

**The Global Financial Crisis:  
Impacts on SMEs and Government Responses**

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# Abstract

This research examines the recent global financial crisis' (GFC) impact on small- and medium-sized enterprises (SMEs) and analyses governments' responses.

According to most literature, SMEs already faced obstacles prior to the GFC, such as paying high taxes, overcoming low profitability, being affected by rising business costs, finding qualified labour, dealing with increasing competition, etc. The GFC has had serious repercussions for SMEs with respect to financing, markets, and liquidity.

In order to explore in depth the governments' responses, qualitative methods are employed to test the following three research questions:

- 1) To what extent did governments aim to assist SMEs to survive the GFC? What types of programs have been implemented to address new and existing obstacles?
- 2) Did governments apply appropriate strategic initiatives to realize their goals? If the initiatives could not achieve the governments' original goals, what obstacles did they address?
- 3) Did governments tend to help SMEs more after the GFC? Did governments give up on disadvantaged firms or did they try to help them survive the crisis?

Analysis revealed that, as a result of the GFC, governments developed programs aimed at new obstacles and at some of the existing ones. The aims did not differ materially for developed and less-developed economies. Financing and taxation programs tended to be designed to achieve

their goals directly, where other programs tended to achieve them in a more indirect manner.

Overall, government initiatives covered most of the serious obstacles faced by SMEs and government assistance programs aimed at SMEs tended to have been augmented in light of the GFC.

**Key words:** SME, government program, public policy, global financial crisis, financing

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# 1. Introduction

This research examines the impacts that the global financial crisis wrought on SMEs and governments' responses to this international downturn. Since 2008, the global financial crisis (GFC) has, and continues to have, profound effects on all sectors, across all economies. As shown in the literatures, small- and medium-sized enterprises (SMEs) have been particularly affected by the financial crisis: demand has fallen, suppliers are less likely to sell on credit; clients are more likely to postpone payments; banks and investors are more conservative; and national and international markets are shrinking. Compared to large firms it is relatively more difficult for SMEs to survive in this kind of economic situation: SMEs have fewer financing sources; they have weaker financial structures; and their smaller size make it extremely challenging for SMEs to downsize or diversify economic activities.

Yet the survival (and growth) of SMEs is essential for governments all over the world. Firstly, it is widely known that the birth and growth of SMEs create job opportunities and add to the well-being of national and regional economies. For instance, employees of SMEs account for more than 50% of the private sector labour force in the Organization for Economic Co-operation and Development (OECD) member countries, and in European Union (EU) member states the percentage is greater than 99% (OECD, 2009c). Secondly, SMEs contribute substantively to countries' Gross Domestic Products (GDP). Moreover, SMEs spur overall innovation. Thus, due to these factors, governments generally craft policy measures designed to improve the environment for SMEs. Some policies (such as tax reductions) seek to expand the market;

others (such as loan guarantee programs) attempt to redress perceived financing difficulties; and others (such as reducing social security charges) focus on the labor market.

Given the importance of SMEs and the difficult situation they face due to the global financial crisis (GFC), this work explores the impacts that the financial crisis has had on SMEs and governments' responses to the issue. This paper seeks to answer the following questions:

1. What obstacles are governments aiming to help SMEs conquer? SMEs are important to economic prosperity yet vulnerable so it stands to reason that governments should help them to survive this financial crisis. This work will describe policies that several national governments enacted to assist SMEs in coping with the GFC.
2. Have governments applied strategic initiatives that would help achieve their goals? If not, what obstacles can government solve? Governments may apply various strategic initiatives to achieve their goals; some initiatives may address obstacles other than their stated goals. This work examines initiatives governments have applied for each type of program; if they are applying appropriate strategic initiatives to meet their goals, and if not, what obstacles those initiatives could solve.
3. Did governments tend to help SMEs more after the GFC? Did governments give up on disadvantaged firms or did they try to help them survive the crisis?

Since the data is secondary data, the author did not have an opportunity to ask the respondents questions that were directly related to the research questions. While this research

reflects the aims and strategic initiatives that governments have implemented to assist SMEs, it is limited by the fact that the efficiency of those programs is not evaluated in this thesis.

This research brings new insight to the topic of SMEs and the GFC. First, this thesis will assist SME owners in gaining a clearer understanding of the nature of the assistance programs available. Many SMEs are not well informed about government policies, or are suspicious of the manner in which the policies are applied. This research examines policies and the strategic initiatives governments have applied to assist them, in addition to the program targets, so that SME owners are aware of government-backed assistance programs, and can then make a well-informed decision in choosing appropriate programs.

The results of this research can also be used as a government reference. For instance, this dissertation includes taxonomy of governmental responses to the financial crisis; therefore, governments can learn about best practices from around the world. The policy evaluation in this thesis will assist governments in better understanding and developing the best policy for their particular contexts.

This dissertation also contributes to future research on government policies, by examining the governments' responses to the GFC.

## **2. Literature Review**

### **2.1 SME background**

#### **2.1.1 The role of SMEs**

SMEs play a particularly important role in a country's economy. This is primarily because SMEs generate a disproportionate share of job opportunities: the number of employees of SMEs in the Organization for Economic Co-operation and Development (OECD) area counts for over 50% of the private sector labour force and in the European Union the percentage is greater than 99%. Second, SMEs contribute substantively to the Gross Domestic Product (GDP). Lastly, but perhaps most importantly, SMEs spur innovation (OECD, 2009c). Thus governments are carrying out various policies to improve SMEs' situations. Some policies (such as tax reduction) aim at expanding the market; some (such as the loan guarantee program) seek to redress financing difficulties; and others (such as reducing social security charges) target the labour market (OECD, 2009c).

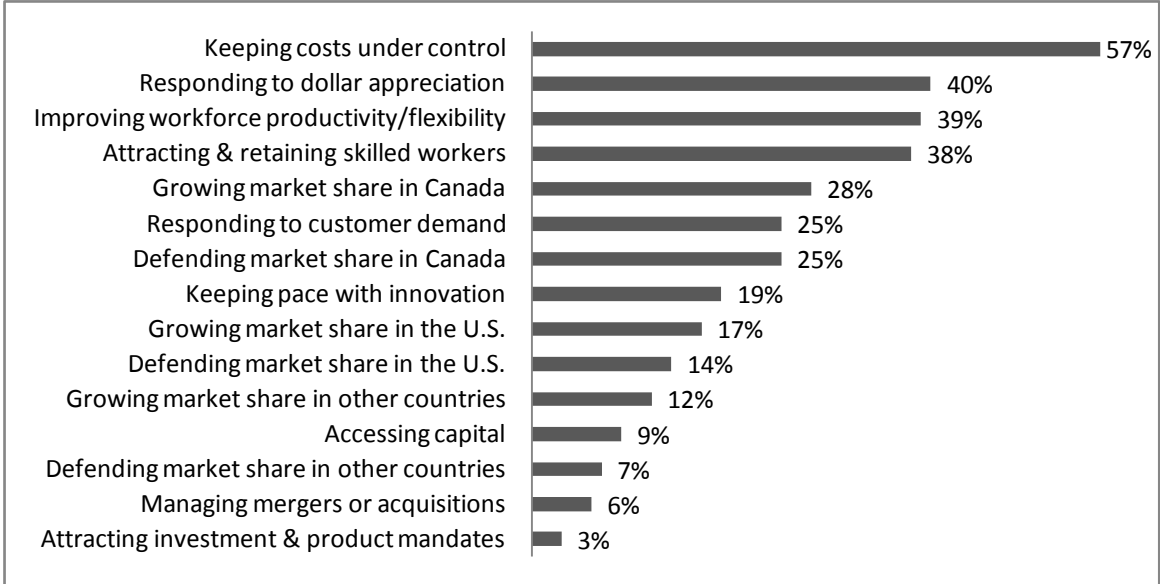
#### **2.1.2 SME obstacles prior to the financial crisis**

Before the global financial crisis SMEs were already facing multiple obstacles. According to a 2004 survey by Statistics Canada, SMEs' main impediment to growth was levels of taxation: 47% of SMEs reported this as a serious problem. This was followed by low profitability: 38% of SMEs reported this as a severe issue. Finding qualified labour, consumer instability, insurance rates, and government regulations were also considered barriers to SME growth, with about one third of SMEs reporting each of the above issues as serious problems. Only 20% of SMEs viewed obtaining financing as a serious problem, and merely 13% SMEs regarded management capacity

as a serious setback. In the same survey, which was conducted in 2007, 56% of SMEs listed rising business costs as a severe obstacle. Finding qualified labour was the second largest issue, with 41% SMEs considering it as a serious obstacle. Increasing competition, another problem that had not even been considered in the previous survey conducted in 2004, became the third important issue for SMEs. Other issues, such as insurance premiums, instability of consumer demand, government regulations, obtaining financing, and management capacity also remain. Environmental regulations and compliance was also included in the 2007 survey, but did not rank as a serious obstacle. Levels of taxation and low profitability were not among the survey options.

A survey done by Canadian Manufacturers & Exporters in 2007 (in BDC, 2008) also shows the SMEs’ anticipation of challenges they will face in future. The result of this survey is presented by the following chart (Chart 2.1).

**Chart 2.1 SMEs’ anticipation of future challenges (BDC, 2008)**



These problems were not only issues for Canadian firms: According to Bartlett (2001), SMEs in Slovenia were, during the same time period, also facing barriers of institutional environment including bureaucratic red tape and external financial constraints including the high cost of capital. In Albania, fiscal constraints, including high taxes, financial constraints, and institutional environment were viewed as obstacles faced by SMEs (Hashi, 2001).

The rankings of obstacles may be different in other countries, but the existence of these obstacles is undeniable in a global perspective.

### **2.1.3 SME financing situation prior to the GFC**

Financing from banks, venture capital (VC) / private equity (PE), and informal financing for SMEs were all impacted by the GFC.

#### **2.1.3.1 Bank financing**

The bank financing situation before the global financial crisis was predominantly not viewed as a significant challenge for SMEs. According to surveys conducted by Statistics Canada in 2004 and 2007, the overall debt financing approval rates for those two years were 83% and 94% respectively (Industry Canada, 2009).

However, bank financing is more of a challenge for certain types of SMEs. Beck et al. (2008a, p. 2) established that “banks in developing countries tend to be less exposed to SMEs, provide a

lower share of investment loans, and charge higher fees and interest rates". They also indicate that "small firms and firms in countries with poor institutions use less external financing, especially bank financing" (Beck, 2008b, p. 467). Riding et al. (2010, p.1) found that "new growth firms and new exporter firms and new exporter firms are especially likely to seek external financing yet less likely to obtain financing".

With regards to institutions that were more likely to provide loans to SMEs, this has been a topic of much debate. Berger and his co-author (2005) suggested that smaller banks were more likely to lend to SMEs, because small banks are better able to collect and act on "soft" information, and large banks "are less willing to lend to informationally 'difficult' creditors" (Berger et al., 2005, p. 237). However, this theory was challenged by de la Torre et al. and Berger has even updated his views on this specific point in his later work. Berger and Udell (2006) found that the former lending paradigm based on "soft" information and hard information is misleading; it ignores other types of transaction lending (in Berger et al., 2007). Currently, research holds there are no significant advantages or disadvantages for large banks in overall small business lending, or in lending to small businesses with a lack of credit history (Berger et al., 2007). Moreover, de la Torre et al. (2008) indicated that all banks are catering to SMEs, and multiple-service banks are more attractive to SME businesses.

### **2.1.3.2 Financing from venture capital, angel and private equity**

Although they are more willing to take risks, venture capital firms and angels are less likely to be financing sources for SMEs. Surveys of SME financing repeatedly demonstrate that

entrepreneurial receipt of risk capital from professional investors is an extremely rare activity (Murray et al., 2007). 2001 Global Entrepreneurship Monitor study data “guesstimates’ that less than 0.5% of all nascent entrepreneurs receives either venture capital or business angel finance at start-up” (Bygrave et al., 2003, p.114). During 2002 to 2004 only a little over 1 in 50 SMEs in the United Kingdom (UK) obtained funding from a venture-capitalist or private equity firm, while approximately 1 in 10 received funds from existing shareholders or friends (Fraser, 2004).

