



Global SMEs Development White Paper©

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1. Introduction

As time plows forward into the new era of the 21st century, the traditional issues that had plagued the world for past decades such as the prosperity of nations at different developmental stages, job creation for billions of people, protection of the global environment, exploration of alternative energies, and fighting against poverty and marginalization remain substantial. As history has repeatedly demonstrated, the world's ability to resolve these challenges depend critically upon continued economic growth and business development worldwide.

Unfortunately, the worldwide recession triggered by the financial crisis in 2007 has, even now, not reached a complete state of recovery yet. According to data released by the Bureau of Economic Analysis of US Department of Commerce, the annual GDP growth rate of the United States from 2008 to 2013 was -0.4%, -3.5%, 2.5%, 1.6%, 2.3%, and 2.2% respectively, with a slightly more optimistic forecast for 2014 and beyond.¹ Per statistics reported by the European Commission, the annual GDP growth rate of the 27 EU countries from 2007 to 2014 was 3.1%, 0.5%, -4.4%, 2.1%, 1.7%, -0.5%, 0.0% and 1.3%, respectively.² Even China, the country that was widely considered the largest growth engine in the world in the past three decades has observed tangibly weakened momentum and reduced GDP growth. According to the data released by China's State Statistics Bureau, China's annual GDP growth was down to 7.4% in 2014,³ compared with an average annual growth rate over 9% in the past 30 years. Needless to say, all these dismal numbers could, through increased pessimism, bring about an even greater level of uncertainty for the future of the world.

The good news, however, lies in the likely forthcoming of an age of revolutionary technological innovation. In past decades, technological and scientific innovations in such fields as the internet, telecommunications, transportation, alternative energies, and biotechnologies have fundamentally changed people's quality and way of life. They have also generated tremendous opportunities in job creation, wealth accumulation, environmental protection, use of alternative energies, business development, and economic growth. What contributed in large part to these connections between technologies and people was the wide-spread activity of entrepreneurship around the world. Thanks to deregulations in many developing and developed countries, micro, small and medium sized enterprises (SMEs) became the focal driving force for technological and scientific progress. Such conducive deregulations included the signing of regional and global, bilateral and multi-lateral agreements that removed significant barriers of trade flow, fund flow and human resources flow between and among countries, innovative new business models that allowed industry, academia and financing to be combined in a more holistic way, and the formation and development of start-ups. As a result, thousands – millions - of

¹ The Bureau of Economic Analysis of US Department of Commerce: <http://www.bea.gov/>

² European Commission: <http://ec.europa.eu/eurostat>

³ China's State Statistics Bureau: <http://www.stats.gov.cn/english/statisticaldata/>

innovative ideas and their subsequently commercialized products were created in a very short amount of time in Silicon Valley and numerous Silicon Valley-like geographies around the world

SMEs play a unique role in business development and economic growth worldwide, especially compared to those of large corporations and multinational Fortune companies. In many countries in the world, SMEs typically comprise over 90% of the total companies in that country. They are usually the major contributors to GDP growth, job creations, tax collection, and imports and exports. Clearly, without the development and growth of the SMEs — the over 90% of the companies in the country, continued development and growth of that country cannot be achieved or sustained.

Even more importantly, SMEs, arguably, play irreplaceable roles in technological innovation. Large corporations usually possess all the needed resources to conduct technological innovation, such as funding, technological knowhow, and human resources — what they lack is the motivation to carry out innovative activities. This is especially true of large corporations with relatively monopolistic positions, for whom innovative activities with high risk-return profiles are less attractive than simply utilizing their advantage as the price setter in the market to raise prices and increase earnings. In particular, innovation, in many cases, simply means replacing the existing products and technology which these large corporations can use as advantages over other firms. It is only natural that none of them would voluntarily give up making “easy money” in exchange for making “harder-earned” income. However, what many of these large corporations may not realize is that the consequences of not constantly updating their technologies could be tremendous — as a classic example, Kodak’s failure to adopt digital technology in a timely manner lead to their eventual bankruptcy.

In addition, in transitional economies where large corporations are usually state-owned and their growth largely attributed to government policy support and administrative decisions, developing SMEs and growing companies through the market process is an activity of special value. It can help these countries avoid generating large corporations that are “big” but not “strong”, which consequently will allow these countries to develop a healthier, stronger and more sustainable economy

Therefore, SMEs will play a critical role in the sustainability of the economic growth worldwide, and can help provide those much-needed resolutions to the challenges facing countries around the world in the coming decades. Understanding the status of global SME development, identifying the challenges facing the SMEs, and assessing the efforts and best practices previously carried out by governments, NGOs, and business communities with regard to SMEs are all pre-requisites for understanding SMEs’ growth. This growth will subsequently correlate with business development and the growth of economies worldwide in the new century.

The Global SME Development White Paper that is presented here collects SME related information from 14 representative countries from five continents, including United States and Mexico from North America, Brazil and Argentina from Latin America, United Kingdom, Germany, and France from Europe, China, Japan and South Korea from Asia, South Africa and Kenya from Africa, and Australia and New Zealand from Oceania. It analyzes the current status of SME development and issues and challenges facing SMEs in these countries, assesses the policies, plans and some best practices adopted by various governments in supporting the growth of SMEs, and, finally, explores possible resolutions for the issues and challenges facing the SMEs worldwide.

2. The Development of Global SMEs and Its Measurements

(1) Who are SMEs?

SMEs are typically defined by the number of employees and the size of sales revenues/the value of assets that a firm possesses. In different countries and different industries, the definition of SME could be slightly different.

In the United States, for example, a small business is defined by the US Small Business Administration (SBA) as a company that is independently owned and operated, organized for profit, and not dominant in its operating field.⁴ Depending upon the industry, size standard eligibility is based on the average number of employees during the preceding twelve months, or on the sales volume averaged over a three-year period. For instance, in manufacturing, the maximum number of employees may range from 500 to 1500, depending on the type of product manufactured; in wholesaling, the maximum number of employees may vary from 100 to 500 depending on the particular product being provided; for services, the annual receipts may not exceed the \$2.5 to \$21.5 million range, depending on the particular service being provided; for retailing, the annual receipts may not exceed the \$5.0 to \$21.0 million range, depending on the particular product being provided; for general and heavy construction, the annual receipts may not exceed the \$13.5 to \$17 million range, depending on the type of construction; for special trade construction, the annual receipts may not exceed \$7 million; and for agriculture, the annual receipts may not exceed the \$0.5 to \$9.0 million range, depending on the agricultural products.

In Europe, four categories of business are classified. Micro-enterprises are defined as those with fewer than 10 employees; small enterprises are defined as firms employing between 10 and 49 employees; medium-sized enterprises are defined as those employing between 50 and

⁴ US SBA: <https://www.sba.gov/>

249 employees; and the large businesses are defined as those firms with more than 250 employees.⁵

In Japan, a SME in the manufacturing, mining, transportation, or construction industries is defined as a firm whose assets are up to ¥300 million, and the number of employees is no more than 300. For the wholesaling and service industry, the value of assets should not exceed ¥100 million, and the number of employees is no more than 100; and for retailing, the value of assets is up to ¥50 million, and the number of employees is up to 50.⁶

In South Korea, a SME in manufacturing is defined as a firm whose number of employees is less than 300, and the assets value is USD \$8 million or less; for mining, construction and transportation, a SME is a firm whose number of employees is less than 300, and the assets value is USD \$3 million or less; for large general retail stores, hotel, recreational condominium operation, communications, information processing and other computer-related industries, it is a firm whose number of employees is less than 300, and the sales revenue is USD \$30 million or less; for seed and seedling production, fishing, electrical, gas and waterworks, medical and orthopedic products, wholesales, fuel and related products wholesales, mail order sale, door-to-door sale, tour agency, warehouses and transportation-related service, professional, science and technology service, business support service, movie, amusement and theme park operation, it is a firm whose number of employees is less than 200, and sales revenue is USD \$20 million or less; for wholesale and product intermediation, machinery equipment leasing for industrial use, R&D for natural science, public performance, news provision, botanical garden, zoo and natural parks, waste water treatment, waste disposal and cleaning related service, it is a firm whose number of employees is less than 100, and sales revenue is USD \$10 million or less; for all other sectors, it is a firm whose number of employees is less than 50, and the sales revenue is USD \$5 million or less.⁷

In Mexico, the MSMEs (Micro, Small and Medium Enterprises) are defined by the number of employees that the companies have. A micro firm is defined as a business with less than 10 employees and is active in the industry, trade and service lines; a small enterprise is defined as a firm with 11-50 employees for industry and service and 11-30 for trade; and a medium enterprise is defined as a firm with 51-250 employees for industry, 31-100 employees for trade, and 51-100 employees for service industry.⁸

⁵ European Commission: <http://ec.europa.eu/enterprise/policies/sme/>. Unless otherwise specified, all EU data come from this source.

⁶ Small and Medium Enterprise Agency, Ministry of Economy, Trade and Industry of Japan: http://www.chusho.meti.go.jp/sme_english/outline/. Unless otherwise specified, all Japanese data come from this source.

⁷ The Small & Medium Business Corporation (SBC) of South Korea: <https://www.sbc.or.kr/sbc/eng/smes/definition.jsp>. Unless otherwise specified, all South Korea data come from this source.

⁸ Law for the Development of the Competitiveness of Micro, Small and Medium Enterprises of 2002:

In Argentina, annual sales revenue is used to define SMEs, which include micro, small and medium sized enterprises. By industry: the threshold in agriculture is an annual sales revenue below 54 million pesos, less than 183 million pesos in industry and mining, less than 250 million pesos for trade, less than 63 million pesos in the service industry and less than 84 million pesos in construction.⁹

In New Zealand, the size of employees of SMEs is typically less than 20.¹⁰

(2) The Status and Contributions of SMEs in a Country's Economy

Despite the smaller size of the firms, SMEs played a vital role in a country's economy. Its critical value can be assessed through several indicators.

(a) The Percentage of SMEs out of the Total Number of Enterprises in a Country.

SMEs are typically the dominant business form in an economy. In the United States, there were approximately 25.8 million businesses in 2005, according to the estimates of Office of Advocacy of US SBA,¹¹ of which there were 5.8 million firms with employees and 18.6 million without employees, using US Census data in 2003, the most recent year with data.¹²

In Europe, SMEs form the backbone of the EU economy. They account for 99.8% of non-financial enterprises, up to 20.7 million. Micro-enterprises, defined as those with fewer than 10 employees, account for 92.2% of SMEs in the EU; small enterprises, employing between 10 and 49 people, account for 6.5%; and medium-sized enterprises, employing between 50 and 249 people, account for 1.1% of SMEs in the EU. Large businesses, with more than 250 employees, account for only 0.2% of enterprises in the EU's non-financial sector.¹³

In Australia, there were 2,132,412 actively trading businesses as of June 2011. Among them, 2,045,335 were small business, representing about 96% of the total enterprises. Other

http://www.siem.gob.mx/portalsiem/ley_pyme/articulos.asp

National Institute of Statistics and Geography, Summary of the Results of the 2009 Economic Census:

<http://www.inegi.org.mx/est/contenidos/espanol/proyectos/censos/ce2009/pdf/RD09-resumen.pdf>. Unless otherwise specified, all Mexico data come from this source.

⁹ SME Secretariat of Argentina: CLASIFICACIÓN PYME. Unless otherwise specified, all Argentina data come from this source.

<http://www.sepyme.gob.ar/sepyme/clasificacion-pyme/> 2013-08-04

¹⁰ Statistics New Zealand Business Demography, Feb 2012. Unless otherwise specified, all New Zealand data come from this source.

¹¹ Office of Advocacy of US SBA: <https://www.sba.gov/advocacy>

¹² The estimates were obtained by applying sole-proprietorship growth rates to the non-employer figures, and US Department of Labor growth rates to the employer figures. Small firms with fewer than 500 employees represented 99.9 percent of the 25.8 million businesses, including firms both with and without employees. As the most recent data show, there are only about 17,000 large businesses in the United States.

¹³ European Commission: http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index_en.htm

3.8% were medium businesses and less than 1% was large ones.¹⁴ In New Zealand, 455,907 SMEs composed of 97.2% of all enterprises in the country.¹⁵

In China, by the end of August 2013, the actual number of enterprises was 14.5414 million with the registered capital RMB 91.84 trillion yuan. The actual number of domestic enterprises is 14.0992 million with the registered capital RMB 79.72 trillion yuan. The actual number of private enterprises was 11.7962 million, and the registered capital is 36.01 trillion yuan. The actual number of foreign funded enterprises is about 442,200, with the registered capital 12.12 trillion yuan. Among them, over 99% is SMEs.¹⁶

(b) Contributions to a Country's Economy

In the United States, about 50% of the Domestic Gross Product (GDP) in the private non-farm sectors is produced by SMEs. Even though the number was down slightly to 46% in 2008, it was relatively stable around the 50% level in a 20-year time span from 1998 to 2008. In the US, SMEs also represent 99.7% of all employer firms, employing 50% of all private sector employees; paying more than 45% of total U.S. private sector payrolls; they generated 60% to 80% of new jobs annually over the last decade; supplied more than 23% of the total value of federal prime contracts in fiscal year of 2005; produced 13 to 14 times more patents per employee than non-SME patenting firms. SMEs are the employers of 41% of high tech workers such as scientists, engineers, and computer workers; 53% of home-based and 3% of franchises; and made up 97% of all identified exporters, producing 28.6% of the known export value in the fiscal year 2004.¹⁷

In Europe, SMEs provided an estimated 67.4% of jobs in the non-financial industries in 2012, and 58.1% of share of GVA (Gross Value Added) in the EU in 2011 and 2012.¹⁸

In Australia, SMEs account for nearly one-half of private sector industry employment and contribute to approximately one third of private sector industry value added in 2010 - 2011.¹⁹ In New Zealand, SMEs created 581,540 jobs, providing 30.2% of all employment, and generated an estimated 27.8% of New Zealand's Gross Domestic Product.²⁰

In Mexico, the 2009 Economic Census of Mexico reported about 4,015,000 business units, of which 99.8% are MSMEs that generate 34.7% of GDP and 73% of employment of the country.²¹

¹⁴ Australian Bureau of Statistics: ABS Cat. No. 8155.0 and DIISRTE calculations. Unless otherwise specified, all Australia data come from this source.

¹⁵ Statistics New Zealand National Accounts 2010, Statistics New Zealand Business Operations Survey 2011

¹⁶ Xinhua Net: <http://news.xinhuanet.com/fortune/2010-05>

¹⁷ U.S. Census Bureau: <http://www.census.gov/cgi-bin/>¹⁸

European Commission: <http://ec.europa.eu/enterprise>¹⁹

Australian Bureau of Statistics: ABS Cat. No. 8155.0

²⁰ Statistics New Zealand Business Demography, Feb 2012

²¹ National Institute of Statistics and Geography, Summary of the Results of the 2009 Economic Census:

In China, as of 2012, SMEs contributed over 60% of the country's GDP, over 50% of tax revenue, about 70% of imports and exports, over 75% of new product revenue, over 65% of innovation and patents, and over 85% to new job creation.²²

(c) How Can the SMEs' Development Be Measured?

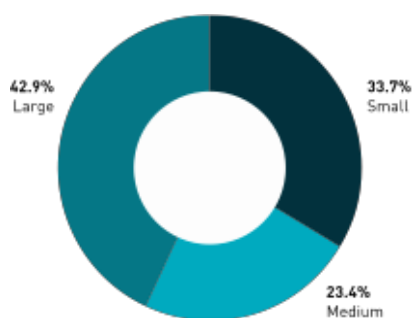
The SMEs' status of development is a multi-dimensional quality, and can only be measured sufficiently by multi-metrics or indicators across different countries. These measurements also depend upon the specific issues facing the SMEs in a particular country and data availability. Overall, the status of development of SMEs can be assessed through a collective system with the following parameters:

(1) Industry Value Added in Private Sector

Industry value added (IVA) is the measure of the contribution to gross domestic product by businesses in each industry. The IVA can be derived as sales or service income plus funding from federal, state and local government for operational costs, plus capital work for own use, plus closing inventories, less opening inventories, less purchases of goods and materials, and less other intermediate input expenses. Therefore, broadly speaking, IVA reflects the overall value produced by employees (i.e. wages plus salaries) and business owners (i.e. profits).

