capture the internationalization of a firm[25]:

1. the number of foreign markets involved;
2. the number and revenue of foreign affiliates;
3. the proportion of foreign assets, sales, profit or staff of the firm;
4. the proportion of foreign ownership or management in the firm;
5. the value of R&D conducted abroad;
6. if the firm controls international networks; and
7. the extent the management of the firm is devoted to foreign affiliates.

While the above measurements are constructed for multinational enterprises, they can be adapted for SMEs. For instance, instead of looking at foreign affiliates, the indicators could look at the number of SMEs being subcontractors to foreign companies and/or having foreign subcontractors. Instead of value of R&D conducted abroad, the indicators could reflect the extent of SMEs' participation in joint ventures, licensing and franchising arrangements.

### *Macro Level*

Ideally, the macro level measurement of SME internationalization should be an aggregrate of the data at the micro level. Taking into consideration the different forms of SME internationalization and micro level measurements, the following indicators

[20] J. Bell, D. Crick and S. Young, 2004.
[21] S. Karlsen, 2000.
[22] European Commission, 2008.
[23] APEC PSU, 2013.
[24] UNCTAD, 2007.
[25] Dunning and Lundan, 2008.

would be able to present a valid picture on the stage of SMEs internationalization[26].

1. number of SMEs exporting directly and value of SMEs' direct exports;
2. number of SMEs importing directly and value of SMEs' direct imports;
3. number of SMEs investing abroad and value of SMEs' investment abroad;
4. number of SMEs being subcontracted by foreign enterprises and value of sales of SMEs being subcontracted by foreign enterprises;
5. number of SMEs subcontracting foreign enterprises and value of purchase of SMEs from foreign subcontractors;
6. number of SMEs cooperating with foreign enterprises under joint ventures, non-equity alliances, licensing and frenchising and value of SMEs' revenue from cooperation with foreign enterprises.

However, most statistical agencies do not collect or even if they do, collect minimum SME-related data. In many economies, only basic data on the number of SMEs and SMEs' economic contribution is collected, while data on SMEs' involvement in international trade, investment, and cooperation, is scarce.

To measure SME internationalization, two feasible options are suggested, namely: 1) by economic surveys; and 2) by census.

*1) Survey Approach*

The European Commission conducts an assessment on internationalization of European SMEs every three years using a survey approach. For the most recent 2010 report on Internationalization of European SMEs, the European Commission conducted 9,480 extended interviews based on a disproportional stratified sample (Appendix 1). The study found that a considerable number of European SMEs were engaged in international activities. Although exporting and importing were still the most prominent activities, European SMEs were also actively engaged in technological cooperation, subcontracting with foreign enterprises, and foreign direct investment in overseas markets[27].

*2) Census Approach*

Japan utilizes the results from an Economic Census in an effort to understand SMEs' internationalization activities. The Economic Census consists of two sub-censuses, namely: 1) Economic Census for Business Frame identifies the basic structure of establishments and enterprises; and 2) Economic Census for Business Activity identifies the situation of economic activities of establishments and enterprises. Each census is conducted once every five years by the Japanese Government, with the help from prefectural municipal governments and enumerators. The results are then reflected in the White Paper on SMEs in Japan. For example, the White Paper on SMEs in Japan 2014 utilized the results from the Economic Census for Business Frame in 2009 and the Economic Census for Business Activity in 2012, and captured the overseas expansion by Japanese SMEs in these three dimensions: 1) direct exports, 2) indirect exports[28], and 3) direct investment. It also provided valuable data on SMEs' business cooperation with foreign enterprises.

## Measuring SME Internationalization in APEC

The APEC SME Working Group has been discussing ways to improve SME access to markets and promote SME internationalization since its inception in 1994. They had addressed the issue of barriers to full participation of SMEs and micro enterprises in international trade/markets within APEC in their Strategic Plan 2009-2012[29]. In their current Strategic Plan 2013-2016, one of the priority areas is on addressing the critical issues pertaining to the strengthening of the business environment, market access and internationalization of SMEs.