Compared with venture capital, angels are more likely to be a financing source for SMEs. It is estimated that there is minimally a flow of \$1.9 billion in business angel capital in Canada during 2004; however, institutional venture capital in 2004 was only \$1.8 billion, of which 60% were “follow-on” (Riding, 2008). In the US, angel investment is involved in 30 to 40 times as many deals as venture capital funds (Van Osnabrugge and Robinson, 2000). Moreover, angels better accommodate SME owners’ needs by having lower rejection rates, longer exit horizons, and target rates of return similar to those of institutional investors even though they apparently assume more risk (Harrison & Mason, 1992). It has also emerged that angels often serve as links to venture capital for technology SMEs (Madill et al., 2005, p.107).

### **2.1.3.3 Other methods of informal financing**

Individual investors also account for a significant amount of SME financing. In 2004, the total amount of informal investments in Canada reached over \$7.48 billion, of which only \$1.9 billion

was from angel investors (Riding, 2008). As a comparison, in the UK, approximately 1 in 10 SMEs in the UK had received funds from existing shareholders or friends (Fraser, 2004).

Trade credit can also be used as a source of financing. Petersen & Rajan (1997) found that SMEs could be financed by their suppliers rather than by financial institutions. Nonetheless, not all SMEs can reasonably obtain this kind of financing. “Commercial lenders were less likely to approve loan applications from early stage growth firms, and especially so for applications from young, growth-oriented SME exporters” (Riding et al., 2010, P.1).

The literature provides a sense of the expanse of the informal financing. The literature also demonstrates that SMEs with fewer opportunities of obtaining bank or professional investor financing may not necessarily have a better chance of getting other types of informal financing.

## **2.2 Government SME policies prior to the GFC**

Before the financial crisis, most governments had already enacted a number of policies to support SMEs.

In Canada, tax policies were used to promote SMEs. Tax rates for small firms included low rates (12% for firms with income less than \$200,000 during the 2000-2004 period); tax-free capital gains rollovers for small business; and fewer capital gains rates combined with a drop in personal tax rates (35% refundable R&D tax credit) (RBC, 2002).

Certain policies that control the regulatory environment were also implemented. Starting a new small business can be time-consuming, onerous, and costly; however, both Canada and the US had extremely open policies for new SMEs, which made them the most advantageous countries in which to start a new business (RBC 2002). Other countries such as Tanzania also have similar policies (Tanzania Ministry of Industry and Trade, 2002). Another regulatory burden faced by SMEs was labour market controls on hiring and firing employees. Canada, the US and the UK were among the lowest levels of such regulations in OECD countries. This indicates that labour market policies in these countries greatly benefit SMEs. Furthermore, an OECD study showed that Canada had lower than international averages on general product market regulatory barriers (RBC 2002).

Some countries enacted policies to help SMEs access bank financing. Prior to the global financial crisis, there were already more than 170 countries that had implemented loan guarantee programs (Levitsky, 1997; Llisteri, 1997, in Nitani & Riding, 2005). The majority of the countries, including Korea (Lee et al., 2006) and Japan (Nitani & Riding, 2005), had the objective of facilitating formation and growth of SMEs by easing access to debt capital (Levitsky, 1997; Llisteri, 1997, in Nitani & Riding, 2005). Certain governments also implemented supporting policies that were best suited to their specific economic situations. In Tanzania, for example, the government enacted policies to provide financial services to SMEs in the agricultural sector, the backbone of Tanzania's economy (Tanzania Ministry of Industry and Trade, 2002).

With a view to providing further assistance in the area of SME financing, certain policies encouraged informal investors.

“Government policy to stimulate growth, innovation and especially the creation of new enterprises is rather focused on access to finance mainly through increasing the supply of capital. As formal venture capitalists are moving towards larger deals and shifting their investments to a later stage of development, creating a ‘second’ equity gap, business angels become more important in the financing of seed, early stage and second round phases. Government policy to stimulate [angel] financing should hence be considered as a priority” (Aernoudt, 2005, p.359, in Riding, 2008).

Such incentives have been observed in the UK (Boyns et al., 2003) and in at least eight states in the US (Galoozis, 2005). Yet those policies were also questioned by a number of researchers. Gompers and Lerner proposed that “encouraging individuals to make such small investments may be counter-productive and socially wasteful if the financial returns are unsatisfactory and the companies financed are not viable” (Gompers and Lerner, 2003, p.291). Moreover, rates of return on informal investments made by friends and family members of business founders have had dismal results (Table 2.1). “It may be counterproductive for public policy to encourage ‘amateur’ informal investors, yet stimulation of value-adding business angel investment seems well advised” (Riding, 2008).

Except for programs listed above, governments have also implemented SME policies that encourage innovation. In Japan, New SME Act (1999) was carried out to support “self-efforts” for business innovation (Yokoshima, 2007).

## **2.3 Impacts of the GFC on SMEs**

The GFC has severely impacted SMEs. SMEs are more vulnerable because they are smaller and rely more on external financial resources. Their small size made them difficult to downsize during the crisis, they are less diversified in economic activities, and the crisis weakened their financial structures. Moreover, they had lower or no credit ratings, and fewer financing options, but were still heavily dependent on credit (OECD, 2009c). These factors have made SMEs more sensitive to the GFC.

### **2.3.1 The impacts on SME financing**

#### **2.3.1.1 Impacts on bank financing**

The GFC made it much harder for SMEs to access bank financing. “The stagnation in lending is true even of banks in countries where governments have deliberately strengthened banks’ balance sheets to allow them to grant additional credit to SMEs and/or where credit guarantee schemes exist”(OECD, 2009c, p.7). In Europe, debt offerings and private placements decreased by 77% to \$1.1 bn, according to Ernst & Young (E&Y) (Dorey, 2009, p.16-17). Furthermore, a survey conducted by Industry Canada illustrates that the overall debt approval rate in 2009 fell to 79% from 94% in 2007 and 83% in 2004. For young entrepreneurs, this rate was only 51% in 2009 (Industry Canada, 2009).

#### **2.3.1.2 Impacts on financing from institutional investors**

Fund raising has dropped since the GFC. “Access to venture capital and private equity also appears to be constrained” (OECD, 2009b, p.5). In 2009, “125 venture funds in the U.S.

collected \$13.6 billion, down from 203 funds that raised \$28.7 billion in 2008 and down from 217 funds that raised \$40.8 billion in 2007, according to data tracker Venture Source”(Tam, 2010, wsj.com). On the other hand, investment amounts also dropped dramatically. “Overall capital raised by European biotechs fell from €5.5bn in 2007 to less than €2bn in 2008, according to E&Y” (Dorey, 2009, p.16-17). In the US, “total investment in the 1st quarter of 2009 was down 60% as compared with the 1<sup>st</sup> quarter of 2008, while 1<sup>st</sup> sequence investment was down 65 %“(OECD, 2009a, p.3). “IPOs are virtually non-existent in the current financial crisis; in Europe, the amount of capital raised in IPOs in 2008 plummeted by 89% to \$111 M” (Dorey, 2009, p.16-17).

Although financing from institutional investors did not constitute a large proportion of the total external financing, the downturn of venture capital and private equity still had a major impact on SMEs, particularly growth-oriented SMEs. A substantial amount of their growth capital is derived from “follow-on” venture capital.

Other informal financing such as self-financing, mobilization of reserves, and factoring were mentioned as alternative sources of financing (OECD, 2009c). However, in a recession market, only marginal possibilities exist to obtaining adequate amounts of financing through those alternative sources.

### **2.3.2 Other impacts**

One of the most devastating impacts of the GFC is the impact to the market itself. The market has shrunk since the financial crisis. Many SME customers went bankrupt, and international trade also decreased drastically -- there was “a market decline in the demand for products and services, considerable variations in the exchange rate, and inflation” (Hodorogel, 2009, p.81). This market recession is a part of the global recession caused by the GFC.

The GFC also caused an endemic shortage of working capital and a decrease in liquidity. This was caused by increased payment delays on receivables combined with an increase in inventories. An increase in reported defaults, insolvencies and bankruptcies also decreased the liquidity of SMEs.

“In Belgium 43% of surveyed SMEs recently experienced extended delays in their receivables and in the Netherlands 50 % of SMEs have to deal with longer payment terms from their customers. In New Zealand, the share of enterprises waiting over 60 days for payment has risen dramatically from 4.8% to 29.5% between February 2007 and 2008. In Denmark, Italy, Ireland, Norway and Spain, the surge in corporate insolvencies was higher than 25%. In Finland, while short-term solvency problems among SMEs normally involve 6-8% of declared insolvency problems. In Sweden, according to ALMI (the Swedish State-owned Development Bank), bankruptcies increased over 50% in the first two months of 2009 compared to the same period in 2008” (OECD, 2009c, p.7).

Although the OECD report separated the shortage of working capital and decrease of liquidity, the former is actually a symptom of the later.

Innovation is also affected by the GFC. As the availability of financing is more constrained, human capital is being depreciated, and incentives to develop a greener economy have weakened. “Evidence for the current crisis confirms these findings. Corporate reports for the

fourth quarter of 2008 in many cases already show a decline or slower growth in R&D spending” (OECD, 2009a, P.3). This situation is caused by the liquidity problem and market recession indirectly due to the GFC.

The topical literature provides an overarching sense of how the GFC has negatively affected SMEs. However, these works ignore the possible interaction between the impacts. For example, the existing financing problems might exacerbate the lack of liquidity.

### **2.3.3 Opportunities**

The GFC has brought investment opportunities for fixed assets and R&D. Regarding the cost of financing, in 2009 interest rates in Canada drastically dropped compared to 2007 figures; the average interest rate decreased from approximately 7.5% in 2007 to merely 5.5% in 2009.

Meanwhile, due to market downturn, business needed less financing for all categories of fixed assets (e.g., land and building, vehicle and machinery) and for research and development. In fact, the R&D approval rate increased from 56% in 2007 to 66% in 2009 (Industry Canada, 2009). However, only firms with good liquidity or financing situation are able to capitalize on this opportunity.

The GFC also created opportunities for new businesses.

“New business models and new technologies, particularly those allowing a reduction in cost, often arise in downturns, as was the case with low-cost airlines which grew out of the recession of the early 1990s. Many of today’s leading firms such as Microsoft or Nokia were born or transformed during

economic contractions. As dominant players weaken, they open space for new players and innovators” (OECD, 2009a, p.4).

Furthermore, skilled labours are experiencing layoffs. “High tech industries (like IT, aeronautics or pharmaceuticals) and knowledge-intensive services (like financial services) are announcing layoffs almost daily” (OECD, 2009a, p.5). This could mean skilled labour driven to innovative entrepreneurship (OECD, 2009a). Again, only firms with good liquidity or financing situation are able to take advantage of this opportunity.

## **2.4 Government response to assist SMEs after the GFC**

After the financial crisis, many governments adopted “anti-crisis packages” to help SMEs survive the collapse. Typically, policy packages included

“three lines of action: stimulation of demand (consumption packages, infrastructure programs, tax policies); credit enhancement measure, including recapitalization of banks which, in some cases, include explicit provisions or mechanisms to preserve or enhance banks’ capacity for financing SMEs such as public credit guarantees; and labour-market measure (reduced employment taxes or social security charges and extended temporary unemployment programs)” (OECD, 2009c, p.9).

### **2.4.1 Stimulation of demand**

The demand measures for stimulation included a number of short-term actions to support cash flow, working capital and sales. To maintain or increase cash flow, some countries such as France and Germany allowed accelerated depreciation for investments already undertaken. Other countries, such as Japan, Netherlands, Canada, the Czech Republic, France and Spain, provided tax credits, cuts, deferrals and refunds (OECD, 2009c). In Vietnam “SMEs may benefit from 30% Corporate Income Tax (CIT) payable deduction; an extension of up to nine months for

the deadline of submission of the tax payable of 2009; and a temporary refund of 90% input Value Added Tax (VAT) for exported goods without justifiable payment documents” (LE Thi Thuy Van, 2009). To address the depletion of SMEs’ working capital and easing SMEs’ liquidity, governments adopted “either legal moves to shorten payment delays and enforce payment discipline (France) or reduction of government payment delays (Australia, France, Hungary, Italy, the Netherlands, New Zealand, UK)” (OECD, 2009a, p.31). To alleviate the sales shock on export markets and strengthen enterprises’ liquidity, some highly internationalized countries put in place or reinforced existing export financing or guarantee facilities, including “dedicated export credit lines (Canada, Chile, Czech Republic, Denmark, Mexico, Slovenia), credit insurance mechanisms (Germany, Luxembourg, New Zealand and the Netherlands), investment credit for exporting SMEs (Mexico), and general support for internalization and competitiveness of SMEs (Austria, Italy, Spain)” (OECD, 2009c, p.31).