In Australia, for example, small businesses contributed to around 34% of private sector industry value added in 2010 - 2011, compared to the 23% contributed by medium businesses and 43% by large businesses. Totally, SMEs contributed 57% of private sector IVA, as indicated in Figure 1.1 below.

Figure 1.1: Contribution to Private Sector IVA by Business Size, 2010 -2011



Data Source: ABS Cat. No. 8155.0 and DIISRTE calculations

<http://www.inegi.org.mx/est/contenidos/espanol/proyectos/censos/ce2009/pdf/RD09-resumen.pdf> 2013-08-04

²² SINA Finance: <http://finance.sina.com.cn/hy/20120426>

In Japan, similar measures of Value Added (VA) and Value of Manufactured Shipments (VMS) are used to assess the status of SMEs. The Table 1-1 below summarized VMS for Japanese SMEs from 1995 to 2010. It can be seen that the percentage of the VMS produced by smaller firms with number of employees less than 100 declined during a 15 year time span, and the portion of the VMS produced by larger firms increased during the same period of time. Among them, firms with 4-9 employees decreased their shares from 4.5% in 1995 to only 2.3% in 2010; firms with 10-19 employees decreased their shares from 5.3% in 1995 to 4.0% in 2010; and firms with 20-99 employees decreased their shares from 22.1% in 1995 to 19.2% in 2010.

Table 1-1: Value of Manufactured Shipments

(Upper Row: ¥Billion, Lower Row: % of Total)

Year	1995	1996	1997	1998	1999	2000	2001	2002
No. of Workers								
4-9	13,750 4.5	13,491 4.3	13,400 4.1	13,722 4.5	12,194 4.2	12,198 4.1	10,250 3.6	9,103 3.4
10-19	16,318 5.3	16,314 5.2	16,492 5.1	16,280 5.3	15,001 5.1	14,742 4.9	14,733 5.1	13,384 5.0
20-99	67,531 22.1	68,957 22.0	70,216 21.7	67,443 22.1	63,630 21.8	63,915 21.3	61,267 21.4	57,135 21.2
100-299	59,541 19.5	60,761 19.4	63,917 19.8	60,493 19.8	59,724 20.5	62,770 20.9	60,568 21.1	58,154 21.6
300-999	70,635 23.1	73,377 23.4	76,835 23.8	72,455 23.7	68,720 23.6	73,269 24.4	70,269 24.5	66,184 24.6
1,000 or more	78,256 25.6	80,169 25.6	82,212 25.4	75,447 24.7	72,180 24.8	73,585 24.5	69,580 24.3	65,402 24.3
4-299	157,139 51.3	159,523 51.0	164,025 50.8	157,938 51.6	150,550 51.7	153,624 51.1	146,818 51.2	137,776 51.1
300 or more	148,890 48.7	153,546 49.0	159,047 49.2	147,902 48.4	140,900 48.3	146,854 48.9	139,849 48.8	131,586 48.9
Total	306,030 100.0	313,068 100.0	323,072 100.0	305,840 100.0	291,450 100.0	300,478 100.0	286,667 100.0	269,362 100.0

Year	2003	2004	2005	2006	2007	2008	2009	2010
No. of workers								
4-9	9,055 3.3	8,450 3.0	9,283 3.1	8,361 2.7	8,750 2.6	8,852 2.6	7,105 2.7	6,672 2.3

10-19	12,986 4.7	13,039 4.6	12,429 4.2	13,097 4.2	14,415 4.3	14,158 4.2	11,840 4.5	11,414 4.0
20-99	57,163 20.9	59,035 20.8	59,991 20.3	61,152 19.4	65,405 19.4	65,659 19.6	55,103 20.8	54,885 19.2
100-299	59,069 21.6	63,787 22.5	64,630 21.9	68,120 21.6	70,278 20.9	70,450 21.0	58,174 21.9	60,574 21.2
300-999	69,312 25.4	71,187 25.1	76,880 26.0	84,539 26.9	87,286 25.9	86,389 25.7	67,693 25.5	76,293 26.7
1,000 or more	65,824 24.1	68,020 24.0	72,133 24.4	79,567 25.3	90,623 26.9	90,070 26.8	65,344 24.6	75,645 26.5
4-299	138,274 50.6	144,311 50.9	146,333 49.5	150,729 47.9	158,848 47.2	159,120 47.4	132,222 49.8	133,545 46.8
300 or more	135,136 49.4	139,207 49.1	149,013 50.5	164,106 52.1	177,909 52.8	176,459 52.6	133,037 50.2	151,938 53.2
Total	273,409 100.0	283,530 100.0	295,346 100.0	314,835 100.0	336,757 100.0	335,579 100.0	265,259 100.0	285,483 100.0

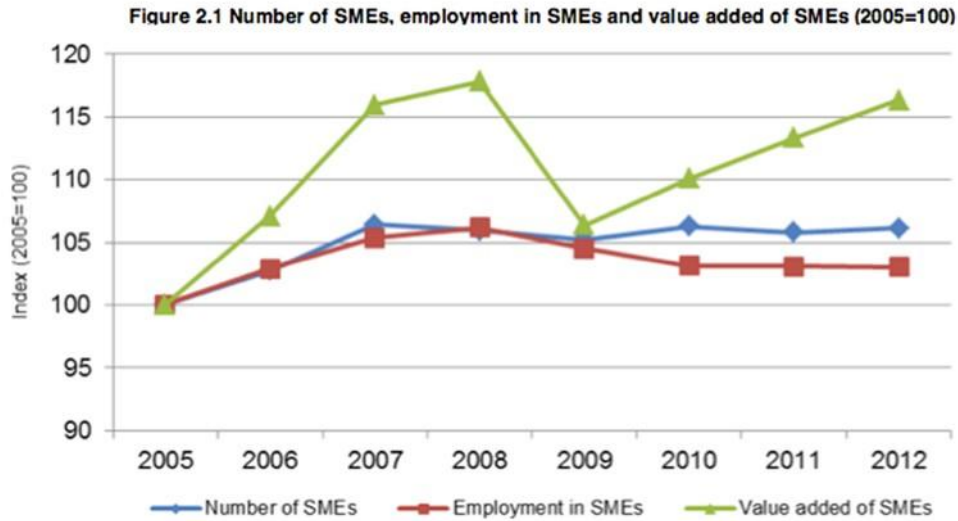
Note:

1. Based on statistics for business establishments. The “Total” may not correspond to the total value of the items as they have been rounded off.
2. Figures were basically recalculated from the “Industry” section data for each year.

(2) The Number of Business Establishments and Number of Employees

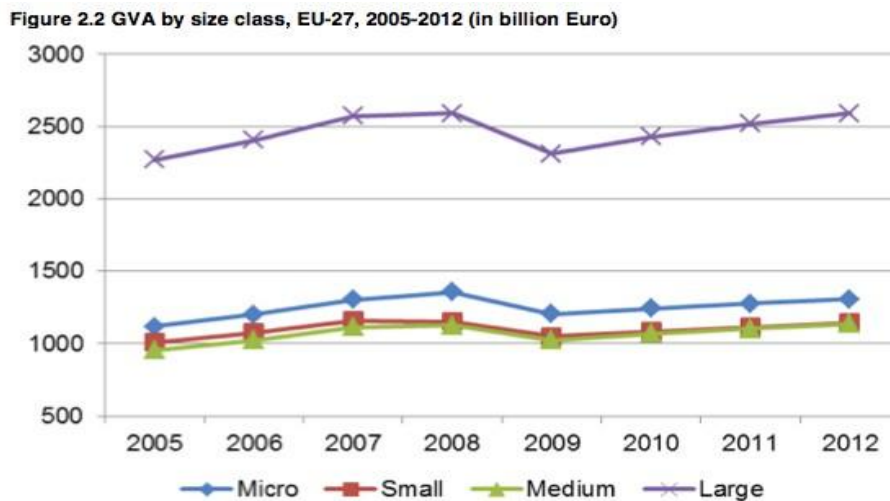
The number of business establishments and number of employees is another indicator that can help measure the status of SMEs. Even though different countries have economies and populations of different sizes, the trend of the SMEs’ growth in numbers can still provide helpful insight when analyzing the status of SMEs.

In the EU area, the recovery from recession appears sluggish, with rather fragile development and a reduction in the number of enterprises overall. Despite this, small firms seem to be the least affected, as indicated in the Figure 2.1 below.



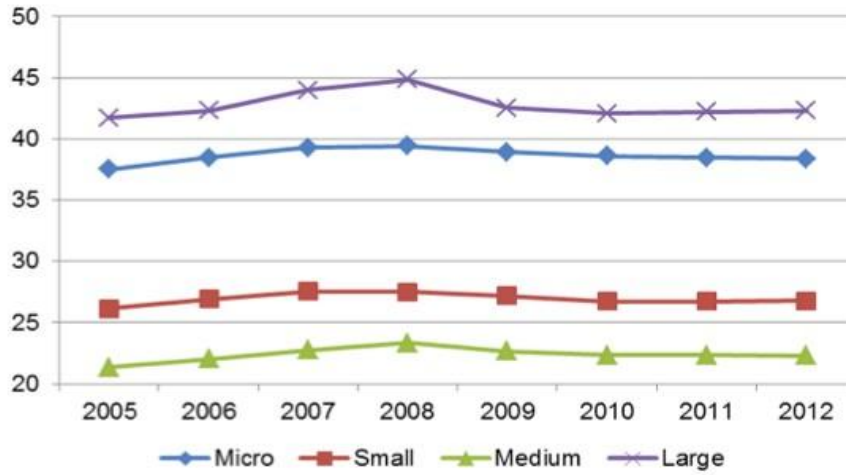
Source: Eurostat/National Statistics Offices of Member States/Cambridge Econometrics/Ecorys

Figures 2.2-2.4 illustrate the developments of the three core SME indicators by firm size over the period 2005-2012 in absolute terms. While GVA appears increased from 2009 for all sizes of SMEs classes, the employment reflects a status of stagnation.



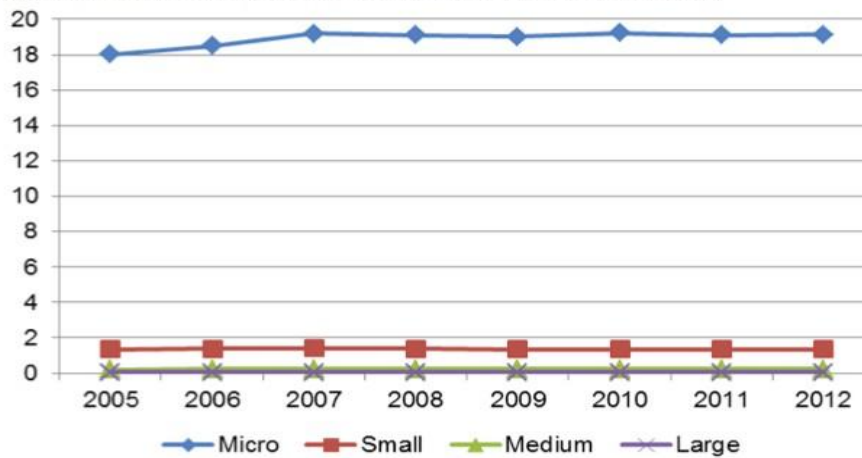
Source: Eurostat/National Statistics Offices of Member States/Cambridge Econometrics/Ecorys

Figure 2.3 Employment by size class, EU-27, 2005-2012 (in million persons)



Source: Eurostat/National Statistics Offices of Member States/Cambridge Econometrics/Ecorys

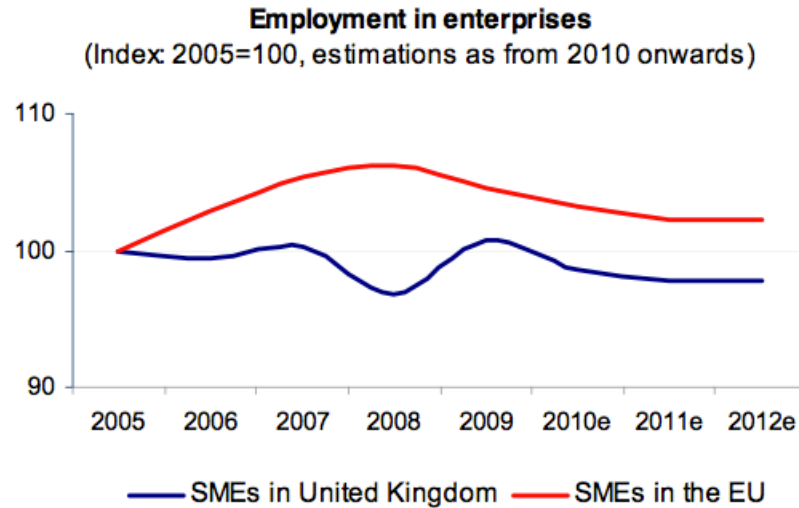
Figure 2.4 Number of enterprises by size class, EU-27, 2005-2012 (in million)



Source: Eurostat/National Statistics Offices of Member States/Cambridge Econometrics/Ecorys

Among the EU countries, SMEs in the UK appears to be affected by financial crisis very harshly. Overall, it is estimated that there was a decline in the number of jobs provided by SMEs of around 80 000 in 2011, representing a net loss of less than 1%. Employment is sliding again below 2005 figures with no indication of a recovery soon, as indicated by Figure 2.5 below.

Figure 2.5: Employment in SMES in UK



Source: Eurostat, DIWecon, DIW, London Economics

The Tables below showed the corresponding numbers from Japan and South Korea.

Table 2-1: The Number of Business Establishments and Enterprises by Industry and Size in Japan

Industry	SMEs				Large enterprises		Total	
	No	% of Total	No	% of Total	No	% of Total	No	% of Total
Mining and quarrying of stone and gravel	2,059	99.8	1,844	89.4	4	0.2	2,063	100.0
Construction	519,259	99.9	499,167	96.1	280	0.1	519,539	100.0
Manufacturing	446,499	99.5	394,281	87.9	2,036	0.5	448,535	100.0
Electricity, gas, heat supply and water	786	96.7	528	64.9	27	3.3	813	100.0
Information and communications	49,503	97.6	34,526	68.1	1,222	2.4	50,725	100.0
Transport and postal services	81,373	99.7	62,361	76.4	251	0.3	81,624	100.0
Wholesaling/retailing	1,047,079	99.6	869,196	82.7	4,224	0.4	1,051,303	100.0

Wholesale trade	241,917	99.3	175,592	72.1	1,693	0.7	243,610	100.0
Retail trade	805,162	99.7	693,604	85.9	2,531	0.3	807,693	100.0
Finance and insurance	34,672	99.3	33,546	96.0	258	0.7	34,930	100.0
Real estate and goods rental and leasing	352,548	99.9	345,065	97.8	303	0.1	352,851	100.0
Scientific research and professional and technical services	203,060	99.7	174,375	85.6	582	0.3	203,642	100.0
Accommodations and food services	604,050	99.8	524,811	86.7	936	0.2	604,986	100.0
Life-related, entertainment and recreation services	404,764	99.9	373,089	92.1	543	0.1	405,307	100.0
Education and learning support	110,895	99.9	100,213	90.3	124	0.1	111,019	100.0
Medical, healthcare and welfare	194,822	99.9	143,584	73.6	243	0.1	195,065	100.0
Compound services	3,617	99.9	3,604	99.6	2	0.1	3,619	100.0
Services (not otherwise classified)	146,278	99.4	105,171	71.5	891	0.6	147,169	100.0
Non-primary industry total	4,201,264	99.7	3,665,361	87.0	11,926	0.3	4,213,190	100.0

Note:

1. Number of enterprises = Number of companies + Business establishments of sole proprietors (independent establishments and head offices).
2. Enterprises with 300 or fewer regular employees (100 or fewer in wholesaling and services, and 50 or fewer in retailing and eating and drinking places) or capital stock of ¥300 million or less (¥100 million or less in wholesaling, and ¥50 million or less in retailing, eating and drinking places, and services) are treated as SMEs.
3. Enterprises with 20 or fewer regular employees (5 or fewer in wholesaling, retailing, eating and drinking places, and services) are treated as small enterprises.
4. The percentages of the total for small business enterprises indicate their proportion of the total number of enterprises.
5. Industries are classified according to the November 2007 revised system of industry classification.
6. Direct comparisons should not be made between the present findings and results obtained from the Establishment and Enterprise Census of Japan published in the supplementary statistical data for past White Papers on SMEs as the Economic Census for Business Frame (1) captures a greater range of business establishments and enterprises due to its use of commercial and corporate registers and other administrative records, and (2) it surveys enterprises and establishments en bloc by having head offices report information on their branches and other operations.