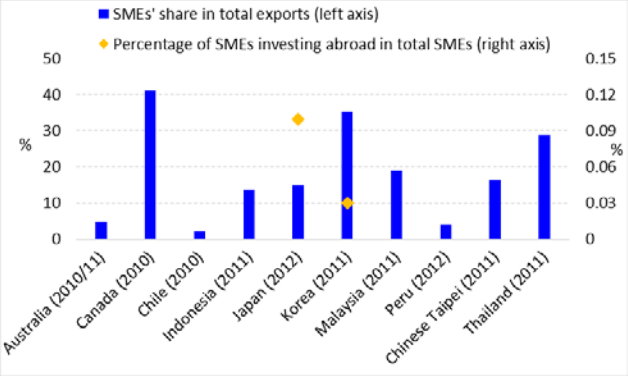
In 2013, in order to measure the progress of implementing the Strategic Plan 2013-2016, the members of the working group agreed to collect APEC SME Monitoring Indices, covering all priority areas of the Strategic Plan 2013-2016. In the area of internationalization, members agreed to use the percentage of SMEs' contribution to exports (i.e. SMEs' share in total exports) and the number of SMEs making direct investments abroad (i.e. percentage of SMEs investing abroad in total

[26] These indicators are based on the European Commission survey (2010) and complemented by other literature.
[27] European Commission, 2010.
[28] Indirect exports are exports carried out through an export agent, wholesaler or trading company, which can be taken as subcontracting.
[29] APEC, 2008.

SMEs) to track the progress. At the 37th SME Working Group Meeting in 2013, the results of the APEC SME Monitoring Index were presented (Figure 2).

Data on the SMEs' share in total exports was available for ten APEC economies, and only two economies, Japan and Korea, had data available for percentage of SMEs investing abroad in total SMEs. Based on the available data, SMEs' share in total exports was quite divergent among APEC economies, ranging from 2.2% in Chile to 41.0% in Canada. For SMEs investing abroad, they accounted for 0.1% of total SMEs in Japan, and 0.03% of total SMEs in Korea.

**Figure 2 APEC SME Monitoring Index - Internationalization, 2013**




Source: APEC SME Working Group, 2013.

The above results is far from capturing the overall progress of SME internationalization in the APEC region, since more than half of the APEC members do not have data on SME exports and investment abroad. Furthermore, the existing SME Monitoring Index does not cover the full scope of SME internationalization activites.

***Survey on SME Internationalization***

To support the APEC SME Working Group in developing a comprehensive and valid methodology for measuring SME internationalization, the APEC Policy Support Unit administered a survey on SME internationalization to member economies in November 2014 (Appendix 2). The survey aimed at gathering data on the various types of SME internationalization activities in the APEC region. At the time of publishing this policy brief, 12 APEC economies have responded to the survey. China; Hong Kong, China; and New Zealand confirmed they do not collect data related to SME internationlizaton; Canada; Japan; Korea; Malaysia; Peru; the Philippines, Chinese Taipei; Thailand, and United States provided data that were available (Appendix 3). There was no data on SMEs subcontracting foreign firms and SMEs cooperationg with foreign enterprises from any economy.

Since more than half of APEC economies do not collect information on SME internationalization, it is difficult to arrive at a region-wide conclusion. Nonetheless, the survey offers some insights into SME internationalization in the nine APEC member economies that reported some data availability:

- **Canada** conducted a Survey on Financing and Growth of SMEs [30] in 2012 to collect information on the general characteristics of SMEs and their financing activities. The results showed that in 2011, 10.4% of SMEs in Canada were direct exporters of goods and services, accounting for 40% of total exports; while 26.0% of SMEs were direct importers. 4,470 SMEs invested abroad, representing only 0.8% of Canadian SMEs. In the same year, 14,874 Canadian SMEs, equivalent to 3.2% of total SMEs, outsourced tasks to foreign subcontractors.

- **Japan** has been publishing a white paper on SMEs on an annual basis since 1964. The 2014 White Paper analyzed the structures and business scope of Japanese SMEs, as well as the challenges facing them[31]. The paper shows that only 3.0% of manufacturing SMEs[32] were involved in direct export, and 13.4% of all SMEs (18.9% of manufacturing SMEs) owned an overseas subsidiary or an affiliated company (investment abroad) at the end of the fiscal year 2011.