## **2.4.2 Credit enhancement measures**

This package is aimed at enhancing SMEs’ access to liquidity, particularly with regard to bank lending. Governments are using two different approaches:

- a) “on the incentive side, the creation and extension of guarantee schemes for loans to SMEs, or when that fails direct public lending” (loan guarantee schemes);
- b) “on the discipline or sanction side, setting targets for SME lending for banks that have been recapitalized by public monies, putting them under administrative monitoring or putting in place specific procedures to solve problems between individual SMEs and banks” (mediation and monitoring schemes) (OECD, 2009c, p.31).

Loan guarantee schemes have been widely used by reporting countries. For EU member countries, “the potential leverage effect of public guarantees on SME bank lending has been further extended by the decision of the European Commission to temporarily authorize Member States to ease access to finance for companies through subsidies guarantees and loan subsidies for investments” (OECD, 2009c, P.32). In France, for instance, this easing of rules made it possible for the guarantee schemes to cover up to 90% of the risks related to a loan as compared to what was previously 50 to 60% on average. The UK guarantees 75% of the loan and Korea, 100%. Japan, in principle, guarantees 80% of the loan, however there are some exceptional cases of 100% coverage. Almost all reporting countries have enhanced or implemented a SME specific or general credit guarantee scheme. For example, “Greece introduced new credit guarantee scheme which recorded €2.2 billion credit guarantee provision for SME working capital for its first three months” (OECD, 2009c, P.32). The exceptions are Australia and New Zealand, which do not have a credit guarantee scheme at all as well as Denmark, which has been maintaining its credit guarantee scheme as it was before the crisis (OECD, 2009c). There are also some private guarantee schemes. “The *Association Europeenne de Cautionement Mutuel* (AECM), which is composed of non-profit organizations giving SME credit guarantees, has provided 55 billion Euros for 1.6 million SMEs (roughly 8% of total SMEs in the EU). AECM members have knowledge of the local context and the SME sector and therefore they can undertake a reliable individual risk analysis of each loan” (OECD, 2009c, p.33).

Certain countries also use mediation and monitoring schemes.

“Belgium and France have appointed a credit mediator, who at regional and central levels, may intervene to ease difficulties and help solve divergences between enterprises and banks. The UK has established the SME Lending Monitoring Panel. In the US, the Government has chosen to strictly monitor, on a monthly basis, the credit activities of banks that have been rescued by public funding” (OECD, 2009c, p.34).

### **2.4.3 Strengthening pro investment measures**

To encourage SMEs’ long-term investments, governments have used measures to strengthen SMEs’ capital base or to develop their productive capacities, or to undertake both activities.

Countries such as the U.S. used tax incentives; countries such as Germany, Austria, the Czech Republic, Hungary and Spain, provided specific funding possibilities such as grants or credit to SMEs (OECD, 2009c).

### **2.4.4 Strengthening the capital base, private equity and venture capital**

Governments also used measures to strengthen the equity base of SMEs. These measures

“range from private public partnerships (Finland) to ad hoc programs (Austria, Chile, Hungary, Mexico) and international projects like the Japanese-Hungarian Venture Capital Fund. The UK is setting up the capital for Enterprise Fund with 75 million pounds (£85 million) in equity and quasi-equity. It is a mix of government and private sector funds. Korea is improving exit opportunities by activating an M&A market and enhancing the KOSDAQ” (OECD, 2009c, p.36).

The OECD provides us an idea of the policy responses of governments, but it does not clearly describe the “anti-crisis package”. The labour market measures were not elaborated in its

report. Instead, the OCED report described policies of strengthening pro-investment measures and policies strengthening the capital base, private equity and venture capital. This may be because the OECD report emphasizes the policies to enhance SME financing.

## **2.5 Discussion**

This research places emphasis on government SME programs, particularly those implemented after the GFC. This dissertation will examine the SME obstacles that the programs attempt to solve, the obstacles that they can actually solve, and their main target audiences.

From the existing literature, it is clear that SMEs play a particularly important role in an economy's employment rate, GDP, and innovation. Surveys undertaken prior to the GFC indicated that SMEs were already facing various obstacles. According to the reporting rate of the surveys, the obstacles can be clustered and ranked as follows (see Table 2.2). Although the ranking maybe different in other economies, the existence of those obstacles cannot be denied. Bank financing for SMEs prior to the GFC was relatively good, although it is was challenging for certain small firms to obtain bank loans. Generally, it is more plausible that SMEs will obtain financing from other informal sources than from professional investors. Angel capital is more readily available to SMEs as well. Prior to the crisis, most governments had already implemented tax, regulatory, financing and innovation policies to assist SMEs. Table 2.2 shows the contribution of governments' SMEs policies to the obstacles noted in topical literature. As we can see from the table, SME policies before the GFC mainly focused on less important obstacles. That is to say, most of the largest obstacles SMEs were facing before the GFC were not addressed.

According to existing literature, the GFC had a serious impact on the financing situation of SMEs. The GFC also had a notable effect on SMEs' market, working capital, and innovation. Although the literature provides a sense of the negative impacts of the GFC on SMEs, it does not address the possible interaction between the impacts. An unexpected byproduct of the GFC was the creation of investing and innovation opportunities for SMEs, although not every firm was able to take advantage of them. The impacts of the GFC will be compared with the research findings of this thesis.

Governments implemented "anti-crisis packages" to assist SMEs. These packages included measures to stimulate demand, enhance credit, and increase the labour-market. Table 2.3 indicates how the "anti-crisis package" contributed to eliminating the obstacles that SMEs might face after the financial crisis.

The literature did not differentiate "stated aim of the program" and "strategic initiative of the program". The literature primarily categorizes the programs according to their stated aims rather than the strategic initiatives they applied – however in this dissertation, both will be compared and contrasted. The targets of the programs are also not specified in the literature, but will be discussed in the research section of this thesis.

**Table 2.1 Rates of return by category of informal investor (Riding, 2008)**

Rate of return	Probable angels	Passive love money	Serial entrepreneurs	Active love money
Lost money	26.7%	62.4%	50.2%	47.3%
1% to 50%	40.7%	25.8%	38.8%	37.0%
More than 50%	32.6%	11.8%	11.0%	15.7%

**Table 2.2 How SME policies contributed to SMEs prior to the GFC**

Obstacles	Policies	Tax policies	Regulatory	Financing	Innovation
<b>Very serious obstacles (&gt;40%)</b>					
Rising business costs					
---Level of taxation		Y			
---Dollar appreciation					
---Insurance premiums					
---Other					
Attracting& retaining qualified workers					
Increasing competition					
<b>Serious obstacles (&gt;20%)</b>					
Government regulations			Y		
Defend and grow domestic market(Canadian)					
<b>Other obstacles (&lt;20%)</b>					
Innovation					Y
Obtaining financing (credit and investment)				Y	
Defend and grow international market					
Management capacity					
Environmental regulations/compliance					

**Table 2.3 How the “anti-crisis package” contributed to eliminating the obstacles SMEs are facing after the financial crisis**

Policies	Stimulation of demand			Credit enhancement & strengthening the capital base, private equity and venture capital		Strengthen pro investment	Labour market		
	Consumption packages	Infrastructure programs	Tax policies	Credit enhancement	Strengthening the capital base, private equity and venture capital		Reduce employment taxes	Social security charge	Extend temporary unemployment programs
<b>Obstacles caused by the Global Financial Crisis</b>									
Financing				Y	Y				
Market	Y	Y	Y						
Working capital & liquidity			Y	Y					
Innovation									
<b>Obstacles already existing before the crisis</b>									
<b>Very serious obstacles</b>									
Rising business costs									
--Level of taxation			Y				Y		
--Dollar appreciation									
--Insurance premiums								Y	
--Other									
Increasing competition									
Attracting & retaining qualified workers									
<b>Serious obstacles</b>									
Government regulation									

## 3. Conceptual Framework

### 3.1 Logical assumption

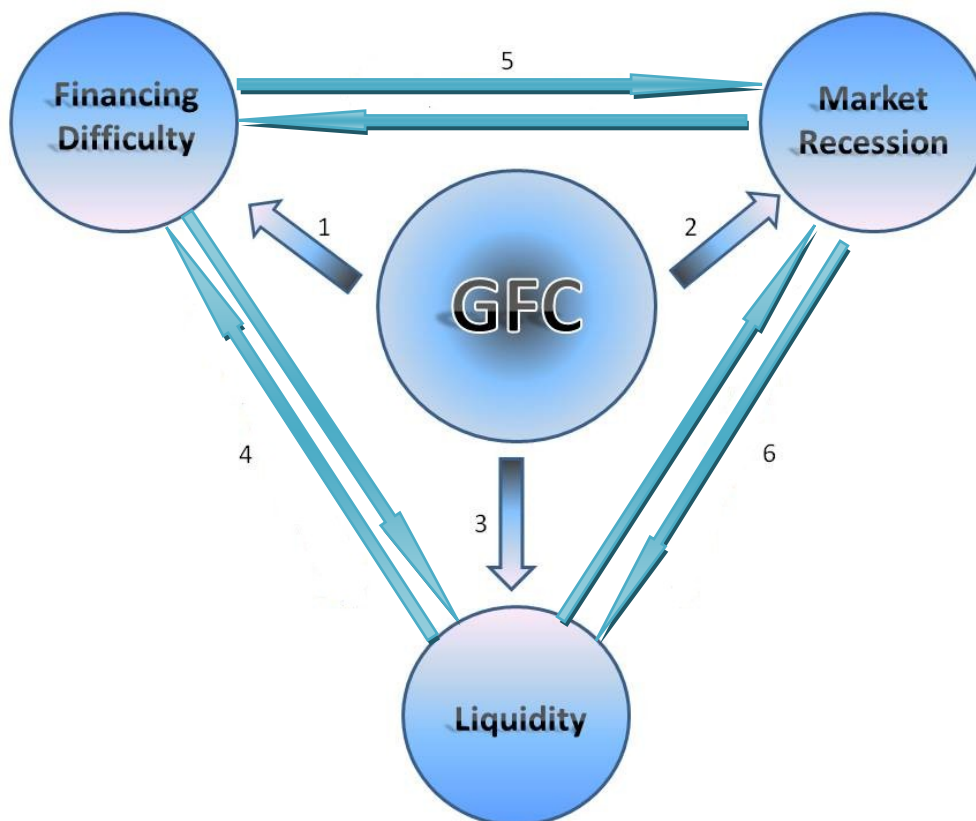
#### 3.1.1 The impacts of the GFC on SMEs

The GFC has had negative impacts on SMEs but has also provided some opportunities.

##### 3.1.1.1 Negative impacts

The negative impacts of financial crisis can be described by the following chart.

Chart 3.1 The negative impacts of the GFC



- 1) The GFC severely impacted SME financing. In some countries, banks went into bankruptcy and other banks tightened up credit. With less collateral and credit history, SMEs are now more likely to be turned down by banks. Other

investors are also becoming more cautious about investing. Venture capital and angel capital have shrunk since the GFC. Other than financial institutions and professional investors, additional informal sources of financing are less available to SMEs. For example, due to their vulnerability as a result of the crisis, small firms are currently less likely to receive trade credit from suppliers.