Table 2-2: The Number of Workers by Industry and Size in Japan (Private, Non-primary Industry, 2009)

Industry	SMEs							
			Small Enterprises		Large enterprises		Total	
	No	% of Total	No	% of Total	No	% of Total	No	% of Total
Mining and quarrying of stone and gravel	19,581	81.3	9,647	40	4,507	18.7	24,088	100
Construction	2,647,321	85.9	1,580,988	51.3	434,462	14.1	3,081,783	100
Manufacturing	5,469,317	59.3	1,393,577	15.1	3,751,514	40.7	9,220,831	100
Electricity, gas, heat supply and water	31,695	15.9	3,331	1.7	167,599	84.1	199,294	100
Information and communications	655,129	45.7	72,781	5.1	777,308	54.3	1,432,437	100
Transport and postal services	1,975,693	63.9	286,171	9.3	1,117,826	36.1	3,093,519	100
Wholesaling/retailing	5,462,645	60.7	1,006,547	11.2	3,536,291	39.3	8,998,936	100
Wholesale trade	2,101,156	70.3	283,278	9.5	887,346	29.7	2,988,502	100
Retail trade	3,361,489	55.9	723,269	12	2,648,945	44.1	6,010,434	100
Finance and insurance	160,064	13.2	66,266	5.5	1,055,313	86.8	1,215,377	100
Real estate and goods rental and leasing	648,054	75.2	296,512	34.4	214,194	24.8	862,248	100
Scientific research and professional and technical	756,175	70.8	237,476	22.2	311,715	29.2	1,067,890	100
Accommodations and food services	2,345,422	63.3	613,656	16.6	1,358,606	36.7	3,704,028	100
Life-related, entertainment and recreation	1,273,599	75.8	298,740	17.8	406,134	24.2	1,679,733	100
Education and learning support	339,809	76.7	68,867	15.6	102,948	23.3	442,757	100
Medical, healthcare and welfare	991,180	89.8	265,454	24	112,957	10.2	1,104,137	100
Compound services	3,370	2.1	3,247	2	160,187	97.9	163,557	100
Services (not otherwise classified)	1,925,640	63.5	148,335	4.9	1,108,015	36.5	3,033,655	100
Non-primary industry total	24,704,694	62.8	6,351,595	16.2	14,619,576	37.2	39,324,270	100

Note:

1. The figures shown indicate the total number of employees of companies and sole proprietors. 2. Enterprises with 300 or fewer regular employees (100 or fewer in wholesaling and services, 50 or fewer in retailing and eating and drinking places) or with capital stock of ¥300 million or less (¥100 million in wholesaling, ¥50 million or less in retailing, eating and drinking places, and services) are treated as SMEs.
3. Enterprises with 20 or fewer regular employees (5 or fewer in wholesaling, retailing, eating and drinking places, and services) are treated as small enterprises.
4. The percentages of the total small enterprises indicate their proportion of regular employees. 5. Industries are classified according to the November 2007 revised system of industry classification.
6. Direct comparisons should not be made between the present findings and results obtained from the Establishment and Enterprise Census of Japan published in the supplementary statistical data for past White Papers on SMEs as the Economic Census for Business Frame (1) captures a greater range of business establishments and enterprises due to its use of commercial and corporate registers and other administrative records, and (2) it surveys enterprises and establishments en bloc by having head offices report information on their branches and other operations.

Table 2-3: Number of South Korean SMEs and Employees by Year

(Unit: No. of Firms and Persons, Ratio: %)

	Total (A)		SMEs (B)		Ratio (B/A)	
	No. of Firms	No. of Employees	No. of Firms	No. of Employees	No. of Firms	No. of Employees
2000	2,729,957	10,768,597	2,707,805	8,680,694	99.2	80.6
2001	2,658,860	10,876,418	2,649,691	9,176,237	99.7	84.4
2002	2,861,830	11,737,640	2,856,913	10,154,095	99.8	86.5
2003	2,939,661	11,870,358	2,934,897	10,308,574	99.8	86.8
2004	2,927,436	11,824,074	2,922,533	10,210,629	99.8	86.4
2005	2,867,749	11,902,400	2,863,583	10,449,182	99.9	87.8
2006	2,940,345	12,234,160	2,936,114	10,677,789	99.9	87.3
2007	2,976,646	12,612,692	2,974,185	11,149,134	99.9	88.4
2008	3,046,958	13,070,424	3,044,169	11,467,713	99.9	87.7
2009	3,069,400	13,398,497	3,066,484	11,751,022	99.9	87.7
2010	3,125,457	14,135,234	3,122,332	12,262,535	99.9	86.8

Table 2-4: Number of South Korean SMEs and Employees by Industry

(Unit: No. of Firms and Persons, Ratio %)

	Total (A)	SMEs (B)	Ratio (B/A)	SME Ratio by Industry

	No. of Firms	No. of Employees	No. of Firms	No. of Employees	No. of Firms	No. of Employees	No. of Firms	No. of Employees
All Industries	3,125,457	14,135,234	3,122,332	12,262,535	(99.9)	(86.8)	100.0	100.0
Agriculture, Forestry & Fishery	787	10,425	785	9,949	(99.7)	(95.4)	0.0	0.1
Mining	1,759	14,009	1,758	13,066	(99.9)	(93.3)	0.1	0.1
Manufacturing	325,082	3,392,737	324,485	2,735,383	(99.8)	(80.6)	10.4	22.3
Electricity, Gas, Steam & Water	389	14,645	373	7,885	(95.9)	(53.8)	0.0	0.1
Sewer/Waste Treatment, Raw Material Reproduction & Environmental Restoration	4,846	58,345	4,821	54,381	(99.5)	(93.2)	0.2	0.4
Construction	96,716	1,176,098	96,372	954,296	(99.6)	(81.1)	3.1	7.8
Wholesale & Retail	870,599	2,577,813	870,309	2,468,058	(100.0)	(95.7)	27.9	20.1
Transportation	344,290	930,743	344,164	843,961	(100.0)	(90.7)	11.0	6.9
Accommodation & Restaurants	633,381	1,754,779	633,313	1,723,686	(100.0)	(98.2)	20.3	14.1
Publishing, Video, Broadcasting and Information Service	22,410	379,296	22,284	289,639	(99.4)	(76.4)	0.7	2.4
Finance & Insurance	9,933	195,347	9,805	107,365	(98.7)	(55.0)	0.3	0.9
Real Estate & Rental	106,935	291,832	106,583	251,218	(99.7)	(86.1)	3.4	2.0
Specialized, Science & Technical Service	65,832	635,580	65,511	451,401	(99.5)	(71.0)	2.1	3.7
Business Facility	34,038	762,573	33,602	476,054	(98.7)	(62.4)	1.1	3.9

	Total (A)		SMEs (B)		Ratio (B/A)		SME Ratio by Industry	
	No. of Firms	No. of Employees	No. of Firms	No. of Employees	No. of Firms	No. of Employees	No. of Firms	No. of Employees
Management & Business Support Service								
Education Service	142,456	507,437	142,357	490,449	(99.9)	(96.7)	4.6	4.0
Health & Social Welfare	82,256	560,559	82,235	552,533	(100.0)	(98.6)	2.6	4.5
Art, Sports & Leisure-related Service	98,579	252,760	98,530	232,233	(100.0)	(91.9)	3.2	1.9
Repair & Other Individual Service	285,169	620,256	285,045	600,978	(100.0)	(96.9)	9.1	4.9

In New Zealand, as reported in New Zealand's Structure and Dynamics 2011 Annual Report, the number of SMEs has dropped in 2011 for the first time in a decade. Even though SMEs still account for 40 percent of the economy's total value-added output and 31 percent of all employees, but these figures are down from previous years.²³

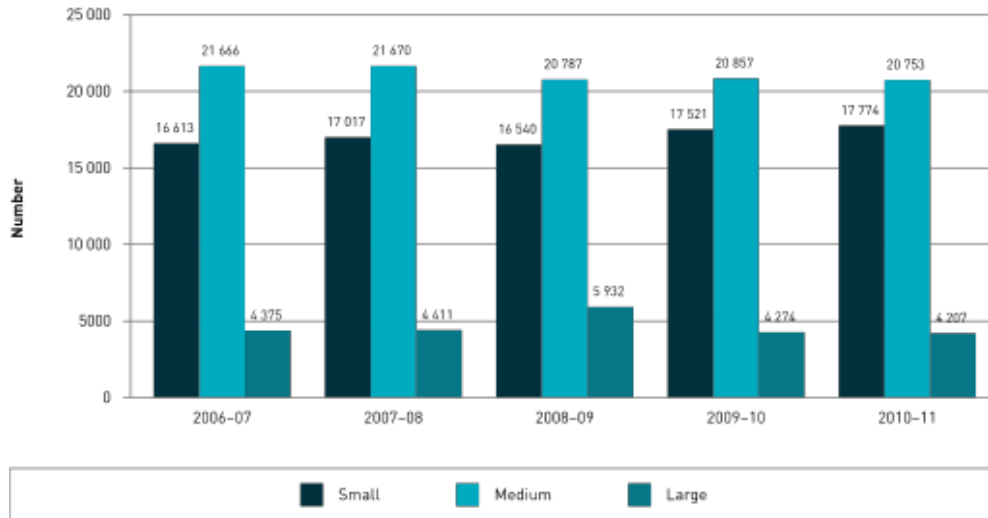
(3) SMEs' Exports

In a relatively developed country with relatively saturated domestic market, exporting represents a major business activity that creates jobs and generates income for the country's economy, including SMEs. SMEs' export can be measured by two sub-indicators: Number of Businesses Exporting Goods and the Value of Exporting Goods.

(a) Number of Business Exporting Goods measures the quantity of SMEs that involved in the exporting activities. In Australia, for example, approximately 17,774 small businesses exported goods in 2010 - 2011, representing 41.6% of all businesses exporting goods. However, while the number of small business goods exporters increased in the recent years, their contribution to total value of goods exports was less than 1% in 2010-2011, as indicated in Figure 3.1.

²³ Ministry of Economic Development and Statistics New Zealand (2011): SMEs in New Zealand: Structure and Dynamics 2011, Wellington, New Zealand

Figure 3.1: Number of Goods Exporters by Business Size, 2006 to 2011

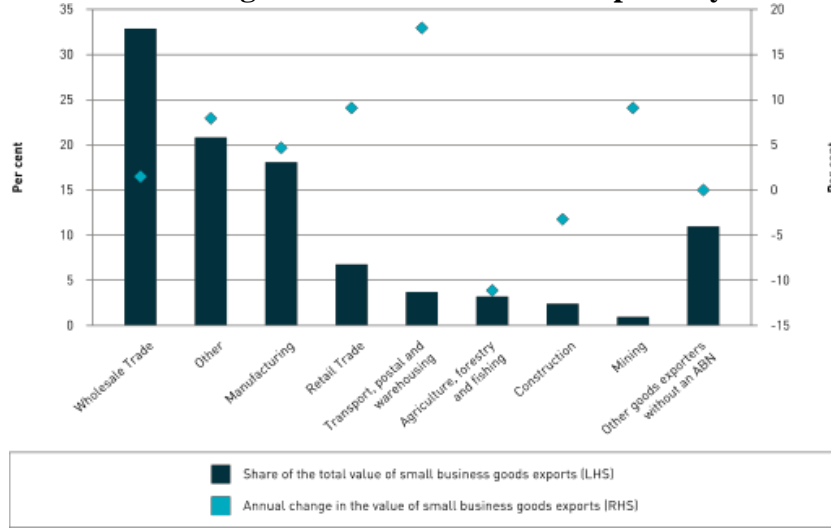


Data Source: ABS Cat. No. 5368.0.55.006

(b) Value of Goods Exported

Value of Goods Exported measures the value of goods that SMEs export. Taking a look at Australia again as an example, small businesses exported goods with the value of \$1.24 billion in 2010-2011, representing 0.5% of the total value of goods exported. Regarding the industry distribution, in 2010-2011, 32.9% of the total value of small business exports was from the wholesale trade subsector, with 18.1% from the manufacturing sector. Transport, postal and warehousing experienced the largest increase, growing by 17.9%, while retail trade came in second, recording a 9.1% growth. Large decreases in the value of exports by small businesses, on the other hand were recorded in the Agriculture, Forestry and Fishing sector, down by 11.1%, and the construction subsector, down by 3.2%. These are all summarized in Figure 3.2.

Figure 3.2: Share & Annual Change in the Value of SMEs Exports by Industry, 2010-2011



Data Source: ABS Cat. No. 5368.0.55.006, Table 3 and DIISRTE calculations

(4) Skills

Skill, specifying also for types of skill, is another indicator that some countries use to measure the status of SMEs’ development. In Australia, trade and financial skills were considered the types of skills most used in core business activities during 2010-2011. Among SMEs, one quarter of micro businesses reported the use of trade skills, while 32% of other small businesses reported financial skills as the skills most likely to be used. Forty percent of medium businesses and 62% of large businesses also reported financial skill as the skills most widely used for undertaking core business activities. Across all company sizes, the least frequently reported skill used in core business activities was scientific research (4%). By industry, the types of skills used naturally varied depending upon the nature of the business it undertakes.

(5) Business Performance

Business performance is another measure that some countries used to assess the SMEs status of development. It is typically composed of a set of quantitative metrics such as financial ratios, operational efficiencies, innovation activities, human resource quality, and environmental metrics. The Table 5.1 below displayed SMEs’ business performance in Australia.

Table 5.1: Business Performance Assessment, by Extent of Focus, by Type of Measure, 2010-2011

Type of measure	Not at all (%)		A small extent (%)		A moderate extent (%)		A major extent (%)	
	0-4	5-19	0-4	5-19	0-4	5-19	0-4	5-19

	persons	persons	persons	persons	persons	persons	persons	persons
Financial (e.g. profits, sales growth, returns on investment)	24.8	9.5	21.4	14.1	27.6	35.8	26.0	40.7
Cost (e.g. budget, cost per unit of output, inventory cost)	26.6	10.3	24.8	17.4	28.4	38.2	20.4	34.2
Operational (e.g. asset utilisation, on-time delivery)	36.1	17.1	23.0	23.5	24.2	36.0	16.8	23.2
Quality (e.g. customer satisfaction, defect rates)	25.0	8.8	16.1	14.5	24.2	35.0	34.6	41.9
Innovation (e.g. new process innovation, new value added products)	41.8	20.9	25.4	31.4	22.8	33.8	10.3	14.1
Human resources (e.g. job satisfaction, skills development)	42.2	15.6	24.5	30.9	24.6	39.2	8.9	14.2
Environmental (e.g. recycling program, adherence to environmental regulations)	48.7	26.0	24.8	35.3	19.8	29.2	6.8	9.5

Data Source: ABS Cat. No. 8167.0

Notes: Proportions are of all businesses in each output category. Businesses were asked to indicate to what extent the business focused on the listed measures when assessing performance. The sum of component items for each measure may not equal 100 percent due to rounding and/or provision of multiple responses.

(6) Small Business Entries and Exits

Small Business Entries and Exits is another metric that can be used to assess the status of SMEs' development. The birth and death of SMEs are important aspects of SMEs growth and development. They can be further classified disparately as Entries and Exits.