- In 2013, **Korea** reported 87,800 SMEs exporting goods and services directly with a value of USD 95.9 billion [33]. SMEs imports accounted for USD 70.9 billion. As for FDI, Korean SMEs made 4,265 overseas investments and invested in 1,351 new overseas enterprises in 2013. SMEs' total investment abroad was equivalent to USD 2.4 billion.

- In **Malaysia**, more than 6,000 SMEs in the manufacturing sector exported directly in 2013 and their direct exports were equal to MYR 136.8 billion (USD 43.4 billion).

[30] Statistics Canada, 2012.
[31] Japan Small and Medium Enterprise Agency, 2014.
[32] Japan SME data do not cover micro enterprises.
[33] Only goods trade are covered.

- In **Peru**, 3,082 SMEs exported goods in 2013, with a value of USD 1.6 billion. Similarly, 10,702 SMEs imported goods accounting for USD 3.2 billion.
- In **the Philippines**, SME-related data is gathered from the Annual Survey of Philippine Business and Industry. In 2010, 72,321 SMEs in agriculture, forestry, fishery, manufacturing, wholesale and retail trade exported directly, with a value of USD 1.2 billion.
- Since 2004, **Chinese Taipei** has been publishing a white paper on SMEs on an annual basis. In the 2014 edition[34], Chinese Taipei reported that 68,639 SMEs exported goods and services, reaching NTD 1,424 billion (around USD 47.5 billion).
- SMEs in **Thailand** engage actively in exporting and importing activities. In 2013, 24,944 Thai SMEs exported THB 1.8 trillion (USD 57.3 billion) of goods, and 44,684 Thai SMEs imported THB 2.4 trillion (USD 77.1 billion) of goods.
- SMEs in the **United States** have been active in international markets. In 2012, 298,000 SMEs exported goods with a value of USD 499 million and 180,358 SMEs imported goods with a value of USD 620 million.

It is evident from the survey responses that SMEs have been playing an essential role in international business in these economies. A significant number of SMEs participated in direct exporting and importing activities. SMEs' contribution to total exports was substantial, ranging from USD 499 million of goods exports in the United States to USD 150 billion of both goods and services exports in Canada. The survey results also show that there tends to be more SME importers than SME exporters, and the value of SME imports tends to be higher than that for SME exports.

## Conclusions and Recommendations

Although complex, internationalization is of vital importance to SMEs and for the competitiveness of the local economy. Internationalized SMEs perform better than SMEs that focus only on their domestic market. There are various channels for SMEs to internationalize, and they may internationalize their business activities either gradually (i.e. incremental internationalization SMEs) or immediately after the business establishment (i.e. born-global SMEs). Many studies have identified barriers to SME internationalization and recommended policies to address these barrier. However, research on the extent and process of SME internationalization still lags behind, and this may compromise the effectiveness of policies that are targeted to facilitate internationalization.

It is clear that deficiencies in SME-related data restricts the analysis on internationalization of SMEs in the APEC region. Only half of APEC economies collect statistics on SMEs' exports, and less than five economies have data on SMEs' imports. On investing abroad, only Canada, Japan, and Korea track the number of SMEs conducting investment overseas. Given the lack of statistical evidence from most APEC economies, it is imperative for APEC members to set up a strategy to collect data related to SME internationalization:

- In the short term (3 to 5 years), members could consider collecting data via survey or census, taking as reference the cases of the European Commission and Japan.
- In the long term (10 to 20 years), by collating the survey results, members could build up their databases on SME internationalization, such as the Eurostat data on trade by enterprise characteristics.

Collecting statistics on SME internationalization requires substantial commitment on resources and time. However, the benefits from collecting SME data across time can be significant. Policymakers would be able to identify the most common forms of internationalization for SMEs in their economy, as well as the degree and trends of SMEs' internationalization activities. Gathering such statistics is especially beneficial since policymakers would be able to formulate policies catering to different forms of internationalization and sectors. In addition, statistics could help in evaluating the effectiveness and efficiency of policies, which in turn would improve the accountability of policymakers and policy enforcers.

To maximize the value of conducting a survey or census on SME internationaliztion, economies can also incorporate questions on barriers faced by SMEs when accessing international markets. Based on the information collected, policymakers could link specific barriers with particular forms of internationalization, and formulate policies that target the barriers more effectively.