- 2) The GFC also caused the recession of the market for SMEs. Global recession followed on the heels of the GFC. The demand for SME goods is decreasing and international trade is seriously impacted. The recession also caused the sharp drop of the fair value of SMEs' assets.
- 3) SMEs are also facing liquidity problems due to the financial crisis. During the crisis, firms were willing to hold cash in hand. As a result, SME clients were more likely to delay payment and suppliers were less likely to sell on credit. Together with the difficulty of getting financing from financial institutions and other investors, SMEs now face a serious lack of working capital.
- 4) Already facing or expecting to face a liquidity problem, more SMEs require financing. This increased competition has increased difficulties in obtaining financing, in turn intensifying the liquidity problem.

5) The poor financing situation also exaggerated the effects of the recession.

With less financing, SMEs are less likely to purchase from other SMEs. On the other hand, the decrease in value of assets due to the recession of the SME market made it even more challenging to obtain financing because the value of collateral dropped. The drop of demand during the recession reduced SMEs' earning capability, which made them even less likely to receive investor financing.

6) The market recession also increased the liquidity problem. The recession made it more difficult for SMEs to sell their inventory, that is to say, it was challenging to turn their inventory into cash. Meanwhile, some SME or even larger firms went bankrupt due to liquidity problems, or at least, reduced their purchasing power, which in turn, increased the effects of the recession.

Overall, the GFC has arguably caused financing problems, market recession and liquidity problems for SMEs, and these three issues have created a vicious circle, each of the three impacts aggravating the other.

### **3.1.1.2 Opportunities**

According to the literature the GFC also presented opportunities for SMEs.

The GFC provided new investment opportunities. Interest rates have dropped since the financial crisis, and, because of the recession, prices of assets are also dropping, as is the price of skilled labour. That is to say, the cost of investment has decreased as a direct result of the GFC. This presents an excellent opportunity to invest in fixed assets and R&D. Unfortunately not all SMEs are able to take advantage of this opportunity, as it requires good liquidity.

Furthermore, the GFC has introduced the possibility to develop new business models and new technologies, such as the cost-reduced model or product. Additionally, due to the layoffs of numerous skilled workers, these individuals may choose to start new ventures. Again, all of the above options require good financing sources.

### **3.1.2 Government responses**

Governments have carried out three types of measurements to help SMEs in response to the global financial crisis.

The first measure is to stimulate demand. This assists SMEs in coping with market recession. It includes consumption packages, infrastructure programs, and tax policies.

The second deals with financing problem. This includes credit enhancement such as loan guarantee programs, and strengthening the capital base, private equity and venture capital.

The third measure assists SMEs on a long-term basis. This includes strengthening pro investment measure and labour-market measure.

Since the GFC, SMEs are not only facing post-GFC obstacles, but also previous obstacles. In Table 3.1, it is apparent that the governments' response to the crisis only addresses two problems that have emerged out of the GFC; financing and market recession. However, as presented in the table 3.1, the three impacts of the GFC; financing problem, market recession, and liquidity problem, impact each other. One unsolved problem will make the policies addressing the other two issues less efficient. Interestingly, the SME polices before the GFC mainly focused on unimportant obstacles, and post-GFC policies only address one prior obstacle, the others remain unsolved.

## **3.2 Hypotheses**

Based on my logic surrounding the impacts of the GFC on SMEs and the government response, the following research questions will be addressed in this thesis:

- 1) To what extent did governments aim to assist SMEs to survive the GFC? What types of programs have been implemented to address new and existing obstacles?
- 2) Did governments apply appropriate strategic initiatives to realize their goals? If the initiatives could not achieve the governments' original goals, what obstacles did they address?
- 3) Did governments tend to help SMEs more after the GFC? Did governments give up on disadvantaged firms or did they try to help them survive the crisis?

**Table 3.1 How government SME policies address SME obstacles**

SME policies  Obstacles	Before the GFC				Since the GFC		
	Tax policies	Regulatory	Financing	Innovation	Stimulate demand	Financing	Long term
<b>Since the GFC</b>							
Financing						Y	
Market recession							
Liquidity					Y		
<b>Before the GFC</b>							
<b><i>Very serious obstacles</i></b>							
Rising business costs							
---Level of taxation	Y						Y
---Dollar appreciation							
---Insurance premiums							Y
---Other							
Attracting & retaining qualified workers							
Increasing competition							
<b><i>Serious obstacles</i></b>							
Government regulations		Y					

## **4. Methodology**

### **4.1 Data sources**

To test the hypotheses, this work uses two secondary analyses of qualitative data.

The first is a survey of 10 Asia-Pacific Economic Cooperation (APEC) countries conducted in September 2009. The second is an Organization for Economic Co-operation and Development (OECD) 2009 report which describes responses from 29 OECD and non-OECD countries with respect to both public policy and the GFC.

The survey of APEC economies (“Access to Credit for Small Businesses in the APEC Region”) was sent to 23 APEC member economies by the Small Business and Tourism Branch of Industry Canada through the APEC SME working group (SMEWG). The completed surveys were collected by e-mail during the week of September 21, 2009 at which point APEC representatives from 10 economies had completed the survey. The survey is comprised of three sections. The first section seeks background information on the financial markets in which SMEs operate. The second collects data on the functioning of the financial markets in that country over the June 2005-June 2008 period, prior to the financial crisis as well as parallel information on the country for the post-GFC period, namely June 2008 to the date of administration of the survey (September 2009). Sections one and two include questions on the sources of credit-based financing government loans and other policies, before and after the financial crisis. Most of the questions are open-ended questions. Section three, the

final section, contains four financing scenarios, followed by several agree/disagree questions.

The second source of data is an OECD (2009) report: “The Impact of the Global Crisis on SME and Entrepreneurship Financing and Policy Responses”. This report is “based on the responses of 29 OECD Members and non-Members, as well as the European Commission and the European Investment Fund, to a questionnaire which covered the supply of financing to SMEs, their demand for financing, the credit conditions, loan approvals and defaults as well as information on equity financing. The responses also described in detail the policy measure taken by governments for SME and entrepreneurship financing.” (OECD, 2009c, p.5).

For this research, data will be drawn from program information for 24 economies that comprises the raw data appendix to the report as well as a program category summary table contained within the report.

## **4.2 Data analysis methodologies**

### **4.2.1 Methodology: Analysis of background data**

The analysis of background data focuses on respondents’ perceptions of their respective credit markets before and after the GFC. The APEC survey provided information on the perceptions of changes in credit financing, venture capital, and

angel financing pre- and post-GFC. The respondents also provided perceptions of financing difficulties, demand and supply gaps, legal systems, and scenarios for financing SMEs of different risks. The answers will be compared to examine similarities and differences across markets. The background analysis will also help determine obstacles perceived in the responding countries and ascertain why they enacted particular programs.

## **4.2.2 Methodology: Analysis of programs**

The analysis of programs aims to find out how governments have responded to SMEs' needs based on the APEC responses and OECD report. The program information comes from both the APEC survey responses and from the raw data in the appendix of the OECD report. For each program category, the data is analyzed according to money allocation, target, timing, duration, delivery, and evaluation.

- “Money allocation” examines, where possible, the funding governments have allocated to programs. Due to data limitations fund allocations were not compared across program types.
- “Target” represents the nature of enterprises at which the program is aimed. Target programs were categorized into: all enterprises, SMEs and others, all SMEs, specific sectors (e.g. high-tech SMEs, exporter SMEs, young entrepreneurs), SME below certain criterion (e.g. micro firms, less turnover), and SME above certain criterion (e.g. creditworthy, above certain turnover

rate).

- “Time” relates to the time when the program was implemented, either before or after the GFC, and helps to define if programs were transient responses to the GFC, or whether programs were intended to benefit SMEs in the long term.
- “Duration” represents the life-span of a program, whether it is permanent or temporary.
- “Delivery” relates to the strategic initiatives and organizations through which programs were delivered. For certain programs, fees, period, and coverage were also taken into consideration.
- “Evaluation” focuses on the extent to which programs have been evaluated. While few governments reported evaluations of their programs, most provided information that can assist with program evaluation (such as take up rate, loan amount, or estimated benefits).

These six types of data were compared within and across each type of program to discover patterns, similarities, and differences.

### **4.2.3 Methodology: Government programs and SME needs**

This section reports on an evaluation of aims, strategic initiatives and targets relating to government programs enacted to help SMEs overcome the obstacles existing

before and after, the GFC. The analysis draws from a tabular mapping of the aims of programs on SMEs' needs. This analysis seeks to identify which obstacles drew relatively more attention and which remained unaddressed. The analysis included examination of strategic initiatives because governments may have programs aimed at one issue, but delivered in a different way. For example, programs aimed at export facilitation may be delivered through loan guarantee programs, in which case, the program is still dealing with financing problems.

#### **4.2.4 Methodology: Other**

For comparison purposes, funds were translated into US dollars. The exchange rate used for the APEC data was the exchange rate as of September 1, 2009. The exchange rate used for OECD data was the average exchange rate from Jan. 1<sup>st</sup>, 2009 to Feb. 28<sup>th</sup>, 2009, when the OECD data collection was carried out.

Results from developed and non-developed economies were also compared. To measure the level of development, economies were categorized according to the degree of credit market sophistication according to total amount of domestic credit to private sector<sup>1</sup> expressed as a percentage of GDP. These data were drawn from the Global Innovation Index Report 2009-2010 ([www.globalinnovationindex.org](http://www.globalinnovationindex.org)).

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<sup>1</sup> This is defined as financial resources provided to the private sector, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries these claims include credit to public enterprises.

This report ranks 129 economies on this criterion which, for the purposes of this work, were categorized as in Table 4.1. For scores and abbreviations of individual economies see Table 4.2 in Annex 1.

Finally, to compare the fund allocations among countries, the allocation amount was also divided by GDP. The GDP data were drawn from the 2009 GDP listing of the World Bank. For GDP for individual economies please refer to table 4.3 in Annex 1.

**Table 4.1 Category of developed versus non developed countries**

Score (%)	Category	Number of economies (APEC and OECD data)	Score spread
>=105	Developed	16	105.25—210.07
105-0	Non-developed	15	21.03-101.79
N/A	N/A	3	N/A

## **5. Empirical Findings**

### **5.1 Background**

#### **5.1.1 Credit market background**

Respondents from most countries were in agreement that, prior to the GFC, SMEs (and SMEs in specific sectors) faced difficulties in obtaining business loans. According to the responses, innovative SMEs and SMEs in certain other sectors were relatively more disadvantaged in non-developed economies than those in developed ones. There was a generalized view that credit supply does not keep pace with the demand from SMEs—and especially so in developed economies. Prior to the GFC, it was perceived that the situation in non-developed economies and in New Zealand had improved. As to the supply of venture capital, demand was seen to vary widely from country to country, with small firms in Philippines and in Canada perceiving the worst situation. In most countries individuals (including friends and family) were considered as the primary source of financing. (Table 5.1-5.3 in Annex 2)

Most economies reported a legal system generally consistent with an efficient credit market before the GFC. Generally speaking, the legal settings for the credit market in all responder economies were strengthened before the crisis. (Table 5.4 in Annex 2)

There was no clear pattern with respect to access to credit, demand and supply, and legal systems between developed and non-developed countries. (Table 5.5 in Annex 2)

In the APEC survey, respondents were asked whether the following formal financing sources were available to SMEs: term and operating loans from private lenders, commercial credit cards, leases from private financial institutions, direct loans from government or from government-owned financial institutions, trade credit, factoring, personal loans, personal credit cards, and micro-credit. More than half the respondents reported that all of these sources were available to SMEs. Except for direct loans from governments or loans from government-owned financial institutions, all others were available according to more than 80 percent of respondents and all respondents indicated availability of term and operating loans from private lenders.

Post-GFC, most countries reported increases in availability of all sources, except for leases from private sector financial institutions, commercial credit cards and factoring. That is, most respondents reported that the GFC had prompted an improvement in the SME financing situation. Respondents from relatively less developed countries were particularly more likely to hold optimistic views. For the Philippines, domestic credit to private sector score is less than one sixth of that of Hong Kong, but its respondent estimates that all sources will increase. Perhaps less

developed countries view the GFC as more of an opportunity. (Table 5.6-5.7 in Annex 2)

Most governments did not measure the availability of venture capital. Five of the six economies for which this concept was applicable reported increases in the ratio of private sector credit/GDP since the GFC. Compared with private credit per unit GDP, private VC per unit GDP is much lower in the responding countries.