(a) Business Entries

In the Australia Bureau of Statistics (ABS) publication Counts of Australian Businesses, a "business entry" is defined as an actively trading firm that is newly registered as an ABN (Australia Business Number). In the fiscal year 2010-2011, 2,037,988 Australia small businesses were operating at the start of the fiscal year — 94.6% of small business these entries occurred in the non-employing and employing micro business population, which comprises businesses employing between 0–4 employees. This was followed by the remaining small businesses employing 5–19 employees, which accounted for 5.4% of small business entries, as indicated in Table 6.1.

(b) Business Exits

As defined by the ABS, businesses whose size categories change are counted as outflows from their original category (exits) and inflows to their new category (entries). For example, a

business that was non-employing in 2009-2010 and takes on 3 employees in 2010-2011 will be counted as an outflow from the non-employing category and an inflow to the 1–4 categories in 2010-2011. Similarly, a business that was classified as a medium business in 2009-2010, and takes on sufficient additional employees, will be considered an outflow from the medium business category and an inflow to the large business category in 2010-2011.

After accounting for net movements of “surviving” businesses, there were 7,347 more small businesses in operation at the end of the fiscal year 2010-2011, than at the beginning of the fiscal year. Businesses which change their size category over time are captured in the net movement of surviving businesses. The largest amount of small business exits (94.8%) occurred in the non-employing and employing micro business population, with the remaining small businesses accounting for a smaller 5.2% of all small business exits, as also indicated in Table 6.1.

Table 6.1: Business Entries and Exits by Employment Size, 2010-2011

	Operating at the start of the financial year	Entries	Exits	Net movement of surviving businesses ³¹	Operating at the end of the financial year	Entry rate %	Exit rate %
Non employing	1 303 040	198 769	219 574	23 788	1 306 023	15.3	16.9
Employing							
1-4	506 272	76 414	48 303	-25 709	508 674	15.1	9.5
5-19	228 676	15 833	14 555	684	230 638	6.9	6.4
Total small business	2 037 988	291 016	282 432	-1 237	2 045 335	14.3	13.9
Total medium businesses (20-199)	80 787	2 804	3 734	1 149	81 006	3.5	4.6
Total large businesses (200 +)	5 875	390	282	88	6 071	6.6	4.8
Total	2 124 650	294 210	286 448	-	2 132 412	13.9	13.5

Data Source: ABS Cat. No. 8165.0 and DIISRTE calculations

(7) Survival Rate and Bankruptcy Rate

Survival Rate or Bankruptcy (Rate) is another measure that some countries use to assess the well-being of SMEs. Unlike entries and exits, the survival rate of a business does not take into account the movement of businesses between size categories. Changes between employment size ranges are held to the original employment size range at the point of registration.

Table 7.1 below shows the aggregate survival rates for the Australian economy as a whole and depicts the proportion of businesses that were operating in June 2007 and continued operating to June 2011. As can be seen from this table, the survival rate for small businesses (59.7%) is much lower than that for medium (75.8%) and large businesses (74.3%) during this time period.

Table 7.1: Business Survival Rates by Employment Size between June 2007 and June 2011

	Number of businesses operating in June 2007	Number of businesses that continued to operate to June 2011	“Survival” rate (%)
Small (0–19)	1 985 822	1 185 997	59.7
Medium (20–199)	82 071	62 243	75.8
Large (200+)	5 900	4 386	74.3
Total	2 073 793	1 252 626	60.4

Data Source: ABS Cat. No. 8165.0 and DIISRTE calculations

As the bankruptcy is usually the result of default on debt, the SMEs’ debt status, if they are lucky to get debt financing, is highly correlated with bankruptcy. The Tables below demonstrated the numbers of bankruptcy and SMEs with debt in Japan and South Korea.

Table 7.2: No. of Corporate Bankruptcies and Debts

(Unit: no. of bankruptcies, ¥100 million)

Year/ Category		2001	2002	2003	2004	2005	2006
No. of bankruptcies	Overall	19,164	19,087	16,255	13,679	12,998	13,245
	Enterprises with capital stock of under ¥100 million	18,819	18,687	15,877	13,392	12,755	13,011
Debts	Overall	165,196	137,824	115,818	78,177	67,035	55,006
	Enterprises with capital stock of under ¥100 million	73,151	77,540	57,651	53,656	47,209	37,598

Year/		2007	2008	2009	2010	2011
Category						
No. of bankruptcies	Overall	14,091	15,646	15,480	13,321	12,734
	Enterprises with capital stock of under ¥100 million	13,826	15,257	15,130	13,074	12,543
Debts	Overall	57,279	122,920	69,301	71,608	35,929
	Enterprises with capital stock of under ¥100 million	37,264	42,732	38,223	26,778	27,915

Table 7.3: No. of Bankruptcies and Debts by Industry

	Year	2001	2002	2003	2004	2005	2006
Industry							
Construction	No. of bankruptcies	6,154	5,976	5,113	4,002	3,783	3,855
	Debts	20,592	24,976	15,591	11,037	8,439	7,282
Manufacturing	No. of bankruptcies	3,670	3,615	2,787	2,195	1,971	1,856
	Debts	18,289	17,628	13,060	6,643	6,393	6,317
Commerce	No. of bankruptcies	5,535	5,411	4,573	3,811	3,512	3,664
	Debts	41,047	19,566	14,745	10,619	7,909	7,242
Real estate	No. of bankruptcies	667	665	574	518	485	465
	Debts	30,042	21,771	24,892	15,352	17,058	13,642
Financial and insurance	No. of bankruptcies	89	75	75	61	95	70
	Debts	23,734	10,784	8,096	1,982	3,065	1,571
Services	No. of bankruptcies	2,198	2,398	2,380	2,245	2,329	2,499
	Debts	26,004	39,235	31,919	29,408	21,009	15,094
Other	No. of bankruptcies	851	947	753	847	823	836
	Debts	5,488	3,864	7,515	3,136	3,162	3,858
Total	No. of bankruptcies	19,164	19,087	16,255	13,679	12,998	13,245
	Debts	165,196	137,824	115,818	78,177	67,035	55,006

	Year	2007	2008	2009	2010	2011
Industry						
Construction	No. of bankruptcies	4,018	4,467	4,087	3,523	3,391
	Debts	8,124	12,765	9,135	5,277	4,816
Manufacturing	No. of bankruptcies	2,022	2,341	2,619	2,095	1,901
	Debts	6,239	9,847	11,705	5,476	6,608
Commerce	No. of bankruptcies	3,893	4,068	3,885	3,258	3,130
	Debts	7,726	9,878	9,743	6,948	6,228
Real estate	No. of bankruptcies	463	575	596	441	420
	Debts	13,293	20,793	17,670	5,866	2,359
Financial and insurance	No. of bankruptcies	71	107	92	70	54
	Debts	2,243	54,885	9,563	13,198	2,805
Services	No. of bankruptcies	2,713	2,911	2,966	2,798	2,812
	Debts	16,083	10,705	8,370	14,752	6,504
Other	No. of bankruptcies	911	1,177	1,235	1,136	1,026
	Debts	3,572	4,047	3,115	20,091	6,608
Total	No. of bankruptcies	14,091	15,646	15,480	13,321	12,734
	Debts	57,279	122,920	69,301	71,608	35,929

Table 7.4: Breakdown of Number of Bankruptcies by Cause

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Cause											
Slump in Sales	55.2	57.9	62.9	65.8	65.2	63.4	64.9	65.2	69.4	74.8	73.5
Careless Management	9.5	8	7.3	7.6	7.8	8.2	6.6	6.3	5.3	3.9	4.1

Chain Reaction Bankruptcy	8.3	8.8	8.2	7.3	6.9	7.1	7.1	7.7	6.5	5.8	5.6
Past Difficulties	14.7	14.6	12.5	10	10.9	11.5	10.9	10.3	9.6	7.8	8.5
Other	12.3	10.7	9.1	9.2	9.2	9.8	10.5	10.5	9.2	7.8	8.3

Note: Only enterprises with debts of at least ¥10 million are included.

According to a research by the Global Entrepreneurship Monitor (GEM), the survival rate for start-ups in South Africa is very low and that the opportunity for entrepreneurial activity is the lowest of all the reviewed developing countries.²⁴

(8) Business Conditions and Confidence

Business Conditions and Confidence is another measure that some countries use to assess the status of SMEs. They are typically assessed through surveys that are undertaken by private companies on a monthly or quarterly basis. These surveys are designed to measure and present information about business trends, expectations and overall conditions.

These surveys also measure business confidence, which is often used as an early indicator of businesses performance. Surveys are usually released on a timelier basis than official statistics. Business surveys are watched especially closely during special periods of time such as a recession or a financial crisis, as these could signal turning points in the business cycle.

Business Conditions indices are measures of current market conditions. They are often calculated as a composite index of measures such as labor conditions, profits and sales reported by business owners. Some surveys also report these indices as a “net balance” which is obtained by subtracting the percentage of negative responses from the percentage of positive responses.

China’s SME Confidence Index is a good example of this type of indicators. It is a survey of SMEs that covers 1000 companies, of which 70 percent fall into the category of "micro-small companies". The companies are located in 20 cities in four separate regions, North China, East China, South China and West China.²⁵

The index of SME in China was 52.04 percent for the second quarter 2013, down 4.47 percent from the previous quarter. All five sub-indices fell, mostly notable, in varying degrees, in the course of three months. The sub-index measuring SMEs’ confidence on a broad economy slashed 7.51 percent to 47.36 on quarterly basis, and that on operation down 1.89 percent at 54.92, at 56.97 on investment and 48.90 on financing, as indicated in Figure 8.1 below.

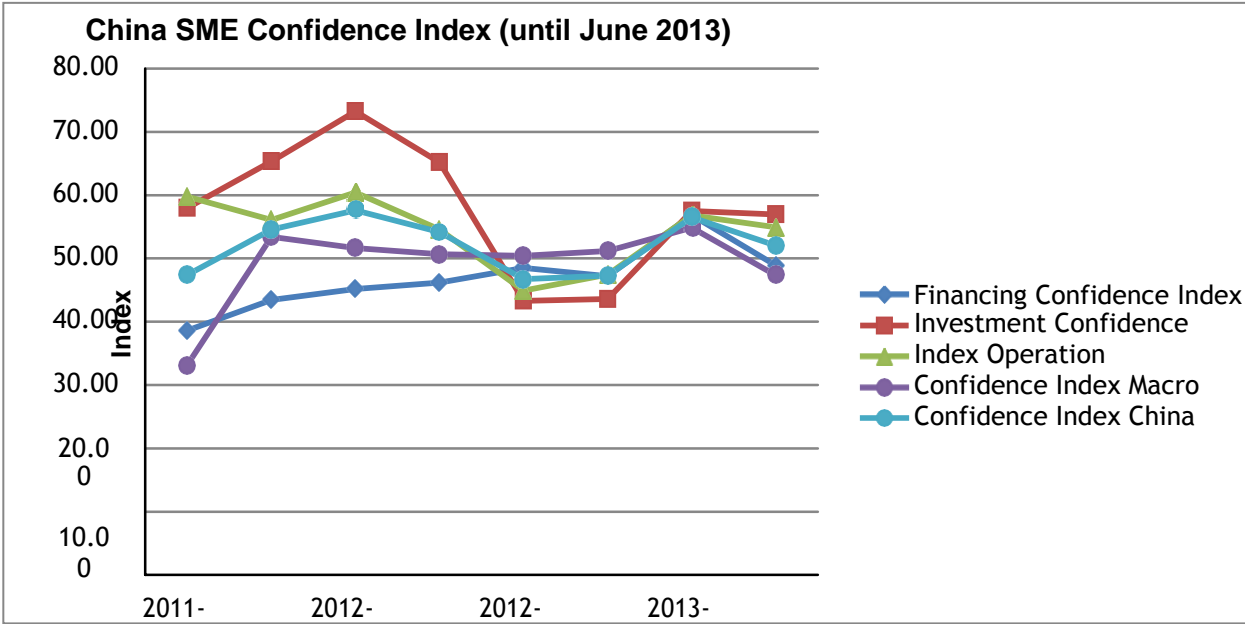
The decline of the China SME Confidence Index came after a surge in the first quarter in

²⁴ Global Entrepreneurship Monitor: <http://www.gemconsortium.org/>

²⁵ Standard Chartered Bank China: <http://www.sc.com/cn/en/sme/>

2013, highlighting concerns about economic conditions in the economy despite a slew of measures taken by central government. A bank survey showed that China's small businesses are cautious about their prospects in the Chinese economy amid the economic slowdown of recent months.

Figure 8.1: The Indexes of SMEs in China



Source: Standard Chartered Bank China: <http://www.sc.com/cn/en/sme/>

(9) SMEs Conditions versus Total Business Conditions

The comparison of SME performance with that of the overall economy is used by some countries, as this may indicate areas that are more or less challenging to smaller business operators. Most conditions indices suggest SMEs are not often encountering weaker business conditions than business as a whole. We go to Australia once again, where, over the past five years, Australia business conditions for all businesses have been generally more positive than small business, as indicated in Figure 9.1. The NAB (National Australia Bank) business conditions for all businesses were slightly negative in the June quarter 2012 but SME business conditions were more negative in comparison.

Figure 9.1: Business Conditions, 5 Years Up to the June Quarter 2012



Data Source: Thomson Reuters Datastream, ACCI Small Business Survey, ACCI Business Expectations Survey, NAB Quarterly Business Survey, and NAB Quarterly SME Survey

The Table 9.1 below demonstrates the business conditions in Japan, by region for all industries. Notably, all the numbers are negative.

Table 9.1: Business Conditions by Prefecture, all industries

Prefecture	2009		2010			
	Jul.-Sep.	Oct.-Dec.	Jan.-Mar.	Apr.-Jun.	Jul.-Sep.	Oct.-Dec.
National	-39.1	-36.2	-33.4	-30.9	-29.2	-28.0

Hokkaido	-36.1	-32.4	-32.3	-30.6	-29.4	-26.9
South/Central Hokkaido	-38.6	-34.1	-35.0	-33.3	-32.5	-30.9
North Hokkaido/Okhotsk	-35.2	-31.0	-26.5	-25.1	-19.0	-11.7
Tokachi, Kushiro, Nemuro	-27.9	-25.2	-33.4	-24.9	-28.8	-24.9
Tohoku	-39.5	-36.9	-36.0	-34.1	-30.9	-30.5
Aomori	-41.7	-42.9	-44.9	-44.6	-35.8	-43.7
Iwate	-35.9	-36.0	-29.7	-30.2	-29.4	-26.2
Miyagi	-46.2	-46.2	-41.3	-38.5	-36.0	-33.0
Akita	-37.5	-30.1	-30.5	-35.0	-23.2	-29.4
Yamagata	-34.6	-32.8	-34.4	-31.7	-29.9	-31.3
Fukushima	-39.1	-37.7	-33.8	-29.6	-30.1	-26.5
Kanto	-38.5	-35.8	-32.8	-29.2	-29.3	-26.8
Ibaraki	-33.7	-31.3	-27.6	-26.3	-30.4	-24.8
Tochigi	-42.9	-40.9	-28.4	-32.5	-25.8	-26.9
Gunma	-34.5	-35.3	-33.5	-29.0	-31.1	-24.2
Saitama	-38.5	-34.5	-31.0	-28.9	-20.7	-23.4
Chiba	-31.8	-27.7	-28.4	-30.8	-29.1	-24.1
Tokyo	-37.2	-37.0	-34.8	-30.4	-30.6	-28.8
Kanagawa	-41.5	-39.3	-36.1	-37.5	-34.4	-27.5
Niigata	-42.4	-42.6	-35.5	-29.2	-30.3	-31.4
Yamanashi	-36.8	-32.0	-27.1	-25.3	-28.1	-26.3
Nagano	-39.6	-30.7	-30.3	-22.4	-26.6	-26.4
Shizuoka	-42.9	-37.2	-34.5	-28.8	-34.0	-27.5
Chubu	-40.4	-37.9	-33.4	-29.7	-27.9	-27.8
Toyama	-33.6	-34.7	-24.8	-22.5	-25.6	-19.8
Ishikawa	-43.0	-35.7	-29.8	-28.9	-22.8	-23.9
Gifu	-43.4	-40.6	-37.0	-29.0	-29.6	-34.3
Aichi	-40.6	-36.5	-32.4	-29.8	-26.1	-24.3
Mie	-42.3	-42.3	-36.9	-36.9	-33.9	-36.5
Kinki	-37.2	-37.4	-32.7	-28.6	-28.2	-28.5
Fukui	-52.2	-38.8	-35.8	-36.4	-30.2	-36.3
Shiga	-38.9	-42.4	-34.8	-30.1	-33.0	-29.0
Kyoto	-39.7	-36.1	-33.6	-29.4	-33.7	-34.7
Osaka	-36.1	-37.6	-33.3	-24.8	-24.7	-25.4
Hyogo	-36.8	-40.5	-29.0	-27.8	-27.1	-30.0
Nara	-25.6	-33.4	-29.4	-29.0	-28.9	-22.3
Wakayama	-36.1	-33.0	-32.1	-31.6	-24.4	-30.4
Chugoku	-40.9	-35.5	-33.8	-30.7	-26.0	-28.0
Tottori	-40.7	-30.0	-15.4	-29.2	-20.9	-26.6
Shimane	-40.2	-33.8	-33.6	-25.6	-23.5	-25.5
Okayama	-37.2	-34.1	-31.0	-32.2	-33.0	-30.3
Hiroshima	-35.6	-34.1	-38.9	-32.9	-18.1	-25.9
Yamaguchi	-49.1	-41.3	-39.3	-34.7	-32.4	-30.1