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## Appendix 1 – Technical Notes of the SME Internationalization Survey by European Commission

The SME Internationalization Survey was designed to analyze the various modes of internationalization, timing and sequence of modes, size, sector and geographical variations of SMEs in Europe. The survey was conducted through extended interviews with 9,480 out of 24 million SMEs in 33 European economies during January to April 2009.

Statistics theory prescribes a proportional random sample based on the total SME population. However, over 92% of SMEs in Europe were micro enterprises and a proportional random sample would lead to over-representation of micro enterprises in retail sector in larger economies and hardly any information on medium-sized enterprises in manufacturing sector in smaller economies. **Therefore, the survey adopted the disproportional stratified sampling, which applies unequal weights in three dimensions - 33 economies, 26 sectors, and 3 different size groups. 137,361 SMEs were contacted for the survey, and 9,480 valid responses were received upon closure.** The sample size was sufficiently large to guarantee a 95% confidence level within a 10% range for most results.

**Sample by economy**

The 33 economies were put under 6 clusters based on sizes and geographical locations for the survey, and the sample size was determined taking consideration of statistical significance to arrive at inferences. 600 observations were required for cluster 1 economies, and 300 observations were required for cluster 5 economies, and for the rest economies, minimum 201 samples were needed. After the survey, the eventual sample size was as following:

Cluster 1: Italy (n=623), Germany (n=622), Spain (n=621), France (n=620), United Kingdom (n=612), Poland (n=628)
Cluster 2: Finland (n=178), Norway (n=174), Denmark (n=197), Sweden (n=223), Iceland (n=118)
Cluster 3: Belgium (n=221), Netherlands (n=303), Luxemburg (n=191)
Cluster 4: Czech Republic (n=210), Slovakia (n=200), Slovenia (n=220), Hungary (n=206)
Cluster 5: Romania (n=317), Bulgaria (n=293)
Cluster 6: Austria (n=233), Croatia (n=220), Cyprus (n=125), Estonia (n=221), Greece (n=243), Ireland (n=181), Latvia (n=225), Liechtenstein (n=135), Lithuania (n=225), FYROM (n=201), Malta (n=164), Portugal (n=230), Turkey (n=300)

**Sample by sector**

The number of samples in each sector was not pre-assigned, although the surveyor tried to guarantee at least 150 completed interviews in each sector. The sample was collated based on the completed interviews:

| Sector | Sample size | Sector | Sample size |
|---|---|---|---|
| 1. Mining | 142 | 11. Electricity | 141 |
| 2. Manufacturing - Food | 268 | 12. Construction | 851 |
| 3. Manufacturing - Textiles | 235 | 13. Sale of Motor Vehicles | 381 |
| 4. Manufacturing - Wood | 214 | 14. Wholesale Trade | 638 |
| 5. Manufacturing – Publishing | 209 | 15. Retail Trade | 1,146 |
| 6. Manufacturing - Chemicals | 230 | 16. Hotels | 540 |
| 7. Manufacturing - Metal | 302 | 17. Transport | 477 |
| 8. Manufacturing - Machinery | 259 | 18. Real Estate | 346 |
| 9. Manufacturing - Motor Vehicles | 162 | 19. Renting | 176 |
| 10. Manufacturing - Miscellaneous | 221 | 20. Computer | 326 |

**Sample by firm size**

To guarantee significant representation of small and medium-sized enterprises, the survey ensured a similar number of completed interviews from each of the three size classes: micro enterprises (n=3253), small enterprises (n=3260); medium-sized enterprises (n=2967).

**Adjustment**

Because the sample is not proportional to the distribution of the European enterprise population, all findings and conclusions were adjusted against the actual distribution of the 24 million SMEs in these 33 economies by size class, sector of industry and country into account. Given the fieldwork was carried out in January-April 2009, the data were also seasonally adjusted. In addition, since the global financial crisis took place in mid-2008, and affected the internationally active SMEs, which is also taken into consideration in the analysis.