### **5.1.2 Scenarios**

Finally, respondents of the APEC survey were provided with four hypothetical financing scenarios, each representing a type of risk the financing provider might face. The SME in scenario 1 has the lowest risk. SME in scenario 2 also had a higher default risk due to its poorer financial situation. The SME in scenario 3 was a start-up firm, so it had an even greater risk. The SME in scenario 4 had a better financial situation, but since it was in the pharmaceutical industry, the industry risk made it the most precarious project. (Table 5.8 in Annex 2)

For lenders in most of the economies, credit histories and information from the owners were reported to be accessible to lenders under the first three scenarios, but as the risk increases, accessibility decreases. In Hong Kong, credit history and owners' help are much more limited, compared to what can be seen in other

countries, and extremely low in the case of start-up SMEs. Generally speaking, information was considered less accessible in non-developed economies than in developed economies (Hong Kong is an exception). (Table 5.9 in Annex 2)

In general, as risk increases in the scenarios, loans were less likely to be approved. This points to the potential importance of loan guarantees, an importance which increases as the default risk increases, but which is especially important for start-up SMEs (scenario 3) than for SMEs with industry risk such as in scenario 4. Different economies evaluate risk differently. In Hong Kong loans are seldom approved, even with a loan guarantee or risk sharing program; whereas in Brunei, loans are very likely to be approved. The difference may be due to the different view of lenders toward patents: according the survey responses, in some economies, owning a patent will increase the chance of obtaining a loan. As a caveat, it must be recalled that the survey answers simply show the perception of a single government representative. Hence, even though it seems more likely for the first two levels of risk that loans will be approved in undeveloped countries (i.e., the Philippines, Peru, and Brunei) than the other countries, this may not be true in practice. (Table 5.10-5.12 in Annex 2)

Otherwise, there are few differences across countries. Interest rates and fees will be relatively higher in the riskier scenarios 2, 3, and 4 (except for in Canada, Hong Kong, the Philippines, and Thailand). (Table 5.13 in Annex 2)

The likelihood of foreclosure on collateral in a default situation is not so different between economies. Foreclosure is more likely to happen as the risk increases. In terms of enforcement, the foreclosure decision is more likely to get support from the legal system in developed countries such as Canada and New Zealand. But in non-developed countries such as the Philippines and Brunei, the legal system is less likely to enforce it in a timely manner. (Table 5.14-5.15 in Annex 2)

In terms of VC, start-up SMEs are somewhat less likely to get VC than firms in scenario 4. The responses do not seem consistent with the demand and supply situation reported by economies. For example, Canada's VC demand far exceeds supply, but respondents report that small firms in both scenarios are likely to get VC financing; on the other hand, in Thailand VC supply fits well with demand, but in both cases the respondents report that firms are less likely to obtain VC financing. This difference may be due to the gap between the governments' perception and the reality. (Table 5.16 in Annex 2)

## **5.2 Analysis of the program**

### **5.2.1 Attracting and retaining qualified worker programs**

According to respondent data, only Canada has a program partly aimed at helping SMEs to find skilled labor. It is a temporary program that was in force prior to the GFC but it has helped SMEs hire over 1,000 new post-secondary graduates.

### **5.2.2 Financing programs**

Financing programs include angel-VC-PE programs, export credit programs, and loan guarantee programs. Financing programs were the most popular programs post-GFC, among which loan guarantee programs were implemented or extended by almost all of the responding countries. Although aimed at accessing financing, its strategic initiatives also include liquidity initiatives, reduced cost initiatives (interest) and regulation initiatives. Financing initiatives target all kinds of firms, but they are more likely to target SMEs and relatively disadvantaged SMEs after the GFC.

#### **5.2.2.1 Financing access programs**

Financing access programs aim to help SMEs access loan financing. Such programs already existed prior to the GFC. The strategic initiatives of such programs include providing loans, creating funds/injecting money, extending repayment periods,

interest or tax privilege/subsidy, reimbursing transaction costs, and other favorable policies. Slightly more non-developed economies took this approach as compared to developed economies.

Money allocation: Only Canada, Chile, New Zealand and EIB/EIF reported funding amounts allocated for financing programs. Canada has allocated at least CAD\$5,260 million (USD \$4,786.6 million) for accessing financing programs, post-GFC. Compared with money allocated to programs designed for both SME, and large firms, there is significantly less amount of money allocated to SME specific programs. Chile allocated around USD \$332.3 million to SME related financing access programs before the GFC and around USD \$506.7 million after the GFC. The money allocated after the GFC was used to extend the existing programs. More money was allocated to program for high growth potential SMEs than for micro enterprises. New Zealand allocated NZ \$150 million (USD \$102 million) to support exporters after the GFC. And EIB/EIF allocated €613 million (USD \$796.9 million) for SMEs to have access to the financing program.

Target: Some governments have programs that target all SMEs (i.e., Before the GFC: Chile, the Philippines; After the GFC: Canada, Chile, Mexico). And some target SMEs within a specific sector or entrepreneurs (i.e., Before the GFC: Brunei, Chile; After the GFC: Canada), such as programs for the agricultural sector or young entrepreneurs. Other governments targeted different types of SMEs: SMEs above

certain thresholds (i.e., Before the GFC: Chile, New Zealand); programs targeted to high growth potential SMEs or creditworthy SMEs. Some countries target SMEs below certain thresholds (i.e., Before the GFC: Canada, Chile; After the GFC: EIB/EIF), such as micro SMEs or SMEs below certain gross annual sales levels. Some target not only SMEs (i.e., After the GFC: Canada, Chile, the Philippines), but both SME exporters and large exporters or to SMEs and citizens.

Delivery: Before the GFC most governments had already carried out various initiatives to help SMEs access financing. These initiatives include creating funding (Peru), increasing loan amounts (Brunei, Canada), extended repayment periods (Brunei), interest subsidies (Brunei), reimbursing transaction costs (Chile), and providing long term financing (Chile). Before the GFC, the policies might have been carried out via national/state bank (Brunei, Chile), private sector (Canada), or public office (Peru). For some economies, government departments administrate the programs, but do not become directly involved in them (Canada). After the GFC, in addition to the existing initiatives, governments have implemented some new initiatives to deliver programs. These included purchasing common stock of crown corporation financial institutions (Canada), short term loans and short term loan guarantees (New Zealand), encouraging lending by federally-regulated deposit-taking institutions (Canada), equity and quasi-equity instruments (EIB/EIF), etc. In addition to the existing ways of implementing the programs, governments also

partnered with local groups (Canada), and Small Business Corporations (the Philippines).

Duration: Most of the programs in existence pre-GFC were permanent programs and, of course, SMEs can still benefit from these programs post-GFC. With regard to programs implemented after the GFC, most of them are actually extensions of existing programs. Programs identified by the responding governments as new programs have tended to be temporary programs (e.g., Department of Trade and Industry-Small Business Corporation Loan Program in the Philippines and Canadian Lenders Assurance Facility).

Evaluation: The CSBF in Canada is the only program for which a social benefit has been reported (CAD\$4,849.7 (USD \$4,413.227) over a nine-year period). Other benefits/characteristics were reported by some programs, including outperformance of recipients (CSBF in Canada), operation cost effective (CSBF in Canada), and one-time support (NZECO in New Zealand). One program reported a shortcoming in that it is unlikely self-sustaining (CSBF in Canada). Only one program had been evaluated by responding economies. However, the program take-up rate provides some information for future analysis of the value of these policies. Most of the programs number of recipients and amounts were growing. Yet, in comparison with data prior to the GFC, the take-up rate and amount did not increase much after the GFC (i.e., Banco Estado in Chile, CSBF in Canada). (Table 5.17 in Annex 2)

### **5.2.2.2 Angel-VC-PE programs**

Such programs aim to enable SMEs receive additional assistance from Angel, VC, and PE investors. This goal is usually realized through the creation of funds or money injection. Considering their GDP, the governments of Thailand allocated the greatest amount of money. Such programs mainly target SMEs, before and after the GFC.

Non-developed economies allocated relatively more money/GDP in such programs.

Before the GFC, some governments had already carried out policies to support Angel, VC and PE in order to help SME financing (Table 5.18 in Annex 2). Thailand and Slovenia (undeveloped countries) allocated much more to SME Angel-VC-PE financing programs than did other countries considering their GDP before the GFC.

There is usually a limited maximum investment amount for each company (Table 5.20 in Annex 2).

Money allocation: Considering their GDP, the governments of Thailand allocated the greatest amount of money.

Target: Most of these types of public programs were not designed for all SMEs, with the exception of one program in Australia and one in Hungary, but both countries also have programs designed for SMEs that fulfill other criteria. Among 11 programs that identified their criteria, 4 programs ask for SMEs in an early stage/ small size/

poor financial states, with high performance/growth potential, and from the high-tech/innovation sector. Seven programs ask for SMEs to satisfy at least two of these criteria; and eight of these programs ask for SMEs satisfy the first one. (Table 5.19 in Annex 2)

Delivery: Some of these programs were delivered via government agency (Thailand) or a government-owned company (New Zealand); some were delivered through a private limited company (Hungary). (Table 5.20 in Annex 2)

Duration: Some governments (New Zealand, Thailand) already had such initiatives before the GFC. After the GFC, some countries (Slovenia) took up these initiatives. Data for the timeline of most initiatives was not available. SCIF in New Zealand before the GFC was not a permanent program, but it will be running until certain Angel networks are achieved, thus SMEs can still benefit by such an initiative.

Evaluation: Few governments have done evaluations of these programs.

### **5.2.2.3 Increase maximum eligible loan/ extend credit programs**

In order to increase the amount of credit to SMEs, governments have developed programs to increase the maximum eligible loan/extend credit. This type of program is carried out in various ways, including increased ceiling for loans, subordinated

loans, encouraging financial institutions to extend credit, increase the ceiling of guarantees, raising reimbursement rates, and reducing associated paperwork burdens.

Delivery: After the GFC, governments carried out programs to increase maximum eligible loans/extend credit. This goal is achieved through initiatives such as:

1) extend credit, this includes increasing the ceiling of loans (Canada, Finland), setting up obligation loans and subordinated loans (Belgium), and encouraging financial institutions to extend credit for SMEs (Hong Kong); 2) increased ceilings for guarantees (Canada, Finland); 3) raising reimbursement rate (Canada); and, 4) reducing associated paperwork burdens (Canada).

Target: These programs are usually targeted to all SMEs (Hong Kong, Belgium, Finland), or to SMEs with relatively lower incomes (Canada, Finland).

Evaluation No evaluations were reported.

#### **5.2.2.4 Guarantee programs**

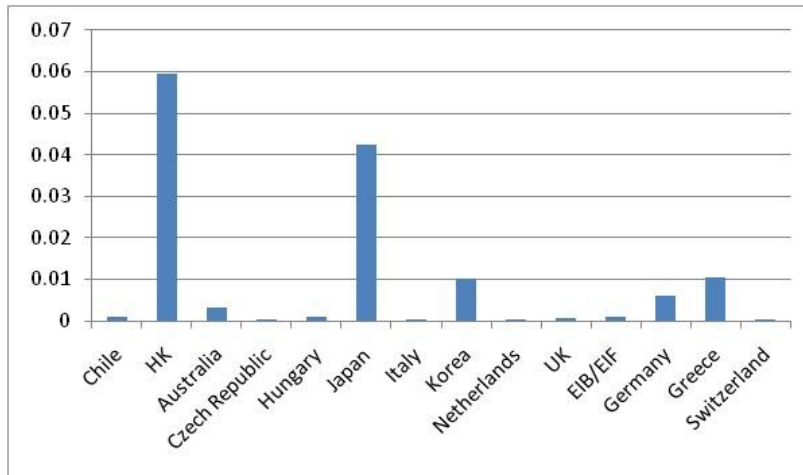
Guarantee programs were frequent forms of credit market intervention both before and after the GFC. Their objective is to increase the likelihood of SMEs getting financing through the provision of government guarantees. Post-GFC, the guaranteed

percentage varied from 40% to 100%. As to the money allocated to such programs, Asian economies seem to allocate more than others per unit GDP. Guarantee program terms have general targets and are less likely to target specific SMEs. Relatively more developed than non-developed economies have such programs.