Shikoku	-42.0	-38.6	-33.8	-35.0	-31.0	-30.8
Tokushima	-45.0	-41.5	-33.6	-34.5	-29.4	-28.4
Kagawa	-35.3	-35.1	-34.9	-34.5	-23.3	-28.3
Ehime	-46.3	-42.1	-36.9	-42.2	-41.3	-37.4
Kochi	-39.2	-33.9	-27.7	-26.9	-24.5	-26.0
Kyushu/Okinawa	-37.3	-36.3	-32.9	-31.7	-29.6	-28.6
Fukuoka	-42.7	-37.7	-33.6	-32.9	-29.4	-28.6
Saga	-41.0	-41.8	-39.7	-35.6	-34.0	-31.7
Nagasaki	-44.0	-43.2	-39.0	-31.9	-34.8	-31.2
Kumamoto	-34.6	-31.4	-29.2	-23.3	-24.7	-24.3
Oita	-40.8	-41.2	-36.2	-35.4	-33.3	-32.8
Miyazaki	-36.9	-34.2	-33.5	-46.8	-40.4	-31.4
Kagoshima	-30.9	-34.1	-28.1	-33.4	-29.2	-29.1
Okinawa	-21.6	-25.3	-18.4	-14.2	-8.0	-19.6

Prefecture	2011				2012
	Jan.-Mar.	Apr.-Jun.	Jul.-Sep.	Oct.-Dec.	Jan.-Mar.
National	-26.3	-34.8	-26.6	-24.3	-24.2
Hokkaido	-23.6	-34.7	-27.2	-21.4	-23.0
South/Central Hokkaido North	-27.0	-35.0	-27.6	-25.2	-25.4
Hokkaido/Okhotsk Tokachi, Kushiro, Nemuro	-13.2	-33.1	-21.7	-7.3	-17.9
	-26.8	-30.8	-30.9	-19.6	-24.1
Tohoku	-29.9	-38.5	-22.0	-21.5	-19.4
Aomori	-29.3	-47.5	-33.6	-24.3	-24.1
Iwate	-27.2	-29.4	-16.8	-12.1	-12.7
Miyagi	-29.4	-39.8	-12.6	-20.0	-7.8
Akita	-29.3	-38.3	-26.9	-27.5	-24.1
Yamagata	-29.7	-33.2	-28.0	-22.5	-22.3
Fukushima	-30.0	-44.3	-17.7	-24.6	-20.6
Kanto	-24.1	-36.1	-24.6	-22.3	-21.9
Ibaraki	-22.5	-31.7	-19.1	-17.4	-21.4
Tochigi	-28.4	-40.3	-28.4	-20.5	-24.7
Gunma	-21.3	-40.0	-28.4	-21.7	-20.2
Saitama	-23.8	-31.9	-24.8	-19.2	-19.1
Chiba	-22.5	-29.0	-16.8	-22.3	-19.5
Tokyo	-21.2	-37.3	-26.8	-26.0	-22.5
Kanagawa	-22.7	-27.0	-24.9	-20.9	-20.8
Niigata	-29.8	-35.9	-33.5	-24.8	-27.9
Yamanashi	-21.7	-42.7	-27.4	-31.0	-29.1
Nagano	-25.0	-41.2	-22.2	-25.0	-24.3
Shizuoka	-21.3	-38.7	-16.2	-13.0	-18.5

Chubu	-24.8	-36.5	-27.2	-25.1	-26.7
Toyama	-23.0	-28.8	-21.4	-17.4	-28.7
Ishikawa	-29.1	-30.6	-25.2	-28.7	-32.4
Gifu	-26.1	-42.5	-29.9	-29.0	-28.9
Aichi	-19.1	-37.6	-25.4	-22.8	-20.2
Mie	-27.1	-37.7	-33.5	-28.8	-29.7
Kinki	-25.7	-31.3	-26.9	-25.6	-25.1
Fukui	-22.3	-40.8	-25.7	-26.1	-27.7
Shiga	-23.9	-32.2	-29.4	-27.9	-29.0
Kyoto	-28.7	-35.6	-36.0	-30.7	-30.1
Osaka	-20.1	-27.2	-25.1	-20.2	-18.8
Hyogo	-31.7	-32.2	-24.9	-25.7	-22.1
Nara	-20.2	-30.3	-30.2	-27.6	-31.8
Wakayama	-34.0	-26.7	-19.5	-33.9	-24.8
Chugoku	-26.7	-32.7	-31.2	-27.0	-29.0
Tottori	-28.9	-33.0	-35.9	-24.2	-20.1
Shimane	-29.0	-27.8	-27.6	-21.5	-27.9
Okayama	-23.7	-36.4	-25.4	-29.1	-27.9
Hiroshima	-21.8	-33.0	-29.9	-27.0	-27.8
Yamaguchi	-27.5	-38.1	-35.6	-30.7	-32.8
Shikoku	-29.9	-34.6	-31.1	-27.8	-28.1
Tokushima	-27.1	-33.5	-34.8	-27.4	-25.1
Kagawa	-27.6	-29.1	-26.1	-25.1	-18.7
Ehime	-31.6	-36.0	-33.5	-30.3	-35.7
Kochi	-33.2	-43.2	-25.8	-29.0	-31.5
Kyushu/Okinawa	-28.7	-31.1	-28.6	-27.6	-26.3
Fukuoka	-30.1	-32.4	-31.3	-31.7	-31.7
Saga	-31.2	-34.7	-33.2	-30.9	-25.3
Nagasaki	-34.9	-34.9	-29.5	-30.3	-30.5
Kumamoto	-17.3	-26.1	-20.5	-26.8	-19.3
Oita	-30.5	-38.3	-37.7	-33.8	-32.0
Miyazaki	-40.1	-31.5	-26.9	-31.1	-30.0
Kagoshima	-24.1	-27.8	-26.3	-21.2	-18.2
Okinawa	-13.6	-23.8	-19.0	-11.6	-14.9

(10) Small Business Financing

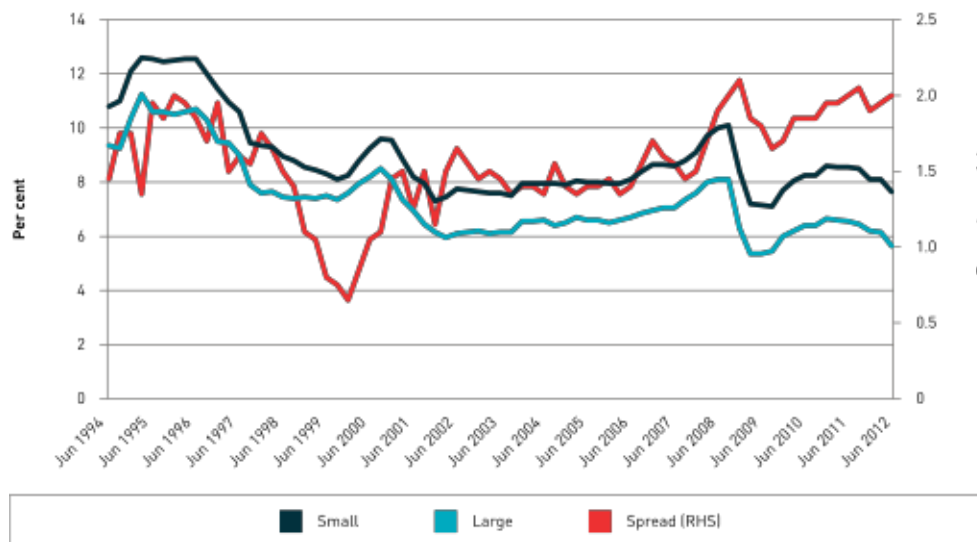
Small businesses need to have access to sources of finance in order to support their growth. Sources of finance include family, friends, credit cards, mortgages, unsecured loans — just to name a few. According to a small business finance roundtable hosted by The Reserve Bank of Australia in May 2012, (a) small businesses mostly meet their funding needs using internal equity funding and existing debt facilities; (b) eighty percent of small business loan applications are accepted while only a small fraction of businesses who seek venture capital funding are successful; (c) small businesses pay more, on average, for debt than both households and larger businesses. This is because smaller businesses are typically viewed as having more volatile revenue streams, making greater use of riskier forms of loan collateral, and making more

use of unsecured debt products; (d) the higher cost of small business debt facilities leads many smaller businesses to use household debt products to fund their business; (e) smaller businesses also make use of alternative sources of debt such as equipment and vehicle leasing; (f) other forms of finance for small businesses include debtor finance and debt funding from trade suppliers.

The CPA Australia’s Asia-Pacific Small Business Survey 2011²⁶ found that only 30% of businesses surveyed had a business loan at the time of the survey, and 30% of businesses needed additional funds, with the main reasons for requiring additional funding being to cover increasing expenses (41%) and business survival (another 41%). The survey also revealed that in 2011, a much higher percentage of business owners sought additional finance compared with the year before for the purposes of business survival, purchasing assets and covering tax payments, and about a third of businesses seeking finance reported difficulty in accessing additional funding. Specifically, they cited difficulty in finding a financier willing to provide funding to the business’ industry.

There are also some trends in business loan interest rates that can be observed. As Figure 10.1 shows, during 2001 to 2008, small businesses paid a premium of about 1.5% above the business lending rates paid by large businesses. However, this spread jumped to yet another 2% following the financial crisis, and has remained at this elevated level since.

Figure 10.1: Spread between Business Lending Rates



Data source: RBA Table F5; DIISRTE calculations

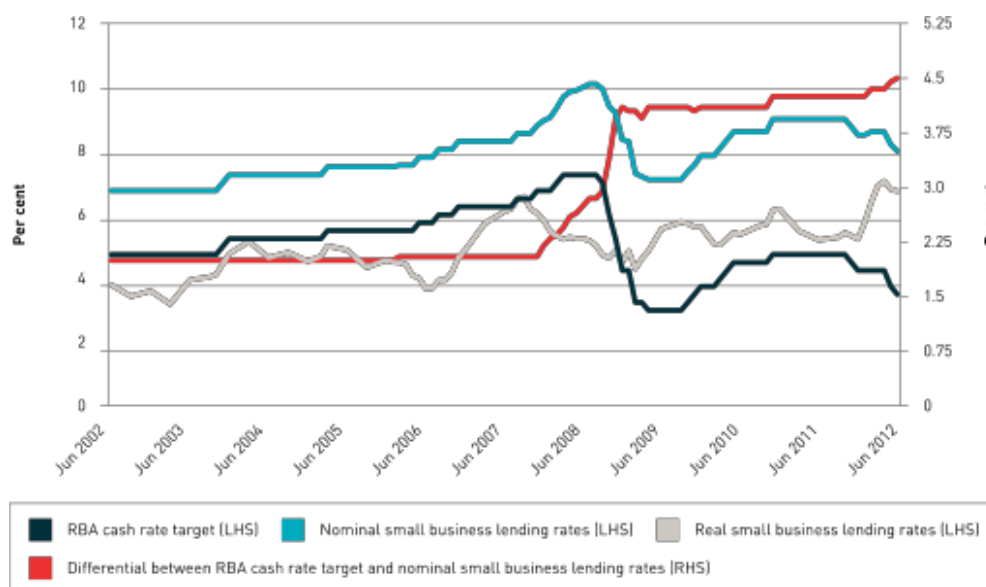
Notes: Business lending rates are the predominant or average indicator rates offered by major banks on loans to small businesses. The RBA makes the following notes: “The definition of small businesses differs between banks but is generally based on annual turnover, number of employees, amount of borrowings or deposits with the

²⁶ <http://www.cpaaustralia.com.au/professional-resources/business-management/small-business/asia-pacific-small-business-survey>

particular bank, or a combination of these”. For small and large businesses, the business lending rate is a weighted average and includes residentially-secured and other term and overdraft facilities (the composition may differ for the two business size categories).

The real small business lending rate reflects the cost of financing for small businesses, adjusted for inflation. The real small business lending rate increased significantly over the 10 years to the June quarter 2012 - from under 4% to around 7%. Small businesses are experiencing higher real lending rates to those prior to the global financial crisis, while the rest of the economy is experiencing lower rates. During the global financial crisis, the major banks only passed on around 70% of the cash rate target decreases onto small business and since the crisis have passed on more than 100% of the cash rate target increases. This is reflected in the sharp rise in the differential between nominal small business lending rates and the RBA (Royal Bank of Australia) cash rate target beginning around December 2007. Further, it appears that small business lending margins increased during the recent monetary easing in 2012 - taking this differential to a new peak of 4.5% in the June quarter 2012. Figure 10.2 shows the trends in these rates.

Figure 10.2: RBA Small Business Indicator Rate vs. the RBA Cash Rate Target



Data Source: RBA Table F05

Notes: Business lending rates are the predominant or average indicator rates offered by major banks on loans to small businesses. The RBA makes the following notes: “The definition of small businesses differs between banks but is generally based on annual turnover, number of employees, amount of borrowings or deposits with the particular bank, or a combination of these”. For small and large businesses, the business lending rate is a weighted average and includes residentially-secured and other term and overdraft facilities. The composition may differ for the two business size categories.

(11) Innovative Activity

The innovation is generally considered the introduction of a new or significantly

improved good or service, operational process, organizational/managerial process; or marketing method. A business with innovative activity is defined as a business that is undertaking work intended to or resulted in the introduction of an innovation. In recent years, the innovative activity has become an increasingly important measure of the status of SME development for many countries.

Using Australia data as our benchmark as we have, Table 11.1 below shows a little over 30% of micro businesses (employing 0–4 persons) undertaking innovative activity in 2010-2011, while almost 50 per cent of other small businesses (employing 5–19 persons) undertook innovative activity in the same period. This figure is well below the 62% for medium businesses and the 66% for larger businesses. Micro businesses introduced less innovative activity compared with other sized businesses - only 24.9% having introduced an innovation, compared with 43.6% of other small businesses, 56.0% of medium businesses and 53.7% of large businesses.