Source: European Commission, Internationalization of European SMEs, 2010

## Appendix 2 - Survey on SME Internationalization

**- Introduction -**

The APEC SME Working Group (SMEWG) Strategic Plan for 2013-2016 addresses critical issues pertaining to the growth of SMEs and micro enterprises under three priority areas: 1) building management capacity, entrepreneurship and innovation, 2) financing, and 3) business environment, market access and internationalization.

In 2013, SMEWG members agreed to APEC SME Monitoring Index to measure the progress of implementation of the Strategic Plan 2013-2016. On internationalization, members agreed to use the percentage of SME contribution to exports and the number of SMEs making direct investments abroad to track the progress. At the 37th SME Working Group Meeting in Bali, the results for APEC SME Monitoring Index were presented, with data on the percentage of SME contribution to exports available in ten economies and data on the number of SMEs making direct investments abroad available in only two economies.

In view of the scarce data reported on the two adopted indicators, the APEC Policy Support Unit would like to complement past efforts in producing SME data by conducting a short survey, which will serve as a starting point to propose a more comprehensive and valid methodology to measure SME internationalization.

**- Survey -**

**Please provide the following data for the most recent year (if available):**

| | Items | Data | Year |
|---|---|---|---|
| A | Number of SMEs exporting directly | | |
| | Value of SMEs' direct exports | | |
| B | Number of SMEs importing directly | | |
| | Value of SMEs' direct imports | | |
| C | Number of SMEs investing abroad | | |
| | Value of SMEs' investment abroad | | |
| D | Number of SMEs being subcontracted by foreign enterprises | | |
| | Value of sales of SMEs being subcontracted by foreign enterprises | | |
| E | Number of SMEs subcontracting foreign firms | | |
| | Value of purchase of SMEs from foreign subcontractors | | |
| F | Number of SMEs cooperating with foreign enterprises under joint ventures, non-equity alliances, licensing &franchising | | |
| | Value of SMEs' revenue from cooperation with foreign enterprises under joint ventures, non-equity alliances, licensing & franchising | | |

Please return the survey to bzy@apec.org by 5 December 2014.

If you have any questions regarding this survey, please contact Bernadine Zhang Yuhua at APEC Policy Support Unit (email: bzy@apec.org ; tel: +65 6891 9417).

**Respondent information**

| | |
|---|---|
| Name: | |
| Organisation: | |
| E-mail: | |
| Telephone number(s): | |

**- End -**

## Appendix 3 – Responses to Survey on SME Internationalization

At the time of publishing this policy brief, 12 members have responded to the survey. China; Hong Kong, China; and New Zealand confirmed they do not collect data related to SME internationalizaton; Canada; Japan; Korea; Malaysia; Peru; the Philippines, Chinese Taipei; Thailand, and United States provided data that were available. The table below shows the survey findings.

| | Indicators | Canada (2011) | Japan (2011) | Korea (2013) | Malaysia (2013) | Peru (2013) | Philippines (2010) | Chinese Taipei (2013) | Thailand (2013) | United States (2012) |
|---|---|---|---|---|---|---|---|---|---|---|
| A | Number of SMEs exporting directly | 58,100 | 6,336* | 87,800 | >6000* | 3,082 | 72,321** | 68,639 | 24,944 | 298,000 |
| | Value of SMEs' direct exports (USD billion) | 150 | | 95.9 | 43.4*** | 1.6*** | 1.2** | 47.5 | 57.3*** | 0.5*** |
| B | Number of SMEs importing directly | 144,100 | | | | 10,702 | | | 44,684 | 180,358 |
| | Value of SMEs' direct imports (USD billion) | | | 70.9 | | 3.2*** | | | 77.1*** | 0.6*** |
| C | Number of SMEs investing abroad | 4,470 | 37,422* | (1) | | | | | | |
| | Value of SMEs' investment abroad (USD billion) | | | 2.4 | | | | | | |
| D | Number of SMEs sub-contracting foreign firms | 14,874 | | | | | | | | |

* The data covered SMEs in manufacturing sector only.
** The data covered SMEs in the following sectors: agricultural, forestry, fishery, manufacturing, wholesale and retail trade.
*** The data covered trade in goods only.
(1) In 2013, Korea SMEs made 4,265 overseas investments and invested in 1,351 new overseas enterprise.