Money allocation: Both Chile and Hong Kong have allocated money to such programs, and the allocated amount is far greater than post-GFC. It would appear governments emphasize loan guarantee programs more than they used to. The amounts allocated by other governments for guarantee programs are also much higher than most other programs, which indicate that governments focus more on loan guarantee programs than on other programs. (Table 5.21 in Annex 2)

Hong Kong, Japan, Korea, Greece, and Germany report the highest funds allocations to loan guarantee program per-GDP after the GFC as shown in Chart 5.1. Hong Kong, Japan, and Korea are the only Asian economies, and their allocated amount over GDP score is much higher than other economies. We may assume that Asian economies rely more on loan guarantee programs than the others, or it is possible that Asian governments provide more help to SMEs.

**Chart 5.1 Money allocated to loan guarantee program over GDP after the GFC**



**Target:** Most guarantee programs are targeted to all SMEs and relatively vulnerable SMEs or those with difficulties. Only two out of 24 programs target all enterprises.

There are several programs designed for SMEs with special needs. Three of the programs are designed for SMEs in specific sectors and nine are for SMEs with difficulties. This means governments do consider the needs of SMEs under certain situations. Although we describe nine programs helping SMEs with difficulty, the total number of economies with such programs is only four; this is because several programs targeted SMEs with special needs are carried out in the same country. We can see that most governments still believe that loan guarantee programs are desired by all SMEs. Unlike that of financing access programs, no government carried out loan guarantee to support SMEs above certain criterion. (Table 5.22 in Annex 2)

**Delivery:** While the average rate of coverage rates of loan guarantee programs did not change materially in response to the GFC, the coverage rate for the new guarantee program in Hong Kong was more than that of the previously-existing

program. There was no clear pattern observed with respect to guarantee rates, program targets or the duration of the programs. (Table 5.23 in Annex 2)

Few governments specified whether the programs were carried out through private institutions, the public sector or government departments; thus it is difficult to identify a pattern. Two governments (Taipei, Australia) mentioned charging fees for loan guarantee programs; however, more data must be collected to compare the fees.

One government (Hong Kong) reported extending the guarantee period as one of their initiatives. Several other governments reported increases in guarantee amounts post-GFC, including Taipei, Chile, Hong Kong, Austria, France, Hungary, Korea, Luxemburg, the Netherlands, Switzerland, and the UK.

Time& Duration: Four APEC responding economies (Chile, Hong Kong, the Philippines, and Taipei) had already implemented loan guarantee programs before the GFC. Three of those economies (Chile, Hong Kong, Taipei) carried out new programs, or extended loan guarantee programs. Australia also reported a new loan guarantee program. No identifiable difference was observed between the known number of new programs and number of extended existing programs. Nine programs were stated as temporary programs; they are all post- GFC programs. No

specific pattern was shown in the country, money located, target, or time of those temporary programs.

Evaluation: The numbers of operation, loan amounts, coverage and take up rate for each loan guarantee program varies from program to program. Nevertheless, we can still find improvements in FOGAPE and COBEX in Chile and in SMEG in Taipei after improving the programs post-GFC. After the improvements, the number of operations for FOGAPE has improved around 25% annually, and the loan amount to SMEs increased around 80%, with the guarantee coverage increasing approximately 70%. The improvement of the SMEG program in Taipei has increased the loan amount to SME by NTUSD22.2b from November 2008 to July 2009. The extended COBEX program almost tripled the number of the recipients of the original COBEX.

Reported effects of loan guarantee programs include an increase in SME credit volume (BF: FOGAPE-ChileAF: SpGS-Hong Kong, Three-Pillars-of-Support Policy-Taipei) and help for SMEs' liquidity problems (AT: SpGS-Hong Kong). Estimated impacts reported for loan guarantee programs include increases in SME sales (BF: FOGAPE-Chile), positive social benefits (BF: FOGAPE-Chile), short-term trade credit insurance (AT: Expansion of Export Credit Scheme-New Zealand), increased SME lending (AT: Expanding guarantees and increasing SME lending-Korea), and secured loans (AT: Enterprise Finance Guarantee Scheme-UK). (Table 5.24 in Annex 2)

## **5.2.3 Increased competitiveness programs**

These programs include: facilitating exports, encouraging entrepreneurship and innovation and promoting investment. They can increase competitive power for export firms, start-ups and innovative firms.

### **5.2.3.1 Export facilitation programs**

In addition to programs targeted to the export sector, governments further assist SMEs by means of export facilitation programs. Strategic initiatives include working capital guarantees, direct funding, tax credits, discount fees, providing necessary infrastructure equipment and promotion of export activities. Before the GFC, these programs were mainly targeted to specific SMEs, but the targets broadened post-GFC.

Money allocation: Denmark, considering its GDP, allocated much more money into export facilitation program than other governments. However, Denmark does not have other programs aimed at financing. Considering the nature of the Denmark economy (export orientation), it is possible that Denmark is using this program to serve financing purposes.

Target: Canada, Slovenia and Australia have export facilitation programs targeted to all SMEs post-GFC. Before the GFC, programs mostly targeted only SMEs above

certain criterion (such as profitable and creditworthy firms). One of New Zealand's programs targets SMEs with lower turnover than before the GFC. (Table 5.25 in Annex 2)

Delivery: In addition to programs targeting the exporting sector, governments further assist exporter SMEs by export facilitation programs, initiatives including working capital guarantees (Australia), funding (Canada), providing credits (Denmark, Mexico, Slovenia), discount fees (Italy), providing necessary equipment and infrastructure (Mexico), and promoting export activities (Switzerland). These initiatives were usually carried out through government departments working in partnership with the source of financing (New Zealand, Australia, and Denmark).

Duration: Some economies already had export facilitation programs pre-GFC (Australia, New Zealand). Post-GFC, some governments have undertaken new programs (Australia). Programs from Austria, Denmark and Germany are temporary programs. The reason for carrying out temporary program may be that they assume such program won't be needed after the GFC, or they could not afford a permanent program.

Evaluation: Few countries reported evaluations of such programs. Australia reported an increase in the number of total facilities after the application of its EFIC Headway program.

### **5.2.3.2 Spurring entrepreneurship and innovation programs**

Two governments (Canada, Chile) reported programs to spur entrepreneurship and innovation, with specific targets of innovative SMEs or micro enterprises. These programs were all carried out post-GFC. The programs from Chile are permanent programs, carried out by providing financing. The goal of the SERCOTEC program in Chile is to double the number of enterprises by 2009. Such programs in Canada are only parts of IRAP and CSBF, respectively.

### **5.2.3.3 Investment promotion programs**

Relatively more developed economies than non-developed ones reported such programs.

Money allocated: The ranking of the money allocated to Investment Promotion programs per unit GDP by responding economies is: Hungary, Austria, Czech Republic, Spain, Germany, and Canada (most to least).

Delivery: To support pro-investment programs, governments have taken various steps. Some governments provide funds directly to SMEs or SMEs in R&D related sectors (Austria, Canada, Hungary, Belgium, E.C., EIB/EIF, and Spain). Some governments provide interest or tax privileges (Belgium, Hungary, and USA). Some

governments carried out a favorable depreciation policy (France, Germany, and Italy). (Table 5.27 in Annex 2)

#### **5.2.4 Dealing with market recession programs**

This is a type of program carried out post-GFC to help recovery of the economy. Such programs are usually not simply targeted to SMEs. Governments assist SMEs by acting as credit mediators (Belgium, France) or by monitoring financial institutions (USA), or by financing SMEs via the security market (Canada).

#### **5.2.5 Working capital programs**

Governments have implemented or extended programs aimed to help SMEs gain working capital post-GFC. Chile and Hong Kong target such programs to all types of SMEs. Such programs were delivered in the following initiatives: providing resources to factoring including interest rate (Chile), removing sub-ceilings (Hong Kong), allowing recycle guarantees (Hong Kong), extending maximum guarantee periods (Hong Kong), loan guarantees (Hong Kong, Canada), government purchases (Slovenia, Mexico), capping payment delays (France, the Netherlands, UK), legal deterrents to minority interests and others (France). Relatively more developed economies undertook such programs compared to non-developed economies.

## **5.2.6 Taxation programs**

Governments employed some taxation programs to help SMEs deal with the GFC.

Strategic initiatives of such program included providing tax exemptions or reductions (Romania, Japan, Canada, Italy), offering faster payments of VAT and other refunds (Romania, France, Italy), postponing tax payments (Belgium, Denmark), expediting payment on facilities and public procurement (Belgium, France), transferring SME unpaid debts to Participation Fund (Belgium), providing tax reimbursements in cash (France), and charging lower interest rates for unpaid or late taxes (New Zealand).

Relatively more developed economies were more likely to implement such programs as compared to less-developed economies.

## **5.3 Government programs and SME needs**

### **5.3.1 Stated aim of programs**

This section exams the aims for different programs. To see the gap between aims and SME needs, the aims were named after the obstacles SMEs are facing; for example, “financing” refers to the aim of solving SMEs’ financing obstacle etc. Tables 5.28, 5.29, and 5.30 elaborates the findings in the following section. Each table is structured as follow:

- Programs were listed horizontally; they were in the same order as were analyzed in section 5.2 “Analysis of program”.

- The stated aims of programs were listed vertically. The aims also reflect the categorizing of programs in section 5.2 “Analysis of program”.
- The body of the tables contains abbreviations of corresponding economies that applied such program.

### **5.3.1.1 Overview**

Governments have implemented various programs to help SMEs, but this does not mean that they sought to solve all the obstacles faced by SMEs.

Of the three major obstacles that emerged as a result of the GFC (financing obstacle, market recession and liquidity crisis), the financing obstacle drew the most attention from governments. A total of 31 out of 34 responding governments undertook programs aimed to help with financing difficulties. By comparison only five governments reported programs to deal with the market recession and eight implemented programs to deal with liquidity issues. Generally speaking, as to the major three problems generated after the GFC, governments primarily emphasized the financing issues. (Table 5.28)

Pre-GFC obstacles included: attracting and retaining qualified workers, increased competition government regulations, and rising business cost. Governments took efforts to solve some of the obstacles but did not cover all the issues. For example,

rising business costs is one of the most frequently-cited obstacles existing pre-GFC and it is caused in part by high levels of taxation, dollar appreciation, insurance premiums, etc. However, only eight governments had programs aimed to reduce taxation. Only Canada reported programs aimed at helping to attract and retain qualified workers, but no government program sought to address the burden associated with government regulations. Twenty governments reported programs to help SMEs increase competitive power, but target SMEs were in different sectors. All in all, as to the pre-GFC challenges, governments focused on reducing tax burden and increasing competitiveness for SMEs. (Table 5.28)

### **5.3.1.2 Developed vs. non-developed economies**

Compared with non-developed economies, developed economies were more likely to aim for the increase of competitiveness. Of 20 economies applying programs with such purposes, 13 are in developed economies. Four of the economies have export facilitation programs. However, this may be due to the fact that more responding developed economies depend on exporting. If this is the case, there is scant difference between the number of developed and non-developed economies with competitiveness programs. Thus, the difference between developed and less-developed economies which implemented financing programs is small. However, developed economies were more likely to use a loan guarantee program. (Table 5.29-5.30)

Generally speaking, considering the nature of the responding economies, the aims of programs are not materially different between developed and undeveloped economies, although the types of programs for achieving certain aims may be different.

### **5.3.2 Strategic initiative of programs**

This section explores the extent of possible discrepancies between program stated aims and their specific initiatives embodied within the programs. Further, to what extent are the programs likely to successfully address the stated or unstated complementary aims? Table 5.31, 5.32 (in Appendix 2), 5.33 and 5.34 elaborate findings of this section. Each table is structured as follow:

- Program's stated aims were listed in the first row above the program names, so as to compare the programs' stated aims and their strategic initiatives.
- Programs were listed horizontally in the second row.
- The initiatives of the programs were listed vertically. The name of the initiative categories are the same with stated aims and obstacles. This helps examine the gap between stated aims and the initiatives for achieving such aims. For the categorizing method of initiatives, please refer to table 5.32 in Annex 2.
- The body of the tables contains abbreviations of corresponding economies that applied such program.