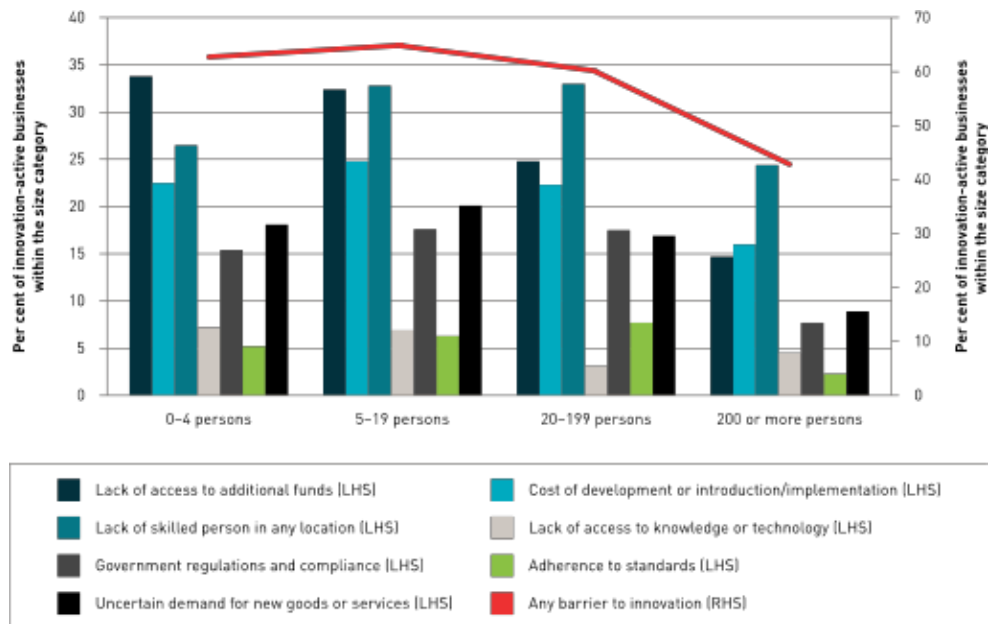
Table 11.1: Innovative Activity in Australia by Firm Size, 2010-2011

	Businesses which introduced innovation (innovating businesses)	BUSINESSES WITH INNOVATIVE ACTIVITY WHICH WAS:		Businesses with any innovative activity (innovation-active businesses)
		Still in development	Abandoned	
Employment size	%	%	%	%
0–4 persons	24.9	14.1	5.4	30.5
5–19 persons	43.6	26.2	6.3	49.6
20–199 persons	56.0	34.5	5.7	61.9
200 or more persons	53.7	38.2	7.3	65.9

Data Source: ABS Cat. No. 8166.0, Data Cube 2, Table 1

The statistics showed that there are significant barriers to innovation for SMEs. As indicated in Figure 11.2, significantly greater proportions of innovation-active micro businesses (62.7%), other small businesses (64.9%) and medium businesses (60.1%) faced some barriers to innovation compared to large businesses (42.8%).

Figure 11.2: Barriers to Innovation, 2010-2011



Data Source: ABS Cat. No. 8158.0, Data Cube 6, Table 1

It can be seen that although large businesses experience fewer barriers in general, the lack of skilled persons across all business sizes is a predominant barrier. This is also true for the cost of development, introduction or implementation of innovation. In this regard, internet access is an important factor. From the period 2009-2010 to 2010-2011 the proportion of micro businesses with internet access increased by 1.8 percentage points, while the proportion of internet access in other business sizes decreased by 0.4 percentage points. In 2010-2011, around a third of micro businesses and 53.8% of other small businesses had a web presence. This seems to suggest that e-commerce adoption by small businesses remains at a relatively early stage in Australia. In the same period, 24.4% of micro businesses and 32.3% of other small businesses received orders via the internet.

Meanwhile, the Sensis e-Business report (2012) ²⁷ found that 92% of SMEs were connected to the internet. Of the SMEs without internet connection, five percent of SMEs did not have internet connection because they did not own a computer. Of those SMEs connected to the internet, 38 percent reported that they used the internet for advertising and only 15% reported having an actual digital business strategy.

Some data from South Korea also revealed the trend of growth of Korean venture business, as indicated in Table 11.1.

²⁷ Sensis e-Business Report: <https://www.sensis.com.au/>

Table 11.1: Korean Venture Businesses and Inno-Biz

(Unit: No. of Firms)

	1998-2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Venture	27,166	8,778	7,702	7,967	9,732	12,218	14,015	15,401	18,893	24,645	26,148
Inno-biz	1,090	1,856	2,375	2,762	3,454	7,183	11,526	14,626	15,940	16,243	16,944

One important innovative activity is the investment on innovative activities or innovation investment. The innovation investment is, in general, not adequate for SMEs, so is to continuous research and development, due to several reasons. (1) As the large enterprise is typically able to diversify risk through multiple product lines, so the ability of absorbing the risk is higher for large firms. (2) As a result of the long innovation cycle and limited cash flow, the majority of SMEs tend to invest less in R&D and innovation. In Australia, for example, the innovation status for three-scale enterprise can be displayed in Table 11.2 as follows.

Table 11.2: The Innovation Status of Three-Scale Enterprises

Enterprises Scale	The Ratio of SMEs with R&D (%)	The Ratio of SMEs with Continuous R&D (%)	The Ratio of Enterprises with Innovation Activities (%)	Innovation Cost Growth over Previous Year (%)	The Ratio of Innovation Cost to Main Business Income (%)
Large	78.2	56.4	83.5	19.6	2.72
Medium	55.9	24.7	55.9	19	1.77
Small	63.3	13.4	25.2	42.2	1.03

Source: NBS, Thematic statistics 2006 National Industrial Innovation Survey

It can be seen that the ratio of SMEs with R&D is smaller than that of large enterprise with R&D, and the ratio of SMEs with continuous R&D is significantly lower than that of large enterprises. Meanwhile, the increase in the innovation costs for SMEs is significantly higher than

that for large enterprise. As a result, SME is generally weak and weaker in innovation, but there is huge potential for SMEs' innovation in the future.

(12) SMEs' Social Responsibility

Corporate Social Responsibility (CSR) is another measure that some countries used to assess the status of SMEs. While there are many critics about the negative externalities generated by the business activities of many companies in China, the issue of CSR has, interestingly, attracted enormous attention in China from all sides, the government, the media, academia, and the business community. This increased interest has resulted in much higher degree of awareness of international CSR-related standards, such as the United Nations Global Compact²⁸ and the Third Generation of the Global Reporting Initiative indicators (GRI-G3).²⁹ Meanwhile, the Shenzhen Stock Exchange released its Social Responsibility Guidelines for Listed Companies in 2006,³⁰ which is the third stock exchange initiative globally, and the Shanghai Stock Exchange released its "Social Responsibility Index" on August 5, 2009.³¹

(13) Intellectual Property Intensity

Intellectual Property Intensity is another measure that some countries used to assess the status of SMEs, and can be defined in different ways. In China, for example, Intellectual Property Intensity is defined as the ratio of enterprise intellectual property application number (or grant number) to corporate assets (or the number of enterprise employees). Intellectual Property Intensity takes into account of firm's assets, sales revenues, the number of enterprise and employees, which can provide more comprehensive view regarding the firm's intellectual property status, compared with enterprise intellectual property application number (or grant number) only.

²⁸ United Nations Global Compact: <https://www.unglobalcompact.org/>

²⁹ Global Reporting Initiative: <https://www.globalreporting.org/reporting/G3andG3-1/>

³⁰ Shenzhen Stock Exchange: <http://www.szse.cn/main/en/rulseandregulations/sserules/2007060410636.shtml>

³¹ World Federation of Exchanges: <http://www.world-exchanges.org/news-views/shanghai-stock-exchange-social-responsibility-index-released>

In 2006, China's State Intellectual Property Office launched a national survey of industry enterprise innovation. The statistics about the use ratio of three-scale enterprises in the patent, trademark, and several other fields is summarized in Table 13.1 below.

Table 13.1: The Use Ratio of 3-scale Firms in the Intellectual Property (2004-2006)

Enterprises Scale	The Proportion of the Total Number of Enterprises					
	Patent	Trademark	Copyright	Technical Standards	Technology Secret Protection	Branding
Large	52.7%	52.7%	16.4%	35.8%	67.3%	68.7%
Medium	22.6%	37.8%	5.8%	16.9%	41.1%	53.1%
Small	8.8%	22.6%	2.1%	7.1%	18.0%	32.4%

Note: the first 3 column of data are between 2004 and 2006, and the last 3 ones are in 2006.

Source: NBS, Thematic Statistics 2006 National Industrial Innovation Survey

It can be observed that SMEs apparently underperform in the patent, trademark, copyright, technology standard, commercial secret, branding and several other fields. Next, SMEs have the largest gap in the use of patents, copyrights and technical standards compared to large enterprises. To take patent as an example, the ratio of patent application for large enterprise is about 2.3 times higher than that for medium-sized enterprise and almost 6 times higher than that for small-sized enterprise. Finally, SMEs perform relatively better in trademark, technology secret protection and branding than in patent, copyright and technology standard.

3. The Imperative Issues Facing Global SMEs

It can be seen from the summarized statistics of the selected countries in Section 2 above, and the information collected from the research that the challenges facing SMEs development are tremendous, despite the increasingly important role that SMEs play in economic growth

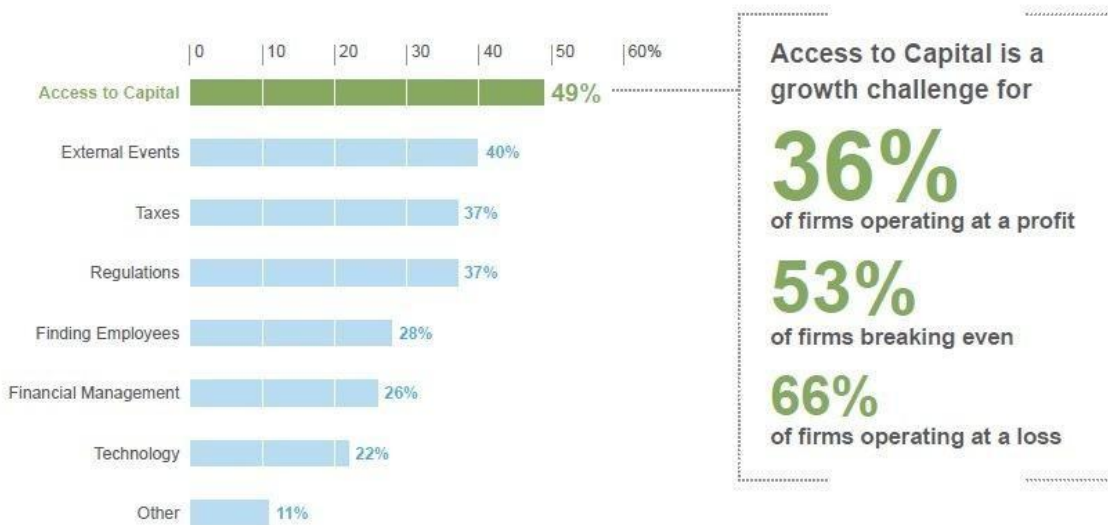
worldwide. The concrete issues that the SMEs encounter vary per country, but the primary challenges facing the SMEs shared many similarities globally. Among them are:

(1) Limited Access to Funding

Funding access is a top challenge for SMEs worldwide as they continue to seek financing for their various business needs. Even in the United States where the financial market is widely considered relatively more developed, this issue is still prevalent. According to a report issued by St. Louis Federal Reserve Bank,³² the ability to access funding was among the top challenges for both profitable and unprofitable SMEs, and about 50% of all firms report needing small amounts of funding of \$100,000 or less — mostly for operating expenses — and are using real estate collateral to secure loans. This can be seen in Figure 14.1 below.

Figure 14.1: SMEs' Access to Funding

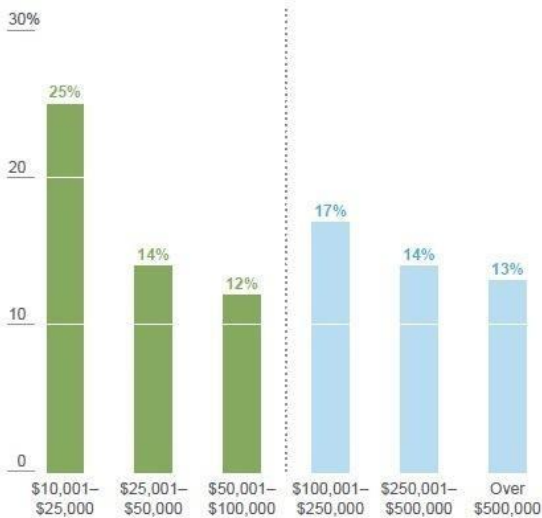
**Ability to access capital is widespread challenge—
even for profitable firms**



³² St. Louis Federal Reserve Bank: <http://research.stlouisfed.org/fred2/release?rid=191>

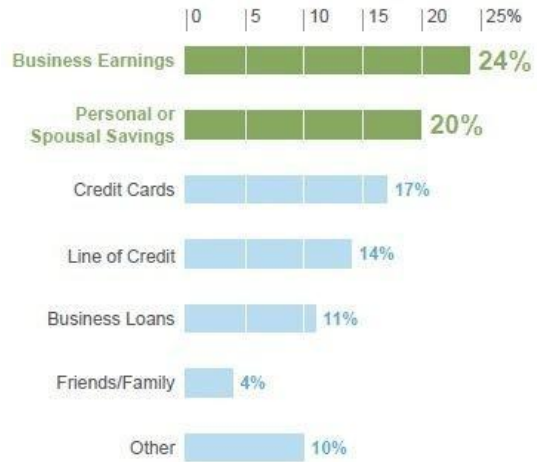
Amount of Financing Sought

Firms seek \$100k or less



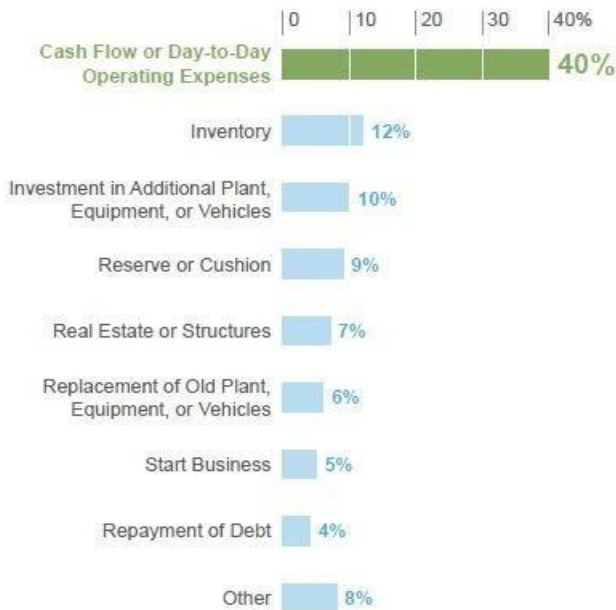
Primary Financing Sources

Business earnings and savings are primary financing



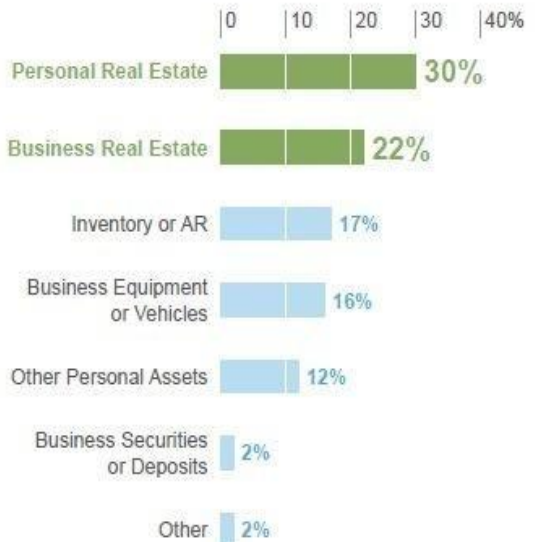
Reason for Seeking Financing

Firms need to fund day-to-day operations



Collateral Type

Firms secure loans with real estate



Source: St. Louis Federal Reserve Bank: <http://research.stlouisfed.org/fred2/release?>

The statistics show that, more than four years into the economic recovery from the financial crisis, the number of small business loans still stands at about three-quarters of its 2008 peak level. National data also shows that the number of small business loans—defined as \$1 million or less—declined by 4.7% in 2011.

A closer look further reveals that most of the recent decline was due to a drop in the number of microloans—those less than \$100,000. While lenders report easing credit standards for large and medium-size firms, loan standards for small businesses have not changed in the last four consecutive Federal Reserve Senior Loan Officer Opinion Surveys.³³ Evidences from small business owners suggest that the recent drop in lending may be due in part to weaker firms self-selecting out of the credit market. Fifty-nine percent of firms did not seek any financing during the last year. Half of the non-applicants said they did not apply because they did not think they would be approved.