### 5.3.2.1 Overview

(The following parts refer to Table 5.31 and for details see Table 5.32 in Annex 2)

Programs have different aims, but it doesn't mean the strategic initiatives of such programs can achieve their stated aims. For example, export facilitation programs may be delivered through financing initiatives; in that case, such programs are more likely to solve financing difficult than increase SME competition.

To understand what problems the governments are solving, this research attempted to answer these two following questions:

1. Can the initiative achieve the aims? If not, what problems are they solving?
2. What obstacles can those programs solve?

#### **i) Can the initiative achieve the aims? If not, what problems are they solving?**

Financing programs Of financing programs from 19 economies, programs from 18 economies applied financing initiatives. In this instance, the initiative achieves the aim, and financing programs are directly solving financing problems.

Increase competition programs Increase competition programs mainly carried out by financing initiatives, reducing cost, creating funds and injecting money. Most of the countries created funds and injected money; however, there are only a few

initiatives that can increase SME competition directly. Moreover, it is hard to say whether allocated money will help with increased competition. Thus it is doubtful whether these programs can achieve their stated aim.

Reduce risk/ monitor economy programs Only one of the four responding governments has monitor initiative, the other governments have just financing initiative. Thus such programs are more likely solving financing problem than reducing market recession.

Working capital programs Only four of the eight responding governments undertook working capital initiatives. Two governments employed financing initiatives, and three market initiatives (France also has working capital initiative). Thus such programs are not likely to achieve their aim.

Taxation programs Seven of the eight responding governments applied initiatives to reduce tax cost. Thus such programs are more likely to achieve their aims in solving taxation problems.

## **ii) What obstacles can those programs solve?**

Financing obstacle Financing initiatives are still the most popular initiative, 21 governments applied such an initiative. Working capital programs, export facilitation programs, and reduce risk/monitor market programs also relied heavily on this

initiative. Financing initiatives including loan related initiatives, guarantee related initiatives (financing via security market, and creating funds and injecting money. For all the countries taking financing initiatives, loan providing is their top choice. This includes providing loan and loan guarantees. Increased ceilings and coverage, and other sources of financing did not attract much attention.

Market recession Market recession initiatives should be carried out by countries with reduced market risk and who participate in monitoring of whole economic programs. Only one of the seven countries with such programs did this. This initiative was applied by three countries through working capital programs, and one through spur entrepreneurship and innovation programs. These initiatives included government purchases initiative, monitor initiative, and public initiative. In total, five governments applied such initiatives.

Liquidity crisis Liquidity initiatives are supposed to be carried out by countries with working capital programs, but only three of the nine countries with such programs did that, and all applied cap payment delays methods. In total 10 countries have such initiatives. Mainly because four taxation programs actually applied liquidity initiatives, for their faster tax refunds methods and government payment methods. Liquidity initiatives include; extend repayment period, extend guarantee period, raise reimbursement rate, tax reimbursement in cash, faster tax refunds, pay government bill, granted payments on facilities and public procurement, transfer of

SME unpaid debts to participation funds, provide resources to factoring, and cap payment delays.

Reduce business cost As to solving existing obstacles, 13 countries have programs with initiative to reduce business cost. Different from their intended aims to reduce only taxation, these programs reduce not only tax but also interest, transaction costs, and other fees. Although these costs were not listed as serious obstacles, it will help with the overall reduction of business cost.

Attracting qualified labour As to initiatives that deal with skilled labour, the Canadian program helps to attract qualified workers; no other programs mentioned initiatives dealing with this obstacle.

Increase competition Increase competition initiatives mainly include providing equipment, promoting export, and creating funds and inject money. Most governments realize this measure through created funds and inject money. It is hard to say whether allocated money will help with increased competition.

Regulation Six countries have programs with regulation initiatives and half of them come from pro-investment programs. The regulation initiatives include favorable policy and reduced paper work burden.

Government initiatives cover almost all the serious obstacles faced by SMEs.

However, this doesn't mean those obstacles can be fully solved. Firstly, the initiative can only solve parts of the obstacles. Secondly, only a few countries applied initiatives to solve most of the obstacles. Thirdly, some programs are designed to realize other purposes, thus the effectiveness for the initiative may be limited.

### **5.3.2.2 Developed vs. non-developed economies**

Due to the limitation of data, differences cannot be established between developed and non-developed economies. For details, refer to the Table 5.33-5.34.

### **5.3.3 Target of programs**

This section examines whether governments tend to help SMEs and disadvantaged SMEs more after the GFC. Table 5.35, 5.36 and 5.37 elaborate the findings of this section. Each table is structured as follow:

- Program targets were listed horizontally.
- Program names were listed vertically.
- The body of the tables contains abbreviations of corresponding economies that applied such program. The bold abbreviations in table 3.35 represent the economies in which the programs were carried out after the GFC.

### **5.3.3.1 Overview**

Generally speaking most countries took more actions post-GFC to improve SMEs' situation than pre-GFC. Governments also tended to broaden their targets to SMEs as well as larger enterprises. (Table 5.35)

### **5.3.3.2 Developed vs. non-developed economies**

Due to the relatively small number of economies for which data are available, it is challenging to say if there are any differences in targets. (Table 5.36-5.37)

**Table 5.28 Program aims—developed and non-developed economies**

<b>Program</b> <b>Aim</b>	Skilled labour	Accessing financing	Angel-VC-PE	Extend credit	Loan Guarantee	Export facilitation	Spur entrepreneurship	Pro-investment	Reduce risk/monitor	Working capital	Taxation
<b>New obstacles</b>											
<b>Financing</b>		Br, Ca, Ch, Pe, Ph, Nz, Me, Sp, EIB	Nz, Th, Au, Austria, Fi, Hu, Me, UK, Ch, SI, Es, EIB	Ca, HK, Be, Fi	Ch, HK, Ph, Ta, Au, Ne, NZ, Sp, Austria, Cz, Fr, Ge, Gr, Hu, It, Ja, Ko, Lu, Me, Sw, UK, E.C., EIB						
<b>Market recession</b>									Pe, Be, Fr, USA, Ca		
<b>Liquidity crisis</b>										Ch, HK, SI, Ca, Fr, Ne, UK, Me	
<b>Existing obstacles</b>											
<b>Rising business costs</b>											
<b>--level of taxation</b>											Ro, Ja, Be, Ca, De, Fr, It, NZ
<b>--Other</b>											
<b>Attracting&amp; retaining qualified workers</b>	Ca										
<b>Increasing competition</b>						Ca, Au, NZ, Austria,CZ, De, Ge, It, Lu, Me, Sw, SI	Ca, Ch	Au, Be, Ca, Cz, Fr, Ge, It, Hu, Sp, USA, E.C., EIB			
<b>Regulations</b>											

**Table 5.29 Program aims—developed economies**

<b>Program</b> <b>Aim</b>	Skilled labour	Accessing financing	Angel-VC-PE	Extend credit	Loan Guarantee	Export facilitation	Spur entrepreneurship and innovation	Pro-investment	Reduce risk/monitor	Working capital	Taxation
<b>New obstacles</b>											
<b>Financing</b>		Ca, Nz, Sp	Nz, Th, Au, Austria, UK	Ca, HK	HK, Au, Ne, NZ, Sp, Austria, Fr, Ge, Ja, Lu, Sw, UK						
<b>Market recession</b>									Fr, USA, Ca		
<b>Liquidity crisis</b>										HK, Ca, Fr, Ne, UK	
<b>Existing obstacles</b>											
<b>Rising business costs</b>											
<b>--level of taxation</b>											Ja, Ca, De, Fr, NZ
<b>--Other</b>											
<b>Attracting&amp; retaining qualified workers</b>	Ca										
<b>Increasing competition</b>						Ca, Au, NZ, Austria, CZ, De, Ge, Lu, Sw	Ca	Au, Ca, Fr, Ge, Sp, USA			
<b>Government regulations</b>											

**Table 5.30 Program aims—non-developed economies**

<b>Program</b> <b>Aim</b>	Skilled labour	Accessing financing	Angel-VC-PE	Extend credit	Loan Guarantee	Export facilitation	Spur entrepreneurship and innovation	Pro-investment	Reduce risk/monitor	Working capital	Taxation
<b>New obstacles</b>											
<b>Financing</b>		Br, Ch, Pe, Ph, Me	Fi, Hu, Me, Ch, SI	Be, Fi	Ch, Ph, Cz, Gr, Hu, It, Ko, Me						
<b>Market recession</b>									Pe, Be		
<b>Liquidity crisis</b>										Ch, SI, Me	
<b>Existing obstacles</b>											
<b>Rising business costs</b>											
<b>--level of taxation</b>											Ro, Be, It
<b>--Other</b>											
<b>Attracting&amp; retaining qualified workers</b>											
<b>Increasing competition</b>						CZ, It, Me, SI	Ch	Be, Cz, It, Hu			
<b>Government regulations</b>											

**Table 5.31 Program initiative—developed and non-developed economies**

Aim	Labour	Financing				Increase competition			Market recession	Liquidity	Reduce cost
Program Initiative	Skilled labour	Access financing	Angel-VC-PE	Extend credit	Loan guarantee	Export facilitation	Spur entrepreneurship and innovation	Pro-investment	Reduce risk/monitor	Working capital	Taxation
Financing		Br;Ca;Ch;Pe ;	Th;NZ;Hu;UK	Be;HK ; Ca; Fi	Ta,Ch,HK,Austria,Fr ,Hu,Ko,Lu,Ne,Sw,U K,EIB ; Au	De,Me,Sl,Au			Be,Fr,Ca	Hk,Ca ,	
Market recession							Ch		USA	Sl,Me,Fr	
Liquidity crisis		Br		Ca	HK					Fr,Ne,UK , Ch	Fr,Ro,It,Be
Reduce cost		Br, Ch			Austria, Ta	It		Be,Hu,USA			Ro,Ja,Ca,It ,Be,De,NZ
attracting qualified labour	Ca										
increase competition						Me,Sw,Ca	Ca	Austria,Ca, Hu,Be,E.C. ,EIB,Sp			
Regulation		Ph		Ca	Ch			Fr,Ge,It			

**Table 5.33 Program initiative—developed economies**

Aim	Labour	Financing				Increase competition			Market recession	Liquidity	Reduce cost
Program Initiative	Skilled labour	Access financing	Angel-VC-PE	Extend credit	Loan guarantee	Export facilitation	Spur entrepreneurship and innovation	Pro-investment	Reduce risk/monitor	Working capital	Taxation
Financing		Ca	Th;NZ;UK	HK ; Ca	HK,Austria,Fr,Lu,Ne,Sw,UK ; Au	De,Au			Fr,Ca	Hk,Ca	
Market recession									USA	Fr	
Liquidity crisis				Ca	HK					Fr,Ne,UK	Fr
Reduce cost					Austria			USA			Ja,Ca,De,NZ
attracting qualified labour	Ca										
increase competition						Sw,Ca	Ca	Austria,Ca,Sp			
Regulation				Ca				Fr,Ge			

**Table 5.34 Program initiative—non-developed economies**

Aim	Labour	Financing				Increase competition			Market recession	Liquidity	Reduce cost
Program Initiative	Skilled labour	Access financing	Angel-VC-PE	Extend credit	Loan guarantee	Export facilitation	Spur entrepreneurship and innovation	Pro-investment	Reduce risk/monitor	Working capital	Taxation
Financing		Br;Ch;Pe;	Hu	Be;Fi	Ch, Hu,Ko,	Me,SI			Be		
Market recession							Ch			SI,Me	
Liquidity crisis		Br								Ch	Ro,It,Be
Reduce cost		Br, Ch				It		Be,Hu			Ro, It,Be
attracting qualified labour											
Increase competition						Me		Hu,Be			
Regulation		Ph			Ch			It			

**Table 5.35 Program targets—developed and non-developed economies**

<b>Program</b>	<b>Aim</b>	<b>All</b>	<b>SME and other</b>	<b>SME</b>	<b>Specific sector/entrepreneur</b>	<b>SME above</b>	<b>SME below</b>
Access financing		Ch, Ph, Ca, Ch, Me			Br, Ch, Ca	Ch, NZ	Ca, Ch EIB
Angel-VC-PE				Austria, Hu	Nz, Th NZ, Au, Ch, SI	Nz, Th Nz, Au, Uk, Ch, SI	Th NZ, Au, Hu, UK, SI, Es
Extend credit		HK, Be, Fi					Ca, Fi
Loan guarantee		Au, Ch	Ch Hk, Ta, Fr	Hk Sp, Ge, Hu, It, Me, Sw, EIB	Ph, Ch, Ch		Ch, Ph, Ta Ch, UK
Export facilitation		Ca		Au, SI		Au, NZ	NZ
Spur entrepreneurship and innovation					Ca		Ch
Pro-investment					Ca		Hu
Reduce risk/monitor		Ca	Pe				
Working capital				Ch, Hk			
Taxation							Ja

Note: "All" refers to all enterprises; "specific sectors/ entrepreneur" refers to SMEs from specific sector such as high-tech or exporter and specific entrepreneurs such as young entrepreneurs, "SME above" refers to SME above certain criterion (e.g. creditworthy, above certain turnover rate); and "SME below" refers to SMEs below certain criterion (e.g. micro firms, less turnover).