In addition, the poll also suggests that the drop in microloans is not wholly due to lack of demand. In fact, applicants expressed strong demand for microloans—but firms also reported higher denial rates for these loans than for larger amounts. As the poll indicated, the reasons for the drop include:

(a) High demand for microloans but limited supply

The microloans (under \$100,000) are actually is highest in demand (58%) and are tougher to secure compared to larger loans. Risk factors that likely resulted in loan denials included: less-established firms, weaker sales performance, and infrequent banking relationships. In general, firms were seeking these microloans to finance their working capital such as payroll, inventory and cash flow.

(b) Discouraged borrowers no longer participated in the credit market

Almost 50% of the firms that did not apply for financing self-selected out of the applicant pool because they did not think they would be approved. Typically, these firms were small, had weaker sales, and primarily relied on savings and family sources for financing.

(c) Partial credit was a common outcome

Overall, 63 percent of businesses that applied for financing received credit—but not always for the full amount requested. Only 13% were approved for the full amount, while 36% received partial financing.

(2) Limited Access to the Technology and Market

As a result of lack of adequate funding, limited access to the technology and market became

³³ St. Louis Federal Reserve Bank: <http://research.stlouisfed.org/fred2/release?>

a common phenomenon for SMEs. In Mexico, for example, SMEs are typically defined as MSMEs (Micro, Small & Medium Enterprises), where about 65% of the MSME are of family type. According to Bank of Mexico and a survey conducted by Colegio de Contadores, the primary source of financing of MSME is the trade credit from suppliers, and not the loan from commercial banks or other financial intermediaries. Meanwhile, there are primarily four types of barriers to MSMEs' growth that were identified: (a) Lack of knowledge: MSMEs lack knowledge about markets, they lack market experience, and they lack the assistance offered by various government agencies and organizations, and terms of payment. For those who tried to explore the foreign market, the lack of knowledge about the foreign culture and language of the targeted country became a severe issue. (b) Lack of resources: in addition to lack of financial support, lack of human resources and technology were a barrier. (c) Regime procedures: a series of regime procedures that could significantly limit the development of MSME such as the tariff when the MSMEs exploring their way to internationalization. (d) Exogenous barriers such as political instability, corruption and bureaucracy, and the level of confidence in the business climate, to just name a few.³⁴

(3) The Impact of Increased Environmental Regulations

The impact of increased environmental regulations and standards on SMEs' productions is a huge challenge to SMEs all over Europe. The pressure on SMEs to move to products and processes with a lower environmental impact will continue to increase over the coming years, from both the market place and environmental legislations such as Small Business Act (SBA).

³⁵ The European Commission is taking actions to raise SMEs' awareness of environmental and energy-related issues, even though, within the framework of the SBA. Meanwhile, European Commission is also providing support to assist SMEs in implementing legislations, assessing their environmental and energy performance and upgrading their skills and qualifications.

(4) Significant Decrease in the Number of Enterprises and the Number of Employees

As indicated in the previous sections, the significant decrease in the number of enterprises and the number of employees were observed in many countries. In Japan, for example, the number of SMEs and Micro enterprises has been continuously decreasing in the last decade, down about 0.57 million, from 4.23 million in 1999 to 3.66 million in 2009. Similarly, the number of employees in Japan has also decreased considerably, primarily for SMEs. For SMEs, the number decreased by 1.88 million (17%) in the last decade from 10.98 million in 1999 to 9.1 million in 2009. Without adequate funding, market access and technologies, the decreased numbers of enterprises and employees should not come as a surprise.

(5) High Number of SME Bankruptcies

Another unsurprising issue facing SMEs is the higher number of bankruptcies. This

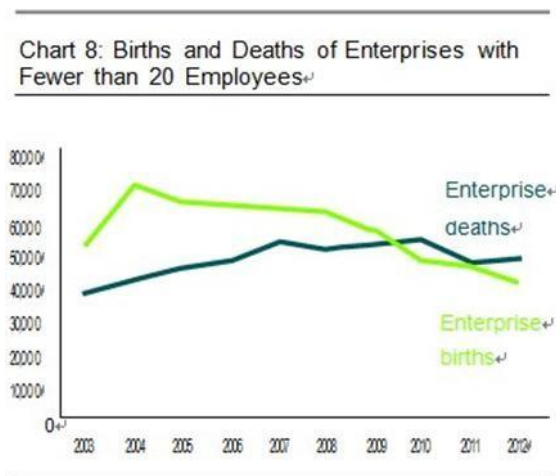
³⁴ Hernández Talonia, J. A. 2009, Políticas de Apoyo a la Internacionalización de las PYMES Mexicanas, Universidad de las Américas Puebla. December, 2009 http://catarina.udlap.mx/u_dl_a/tales/documentos/lni/hernandez_t_ja/capitulo3.pdf 2013-08-29

³⁵ European Commission: http://ec.europa.eu/enterprise/policies/sme/small-business-act/index_en.htm

frequently accompanies a decreased number of enterprises and employees. If using Japan, again, as an example, over 66% percent of companies who filed for bankruptcy had four employees or less; when widening the range to companies with employees of 20 people or less, the percent jumps to 93%. SMEs staunchly make up most of the bankrupt companies in Japan.³⁶

Similar phenomena can be found in other countries as well. The survival of SMEs during their infancy is a great challenge worldwide. In New Zealand, for example, there appears a trend since February 2011 for the SMEs with fewer than 20 employees that there were more deaths than births, as indicated in Figure 14.2 (original Chart 8).³⁷

Figure 14.2: Birth & Deaths of Firms with Less Than 20 Employees



Source: Statistics New Zealand Business Operations Survey 2011

(6) Low Sales and Low Profitability

For the survived SMEs, low sales and low profitability would then become an issue. In this regard, Japan could be a typical example. On the whole, the sales and profitability of Small and Micro enterprises in Japan are especially low compared to large and medium-sized enterprises. For example, as of 2009, the ratios of ordinary income to sales were 3.2% and 1.8% for large enterprises and medium-sized enterprises, respectively, while the ratio of ordinary income to sales for Small and Micro enterprises was -0.6%.

(7) Management Issue of SMEs and Micro Enterprises

Another important challenge facing SMEs worldwide is the various management issues that SMEs encountered on a daily basis. While the domestic and foreign environments surrounding

³⁶ White Paper on Small and Median Enterprises in Japan 2012: http://www.chusho.meti.go.jp/sme_english/whitepaper/whitepaper.html ³⁷ Statistics New Zealand Business Operations Survey 2011

SMEs are growing increasingly severe, a wide-ranging management issues that SMEs are facing on a day-to-day are also growing increasingly complicated and sophisticated, even in the developed countries such as Japan. In Japan, these issues appear as: (a) lack of detailed management support system corresponding to various problems and needs for consultation; (b) how to secure excellent human resources; (c) market development, including overseas expansion, needing to ensure proper and stricter subcontract transactions; (d) the needs to improve the technical capabilities, succession of techniques and skills; and (e) low capital adequacy ratio, which depends upon indirect financing from local financial institutions and the procurement methods.³⁸

4. Are the Public Goods in Place?

To meet the challenges facing the development of SMEs worldwide, the government of different countries have taken various actions to help resolve the issues that appear as obstacles to SME growth and development, as the issues facing the SMEs not only impact the SMEs alone, they affect the sustainability of an entire country's economic growth as well.

In Europe, the Small Business Act for Europe (SBA) was adopted in June 2008, reflecting the European Commission's political will to recognize the central role of SMEs in the EU economy, and for the first time put into place a comprehensive SME policy framework for the EU and its Member States.³⁹

SBA aims to improve the overall approach to entrepreneurship, permanently anchoring the "Think Small First" principle in policy making all the way from regulation to public service. They further aim to promote SMEs' growth by helping SMEs tackle existing and remaining problems that hamper their development. The Small Business Act for Europe applies to all independent companies, which have fewer than 250 employees. That means that it covers 99% of all European businesses.

SBA, in short, is a set of 10 principles, which are meant to guide the design and implementation of policies both at the EU and the national level, and to create a level playing field for SMEs throughout the EU. The hoped-for result is improvement in the administrative and legal environment so as to allow these enterprises to unleash their full potential in creating jobs and growth.

The 10 principles include: (1) Entrepreneurship, which is composed of nine indicators, measuring self-employment, entrepreneurship rate, entrepreneurial intention, opportunity-driven entrepreneurship, preference for self-employment, feasibility of becoming self-employed, share of adults who agree that school education helped them develop an entrepreneurial attitude, share of adults who think that successful entrepreneurs receive a high status in the society, and finally, media attention for entrepreneurship.

³⁸ White Paper on Small and Median Enterprises in Japan 2012:
http://www.chusho.meti.go.jp/sme_english/whitepaper/whitepaper.html

³⁹ European Commission: http://ec.europa.eu/enterprise/policies/sme/small-business-act/index_en.htm

(2) Second Chance, which is described by three indicators: time, cost to close a business, and degree of support for a second chance.

(3) Think Small First, which is built by three indicators that describe communication and simplification of rules and procedures, burden of government regulations, and licenses and permits systems.

(4) Responsive Administration, which expands on nine indicators, measuring time and cost to start a business, paid in minimum capital, time and cost required to transfer property, number of tax payments per year, time required to comply with major taxes, cost to enforce contracts, and full online availability of the basic public services to businesses.

(5) State Aid and Public Procurement, which draws on six indicators that measure the SME's share in the total value of public contracts awarded, state aid for SMEs, delay in payments from public authorities, e-procurement availability, amount of EU Regional Funds for entrepreneurship and SMEs in 2007-2013, and finally, the amount of EU EAFRD funds for business creation and development in 2007-2013.

(6) Access to Finance, which is built on nine indicators that measure rejected loan applications or offers, access to public financial support including guarantees, willingness of banks to provide a loan, relative difference in interest rate levels between loans up to and over EUR 1 million, total duration to get paid, lost payments, early stage of venture capital investments, strength of legal rights, and finally, the depth of credit information index.

(7) Single Market, which is captured by five indicators, measuring SMEs with intra-EU imports/exports, single market directives not transposed or notified, number of directives overdue by 2+ years, and finally, the transposition delay for overdue directives.

(8) Skills and Innovation, which is a mix of ten indicators that evaluate SMEs introducing product or process innovations, SMEs introducing marketing or organizational innovations, SMEs innovation in-house, innovative SMEs collaborating with others, sales of new-to-market and new-to-firm innovations, SMEs participating in EU funded research, SMEs selling/purchasing online, enterprises providing training to their employees, and finally employees participating in education and training.

(9) Environment, which builds on six indicators, namely: innovations with environmental benefits, SMEs that have introduced resource-efficiency measures, SMEs that have benefitted from public support measures for resource-efficiency actions, SMEs that offer green products or services, SMEs with more than 50% turnover generated by green products or services, and finally, SMEs that have benefitted from public support measures for production of green products.

(10) Internationalization, which describes the SMEs landscape along eight indicators measuring importing/exporting from outside the EU, and the cost, time, and documents required to import or export.

In its implementation, among many other things, the European Investment Bank Group increases the range of financial products it offers to SMEs, particularly mezzanine finance.⁴⁰ In particular, more funds will be made available by the European Commission for micro-credit, and access to cross-border venture capital will be facilitated. In addition, late payments can be crippling for SMEs.

In New Zealand, the Business Growth Agenda was developed to ensure the focus of the ministers and departments on the detailed ingredients that are needed to grow business, create jobs and make the most of the opportunities in the world.⁴¹ The six components identified as essential to businesses include: export markets, innovation, skilled and safe workplaces, infrastructure, natural resources, and capital markets.

New Zealand Government is progressively releasing the progress reports on each of these elements on the website of Ministry of Business and Innovation and Employment. These reports provide a high-level assessment of the most updated status in each area and detail the projects that the government is focused on and its vision for the area. Together, the reports outline a comprehensive summary of economic reform that can lead to New Zealand’s economic growth.

In South Africa, the Department of Trade and Industry released an Integrated Small-Enterprise Development Strategy in 2005,⁴² outlining the objectives for the period 2005-2014 and taking into account the successes and failures of the first ten years that followed the White Paper of 1995. The strategy is based on three pillars, which specify the “strategic actions” that form the core of the strategy: (1) increase supply of financial and non-financial support services; (2) create demand for small enterprise products and services; and (3) reduce small enterprise regulatory constraints.

The Integrated Small Business Development Strategy also identifies a number of institutions that have important roles in the implementation of the strategy. These agencies include: Small Enterprise Development Agency (SEDA), South African Micro-Finance Apex Fund (SAMAF), Khula Enterprise Finance Limited, Umsobomvu Youth Fund (UYF), National Empowerment Fund (NEF), Land Bank, and Mafisa.

In Mexico, a number of programs were developed to support MSMEs’ growth, which can be summarized as in Table 14.1 below.

Table 14.1: Programs for the development of MSMEs in Mexico

Segment	Program
New entrepreneurs	National Entrepreneurs Program:

⁴⁰ European Investment Bank Group: <http://www.eib.org/>

⁴¹ Ministry of Business, Innovation and Employment of New Zealand: <http://www.mbie.govt.nz/what-we-do/business-growth-agenda>

⁴² Department of Trade and Industry, South Africa: <http://www.hopeafrica.org.za/>

	Young Entrepreneurs Program National Business Incubation System Consultancy Seed Capital and Financing
Micro enterprises	National Program of Micro enterprises: National Program of Integral Modernization of the Restaurant Industry (Mi Tortilla) Training and Consulting National Program of Integral Modernization of Grocery Stores and Miscellaneous (Mi Tienda)
SME	National Program of Promotion and Access to Financing for SMEs Financing provided by National Ministry of Finance
Gazelles	National Program of Gazelles Enterprises: Mexican Business Accelerator, Fund of Technological Innovation, Technology Parks, Competitiveness in Logistics and Supply Central, Franchising and Mexican Business Information System
Tractor	National Program of Market Leaders: aimed at strengthening the large enterprises' management and business relationship with SMEs through partnerships that foster greater dynamism in trade.

Source: Observatorio PYME, PYMES en el Informe:

http://www.observatoriopyme.com/index.php?option=com_content&view=article&id=96:pymes&catid=34:articulos 2013-08-04

Considering the different characteristics of SMEs comparing with the larger sized enterprises, differentiation in the regulations, and preferred policy orientations towards SMEs are widely adopted by many governments around the world.

In the US, a designated government agency, Small Business Administration (SBA) was set up by Congress to manage all the SMEs related issues.⁴³ It is headquartered in Washington DC with over 70 local offices and 17 regional branch offices across the country. In addition, the U.S. House and Senate also set up Small Business Committee (SBC), and the President of the United States takes advices from SBA and SBC regarding the regulations and policy recommendations

In addition, many proactive fiscal policies was set up and implemented. Typically, these policies contains the following features: (a) small business credit guarantee mechanism; (b) direct funding to small businesses provided by some non-profit agencies and organizations; (c) the establishment of venture capital and more developed private equity market; (d) financing opportunities for small businesses through capital market. In the U.S., the financial support for

⁴³ US Small Business Administration: <https://www.sba.gov/>

small business through the Small Business Investment Company (SBIC) programs ⁴⁴ and a number of loan guarantee programs are very successful. SBA's investment company holds a significant portion of shares of SMEs. From the 1958 starting date, SBIC has made more than 10 million small business investments, and the total investment amounts is over USD \$57.2 billion. The creation of the U.S. NASDAQ market was totally designed to provide direct financing channels for small technology companies.

Small Business Act is another law that helps promote SMEs in the US.⁴⁵ According to the Small Business Act, 23% of government procurement each year must be given to SMEs to ensure small businesses to get a piece of pie of government procurement contracts. SBA has the authority to split the larger contracts into the smaller pieces. In addition, technical assistance, market access and information dissemination are also the primary focus of US SBA.

In Germany, government financial support for SMEs is primarily through investment subsidies, where unemployed people are given subsidies to start a business, recruiting of unemployed person, and technology innovations and development each year are also awarded by subsidies, preferential loans, and low interest loans.⁴⁶

In Japan, government financial support for SMEs was reflected in government-funded banks and loan guarantees through designated SMEs agencies and counter-guarantee agency that provide direct loans and guarantees for SMEs debt financing.⁴⁷

In China, State Council in 2011 issued nine policies to support SMEs' growth and development.⁴⁸ Among them, six are targeted to support SMEs' financing, including increasing credit support for small and miniature enterprises, correcting unreasonable fees for financial services, refining differentiation regulations of financial services for small and miniature enterprises, promoting reform and development of small financial organizations, and improving private loan development based on regulations and risk-control measures. The remaining three are focused on fiscal policies including tax support for small and miniature enterprises, strengthening financial service for small and miniature enterprises by financial institutions, and expanding the scale of SMEs, and supporting small and miniature enterprises by indirect ways.

Under the guidance of these general policies in supporting the SMEs' growth and

⁴⁴ Small Business Investment Company: <https://www.sba.gov/category/lender-navigation/sba-loan-programs/sbic-program-0>

⁴⁵ Small Business Act: <https://www.sba.gov/content/small-business-act>

⁴⁶ European Commission: <http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/> ⁴⁷ White Paper on Small and Median Enterprises in Japan 2012: http://www.chusho.meti.go.jp/sme_english/whitepaper/whitepaper.html

⁴⁸ State Council of China: http://www.gov.cn/lhdh/2011-10/12/content_1967589.htm

development, many actions have been taken by various level of government. Among them, a new type of financial tools that is specifically designed for SMEs in China was developed and implemented, which is SME Collective Bonds Issuance.⁴⁹

SME Collective Bonds Issuance was approved by the National Development and Reform Commission (NDRC), and the first pilot was launched in 2007. Until August 2013, 13 SME collective bonds have been issued, raised RMB 5.202 billion yuan, and 103 SMEs obtain direct financing. Basically, these bonds were issued with 3-year or 6-year terms, and the credit rating is concentrated in AA and AA +. Most of the bond issuance was secured by the local state-owned enterprises and state-owned guarantee companies.

The guarantee fee of SME collective bonds is generally 1%-1.5% of the total funds raised. As a result, considering the interest rate and guarantee fee, the cost of debt was typically in the range of 8.6% - 9.1%, which is equivalent to about 40% up for 5-year benchmark lending rates. Meanwhile, the cost of financing SME collective bonds kept increasing. Take bonds with AA + credit rating as an example, the interest cost of insurance was 5.03% in 2011, but jumped to 7.15% -7.58% in 2012, and further increased to 7.60% in 2013.

In addition, SME collective notes, SME collective trusts, SMEs short-term financing bills were also developed and launched to mitigate the imbalance between the demand and supply in the loanable funds markets for SMEs.

SME training projects is another action taken in China to help SMEs' growth and development. China's major national SME training projects include National SME Galaxy Training Project, Professional and Technical Personnel Knowledge Update Project, Millions of SME Informatization Training Project, and Enterprise Management Personnel Quality Promotion Project, among others and many local-government-sponsored training programs.

One of the most influential projects is the National SME Galaxy Training Project, which is organized by Ministry of Industry and Information Technology (MIIT) and Ministry of finance starting from 2003.⁵⁰ The project originally aimed at improving the quality of SME management personnel, and later, expanded to the training of all types of SME personnel. Since its inception, the project has completed training for 800,000 persons in management, policy and regulation areas. In addition, 300,000 persons received training in some concentrated areas for free, 500,000 persons obtained remote network training, and 1,100,000 individuals completed their training in

⁴⁹ <http://baike.baidu.com/view/1860246.htm?fr=aladdin>

⁵⁰ China's Ministry of Industry and Information Technologies (MIIT): <http://www.sme.gov.cn/>, <http://www.miitec.org.cn/rcgh/ShowClass.asp?ClassID=120>. Unless otherwise specified, all MIIT data come from this source.

informatization. Meanwhile, the project also led to many training programs sponsored and supported by local sources, which has trained so far nearly 6,000,000 people.

At the same time, many SMEs service agencies were established nationwide. According the statistics provided by MIIT, there are 818 SMEs service agencies nationwide, including 74 provincial agencies, 181 municipal agencies, and 563 county agencies. In some regions, the SME service agencies could even come down to local communities and local development zones. It indicated that the basic framework of SME service system has been formed in China.

5. The Resolution for SMEs' Challenges

The challenges facing SMEs are clearly wide spread. They cover a broad spectrum of areas and involve in both external and internal issues, market environment conditions, and government policy orientations. As a result, the resolutions for meeting the challenges facing SMEs would have to be a joint effort between SMEs themselves, governments, and the other institutions in the market place. In this “cocktail” prescription, several elements are fundamental:

First, financing is critical for the survival of SMEs. As 50% of SMEs can't survival over 5 years even in the well developed countries such as United States,⁵¹ getting financed becomes a necessary condition for SMEs' growth and development. However, the difficulties for getting financed for SMEs are well known. There are several reasons that cause these difficulties:⁵²

(a) Asymmetric information. The outsiders always know less than the insiders about what actually goes on at a firm. It is not only true for publicly-traded large corporations, but also, and especially, for SMEs. Either due to cost considerations or protection concerns, SMEs typically disclose less information to the general public than their larger corporate counterparts. As a result, SMEs are typically perceived as enterprises with much higher degrees of uncertainty and risk.

(b) Non-standardized financial information. In addition to less information released to the general public, the financial information possessed by the SMEs is also less likely to be standardized in a format that is in compliance with generally-accepted accounting principles. Due to limited resources, SMEs usually cannot afford to hire financial professionals to prepare their financial documents, or contract public accounting firms to audit their financial statements. As a consequence, even when SMEs consent to providing their documents, not much of the information can be actually used by financial institutions when these institutions attempt to make financing decisions about SMEs.

(c) Lack of adequate collateral for bank loans. Because these firms are small, the amount

⁵¹ US SBA: https://www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf

⁵² Wang, J.G. and Yang, J., 2014, Who Gets Funds from China's Capital Market? Springer Publisher

of assets that they can use as collateral for bank loans are typically less and, in frequent cases, inadequate. When measured against the financing values that most SMEs request and need, the collateral they possess are usually not enough to meet the requirements of banks.

(d) Insufficiency of credit records. Commercial banks typically use the credit history of their borrowers as an important reference when making financing decisions. However, many SMEs usually don't have any history of borrowing money from banks due to difficulties in securing bank loans as described above. As a consequence, they are usually rejected for bank loans due to the lack of credit history. Clearly, this is a classic Catch-22, and creates a vicious cycle. If a SME doesn't have adequate credit history, it won't be able to get credit; if it cannot get credit, it is almost cyclically banned from ever being able to obtain a loan.

(e) Management flexibility in changing a firm's risk. The classic agency problem normally occurs in large corporations due to the separation of ownership and management. Small businesses usually can avoid this problem because the owner and manager are typically the same person. However, retaining the functionality of ownership and management in one person may increase the flexibility, in both a positive and a negative sense, of the firm's operations. On the one hand, small businesses can change the direction of their businesses or the composition of the firm's assets more easily and rapidly in response to the changes in technology or business conditions. At the same time, however, this flexibility may also increase the uncertainty about the future operations and development of the firm, hence, increasing the firm's risk.

(f) Lack of economy of scale as a disincentive for financial institutions. From the perspective of the commercial banks, it must put in the same amount of effort and procedure to clear a firm for lending, regardless of the size of that firm; it must undergo the same application reviews, credit assessment, comprehensive analysis, on-site investigation, and final release of funds, all of which are consuming time and resources. Given the relatively smaller size of the loans requested by SMEs compared to those by larger corporations, it would be difficult for the commercial banks to achieve the same economies of scale when lending to SMEs. Needless to say, commercial banks, on the whole, prefer larger corporations.

As a result, commercial lending for SMEs, especially for micro and small firms, may represent a real time example of "market failure". Because of this failure, it has become imperative for SMEs to explore alternative financing methods. As indicated by and experienced in some economies, equity financing, segmentation of loanable funds market, and government guarantee could be some feasible and effective alternatives.

For technology oriented SMEs or Tech Start-ups, or Inno-Biz, equity financing appears to be the preferred approach to get financed. The nature of tech start-ups is their high risk profile and lack of immediate and short-term cash flow. It totally contradicts the requirements that commercial banks typically require — low risk financial projects and periodic interest payments, with a relatively stable guarantee of the principal pay-back at maturity. As a result, the angles, venture capitals and private equity funds provide good solutions for these Tech Startups. The establishment of equity exchange facilities such as the OTCBB and Pink Sheet in the US and New Third Board and various regional equity exchange centers in China provide a convenient exit for these early or earlier investors.

For these non-tech-oriented or more traditional SMEs, a loanable funds market with segmentation should be created. Just as firms of different sizes inherit different level of risk, the smaller amount of loan transactions for the SMEs may not justify the economies of scale for larger sized commercial banks. As a result, a multi-layer banking system should be in place to satisfy the needs of multi-layer loan demanders, especially the layer that contains small financial institutions servicing SMEs. Needless to say, allowing for the entry of private capital into the loanable funds market and a full coverage of segments is a pre-requisite for multilayered market. This is especially critical for developing countries that only have limited numbers of banks with permits that dominate the market place.

When micro or small establishments that provide necessary functions to the economy but are not able to pass the regular due diligence process of commercial banks, “market failure” occurs. For these firms, government intervention could be the last resort. The SBA’s loan guarantee program in the US is a successful example in this regard. In China, also various government backed guarantee companies have emerged in the recent years, which is another welcome development in tackling the issue of SME financing.

Second, government support is an irreplaceable ingredient in the recipe for the growth and development of SMEs. In addition to these “market failures,” the healthy growth of SMEs from their infancy also require care from the government. As learned from the experiences and best practices of various countries, there are a few things that governments need to put in place:

(1) Set up designated government agencies with adequate authority to coordinate all SMEs’ related issues. US SBA is a successful example in this regard. It is a designated agency that reported to Congress directly, with the authority to review the government contracts, approve the lending rate to SMEs under government guarantee programs, and influence the making of the fiscal policies with SMEs impact.

(2) Preferential government policies, especially the fiscal policies in the areas such as government procurement, tax treatment, and professional services and assistances. While, in general, monetary policy could be more general and non-differentiable to different companies with different size, monetary policy with specific target for some specific industries or some particular groups of companies such as SMEs are still possible. The monetary policy carried out by China’s central bank in the recent months demonstrates how a monetary policy targeting a specific industry (such as real estate) and specific groups (such as SMEs) can be designed and implemented.⁵³

In developing countries without a well-established legal system, the set-up of such a system becomes critical, especially for these tech-start-ups that innovate. The bottom line is that a well-established and fully executed legal system will reward innovators for their innovations, protect the values and benefits that were created by their innovations, and punish violators of copyright. Without this basic legal environment, many potential innovators will be discouraged from the activity due to risk and fear of infringements. As a result, the establishment of an

⁵³ <http://wallstreetcn.com/node/209299>

adequate legal system is fundamental and necessary for the growth and development of SMEs, especially for tech oriented start-ups.

(3) Localized service is another key element. The preferential policies for SMEs are important, but how the SMEs can access them is also important. In the US, for example, there are many SBDCs (Small Business Development Center) that are set up in universities, and many export assistance centers are set up across the country that conveniently integrate resources from government, businesses and academia in a one-stop-shopping service package for SMEs.

Third, the non-governmental organizations (NGOs), industry associations, and various business organizations can play an important role in supporting SMEs' growth and development. In particular, there are two special roles that either only NGOs and business organizations can play, or they can do better than any other entities in the society, including government.

The first one is the information sharing and dissemination, including information in technology, financing, and markets. Governments face budget constraints, so it is difficult for them to collect and disseminate industry specific information to SMEs in a specific industry in a timely manner. The search cost and transaction cost of information is also frequently unaffordable for many SMEs themselves. As a result, NGOs, including industry specific organizations could provide a much more efficient mechanism in information collection, sharing, and dissemination, as these organizations are typically with better and timely industry-specific knowledge, and possess more convenient communication networks and transaction channels with their members.

The second one is the self-regulation. Law and government regulations will never be able to cover every single aspect of society, especially not in industry, and even those regulations that are passed come with a time lag. Because of this, industrial self-regulation has become critical for the healthy growth of industry, which includes SMEs. It is especially true for some emerging technology industries in emerging countries, such as online lending in China. In a matter of just a few years, hundreds of online lending platforms mushroomed nationwide. While these platforms did fill a gap in inclusive financing by providing the capital to these traditionally underfinanced, they were also creating tremendous risk for the investors, as evidenced by the 100 or so platforms that went bankrupt in a single month in October 2013, which involved billions of RMBs.⁵⁴ While regulation is apparently needed, the degree of regulation is still unclear to both regulators and industry practitioners. Over-regulation may unnecessarily slow down the innovations, but the under-regulation may not be able to play the role that the regulation is supposed to play. During this "transitional" period of time, industrial self-regulation that is set up by industrial associations could be a best solution to fill the gap.

Fourth, utilizing internet technology will become increasingly critical for SMEs as they grow in the Internet Era. The benefits to SMEs from the internet could be multi-dimensional and tremendous in magnitude. In the area of financing, debt financing through online leading and equity financing through crowdfunding provided SMEs with alternative channels to obtain the

⁵⁴ Wang, J.G. and Xu, H. Eds., 2015, *Financing the Underfinanced – Online Lending in China*, Springer Publisher

needed financing in a much more workable and efficient way, and with needed financing, SMEs can grow faster.

In the areas of marketing and market access, internet technology will allow SMEs to reach markets beyond their geographical headquarters without leaving the office — it's a concept that was unfathomable before the web. In this age of globalization and regionalization, reaching out to international markets is becoming a basic necessity for survival and success, true not just as a "luxury" for privileged Fortune 500, but also for SMEs. Internet technology enabled SMEs to break through the boundaries that restricted them financially and logistically before, allowing SMEs to access the international market with affordable costs as they've never been able to before.

Using internet technologies will allow SMEs to market their products and services in a more cost-effective way with much wider coverage. With internet-enabled ad platforms such as email, designed web pages, texts, blogs, and social media, a firm can conceptually achieve the same level of exposure (if not necessarily the same impact) as they would placing an ad on a top ranked newspaper or purchasing a spot on a primetime TV show. It is both a socially relevant and highly cost-effective way for SMEs to generate exposure without shelling out the kind of dollars that traditional advertising platforms would require.

In the area of management, managing a small firm with global presence, which is not uncommon for SMEs today, would be difficult without internet-based technologies. Communications, data transfer between headquarters and local offices located in different geographical regions would be otherwise dysfunctionally cumbersome, while logistics and cargo tracking between different destinations all heavily depends upon the internet-enabled technologies. These technologies not only provide the SMEs with feasible logistical options, but also made these options affordable for SMEs.

6. Conclusions

In summary, SME is a dominant form of business that occupies a very unique position in the economy of any given country around the world. They employ the most amount of human capital and create significant employment opportunities, are major driving forces of innovation, and typically contribute to more than half of a nation's GDP. However, due to their relatively smaller size, and the fact that most are in the early stage of their life cycle, SMEs inherit many small-firm-specific risks, and encounter many external and internal challenges that larger-sized firms tend not to experience. As a result, resolving these challenges will take a multi-dimensional strategy, and require joint effort from governments, NGOs — which include industrial associations and business organizations — larger corporations and SMEs themselves. More importantly, these resolutions need to be creative.

As reported in this White Paper, tremendous efforts have been made in different countries across world to this effect, and many effective best practices have been developed in order to meet the challenges facing SMEs. Policy makers, business leaders and academic researchers worldwide have been increasingly recognizing the importance of SMEs to a country's growth and development.

It has become the consensus that SMEs are important not only because of the sheer number of them but also because of the crucial roles they play; many Fortune companies grow from SMEs. Therefore, it should be reasonable to state that SMEs, as a whole, are standing at a critical juncture at the beginning of this new century, still facing down immense challenges but better equipped with new technologies and stronger support from the public and private sectors than ever before. We truly believe that SMEs will play an even more important role in the growth and development of world economy in the years to come, and we hope this White Paper has properly and accurately analyzed the well-being of SMEs at this critical moment.