**Table 5.36 Program targets--developed economies**

Program \ Aim	All	SME and other	SME	Specific sector/entrepreneur	SME above	SME below
Access financing	Ca			Ca	NZ	Ca
Angel-VC-PE			Austria	Nz, Th, Au	Nz, Th, Au, Uk	NZ, Au, UK
Extend credit	HK					Ca
Loan guarantee	Au	Hk, Fr	Hk, Sp, Ge, Sw			UK
Export facilitation	Ca		Au		Au,NZ	NZ
Spur entrepreneurship and innovation				Ca		
Pro-investment				Ca		
Reduce risk/monitor	Ca					
Working capital			Hk			
Taxation						Ja

Note: "All" refers to all enterprises; "specific sectors/ entrepreneur" refers to SMEs from specific sector such as high-tech or exporter and specific entrepreneur such as young entrepreneurs, "SME above" refers to SME above certain criterion (e.g. creditworthy, above certain turnover rate); and "SME below" refers to SMEs below certain criterion (e.g. micro firms, less turnover).

**Table 5.37 Program target—Non-developed economies**

Program	Aim	All	SME and other	SME	Specific sector/entrepreneur	SME above	SME below
Access financing		Ch, Ph, Me			Br, Ch	Ch	Ch
Angel-VC-PE				Hu	Ch, SI	Ch, SI	Th, Hu, SI, Es
Extend credit		Be, Fi					Fi
Loan guarantee		Ch	Ch	Hu, It, Me	Ph, Ch		Ch, Ph
Export facilitation				SI			
Spur entrepreneurship and innovation							Ch
Pro-investment							Hu
Reduce risk/monitor			Pe				
Working capital				Ch			
Taxation							

Note: "All" refers to all enterprises; "specific sectors/ entrepreneur" refers to SMEs from specific sector such as high-tech or exporter and specific entrepreneur such as young entrepreneurs, "SME above" refers to SME above certain criterion (e.g. creditworthy, above certain turnover rate); and "SME below" refers to SMEs below certain criterion (e.g. micro firms, less turnover).

## 6. Conclusion and implementation

Governments do have programs aimed to help with financing, market recession, and liquidity crisis problems that emerged after the GFC. Compared with financing, governments focus much less on market recession and liquidity crisis issues that emerged after the GFC. This strategy is not without history. Aernoudt (2005, p.359, in Riding, 2008) noted, well before the GFC, that “government policy to stimulate growth, innovation and especially the creation of new enterprises is rather focused on access to finance.” Governments choose to focus more on financing—most likely because they are more experienced in financing policies. Moreover, compared to other programs, financing programs are the simplest and most straight-forward: unlike working capital initiatives, financing programs only need to work with banks, whereas working capital initiatives need to increase SMEs' cash inflow by solving their debts; and unlike market recession initiatives, which cover several aspects such as monitoring the economy and stimulating the economy, all that need be done for financing purposes is to provide SME money. Once the SMEs receive the loan, the aim is achieved. Together with the indirect positive influence on the other two identified GFC problems of liquidity crisis, and market recession (because of the interrelationship between the three problems as illustrated in Chart 3.1), governments tend to focus on the financing problem. This also explains why they tend to use financing initiatives in liquidity and market programs.

However, governments have not considered the possibility of a negative interrelationship between liquidity, market recession and financing. The interrelationship between the three obstacles may lead financing programs to be less effective. Holding more money in hand does not necessary make

SMEs more likely to purchase from other SMEs or pay their bills. In contrast, low faith in SMEs' clients paying bills and the recovery of the economy may drive them to retain their money to prevent a worse situation. Financing programs increase the chance a SMEs will receive financing, but cannot guide them to put the money to proper use and drive the economy forward.

Among all financing programs, loan guarantee is a primary aim and initiative. This is possibly because in a recession market SMEs (and especially SMEs with financial difficulties) are more risky than larger firms. The loan guarantee program will reduce the risk for banks and increase the chance of SMEs getting approved for a loan. The findings from the background research also prove that the importance of loan guarantees increases as default risk increases. However, considering the cost, the benefits may not be so attractive. Levitsky (1997) has chronicled several cases that suggest that loan guarantee programs have not been good value for taxpayers' funds. Moreover, as the recession lasts, the risk of the loans may be underestimated, resulting in an underestimation of the money allocation.

Governments do have programs aim at existing obstacles of reduce taxation levels and increase SME competition, but they omit other problems prior to the GFC. These problems include: rising business costs from other aspects, attracting and retaining qualified workers, and increasing competition and government regulation. These unsolved problems will still affect SMEs' growth. The governments' initiatives cover almost all those obstacles. However, it does not mean those obstacles can be solved. There are only a few countries that have applied such initiatives and they can only solve part of the obstacles; moreover, they are designed to realize other purposes.

Government strategic initiatives also do not always stick to their aims. Financing and taxation programs applied initiatives that can achieve their goals directly. However, increase competition programs, reduce risk and monitor economy programs, and working capital programs were carried out via initiatives that do not directly target their stated aims. This may be because indirect initiatives cost less and/or suit their economies better or, perhaps, because they could not create a direct initiative.

There are advantages and disadvantages to the differences in initiatives for similar types of programs. Differences may make it challenging for future researchers to evaluate such programs. However, the advantage is that the results of different countries can be compared to find the best initiative to achieve a chosen aim.

Generally speaking, governments have tended to assist SMEs as well as larger enterprises more after the GFC.

Differences between developed and non-developed economies are slight. Non-developed countries tend to hold a more positive attitude to the GFC. However, the aims of “anti-crisis packages” are not different between developed and non-developed economies. This is not surprising. Firstly, as the background research shows, even SMEs in developed economies were facing gaps in credit supplying and demanding before the GFC, not to mention after the crisis. Secondly, as a worldwide crisis, the GFC brought destruction to every open market economy. Thirdly, when dealing with a

worldwide crisis, governments do not only look back on their own history, but are also learning from others. These three reasons explain why the strategies of developed and non-developed economies do not vary widely at all. However, to help SMEs' financing, developed economies are more likely to use loan guarantee programs than non-developed economies. Due to the data limitations, no significant differences can be observed between the initiatives and targets of programs from developed and non-developed economies.

Considering the findings and implementation of this research, the author would provide the following suggestions to governments:

Firstly, perform cost-benefit analyses. According to the APEC survey, few economies have done cost-benefit analyses of their programs. Yet these analyses are very important. Although money comes from the governments, the bills are paid by taxpayers. Governments need to let tax payers know how the money was spent and how effectively it was spent.

Secondly, carry out programs to address the gaps in support for SME obstacles. Most of the new and existing obstacles were remain unsolved, they will still be the obstacles for SMEs' survive and growth. Governments should carry out programs aimed at those problems.

Thirdly, governments should address the gaps between their programs' stated aims and strategic initiatives. To ease a liquidity crisis, governments can implement initiatives such as: paying government bills, factoring, offering faster tax refunds, extending loan repayment/guarantee

periods, and capping clients' payment delays. To bolster the market, governments can undertake government purchases, monitoring, and other purchasing incentives. Eliminating existing obstacles is also an important factor. To reduce SMEs' business costs, governments can implement other initiatives along with reducing taxes, including reducing fees or interest rates, reimbursing transaction costs, reducing insurance premiums. To attract and retain qualified workers, governments can try reducing SME employees' income tax. To increase competition, governments can try initiatives that are more specific than creating funds and inject money, such as providing free training for SME employees and increasing public service for SMEs. To reduce regulatory difficulties for SMEs, governments can try reducing paper work burden, increasing the process speed for SMEs, and other favorable policies.

Fourthly, to be more prepared for the next crisis, governments should properly evaluate their programs, and share their experiences with other economies. The outcome of different initiatives should be compared. These will assist them to more effectively choose the right programs to suit their needs and challenges.

Further researches also need to be done to answer the following research questions:

- 1) Governments have done surveys and researches to understand the obstacles of the SMEs, but why they only aim to solve some of them? Is it because they are short of resources or they misunderstood the SMEs' needs, or, they could not come up with proper ways to solve those problems? Answering these questions can provide information to help the governments make better decision on whether or not carry out programs to fix certain problem.

2) Governments learn from each other, but why they still have very different initiatives for programs with similar aims? Is that they believe those initiatives suits their economies better, or they did not learn others' initiatives? Answering these questions can help governments see whether they have implemented appropriate initiatives.

3) How to compare the efficiency of programs with the same aim but different initiatives? Governments may evaluate their programs, but the results can hard to be compared with that of the same program with different initiatives. Answering this question can help to find out the most proper way of carrying out certain program, thus help governments better prepare for the next crisis.

## References

- Aernoudt, R. 2005, Executive forum: Seven ways to stimulate business angels' investments, *Venture Capital* 7 (4), pp. 359-371
- Bartlett, W., Bukvič, V., 2001, Barriers to SME Growth in Slovenia, *Most* 11 (2), pp. 177-195
- BDC, 2008, *BDC's Entrepreneurial insight*, February 2008, p.12
- Beck, T., Demirguc-Kunt, A., Soledad Martinez Peria, M., 2008a, Bank Financing for SMEs around the World, *Policy Research Working Paper* 4785
- Beck, T., Demirgüç-Kunt, A., Maksimovic, V., 2008b, Financing patterns around the world: Are small firms different? *Journal of Financial Economics* 89 (2008) 467-487
- Berger, A.N., Miller, N.H., Petersen, M.A., Rajan, R.G., Stein, J.C., 2005, Does function follow organizational form? Evidence from the lending practices of large and small banks. *Journal of Financial Economics* 76 (2), pp. 237-269
- Berger, A.N., Udell, G.F., 2006, A more complete conceptual framework for SME finance, *Journal of Banking & Finance* 30 (2006) 2945–2966
- Berger, A.N., Rosen, R.J., Udell, G.F., 2007, Does market size structure affect competition? The case of small business lending, *Journal of Banking & Finance* 31(2007)11–33
- Boyns, N., Cox, M., Spires, R., Hughes, A., 2003, *Research into the Enterprise Investment Scheme and Venture Capital Trusts*. London: PACEC (Public and Corporate Economic Consultants).
- Bygrave, W.D., Hay, M., Ng, E., Reynolds, P., 2003, Executive forum: a study of informal investing in 29 nations composing the Global Entrepreneurship Monitor, *Venture Capital*, Volume 5, Issue 2 April 2003 , pages 101 - 116
- Canadian Manufacturers & Exporters, *2007-2008 Management issues survey*, October 2007
- de la Torre, A., Martínez Pería, M.S., Schmukler, S.L., 2008, *Bank Involvement with SMEs: Beyond Relationship Lending*, Policy Research Working Paper 4649
- Dorey, E., 2009, Bleak funding future forecast for biotech, *Chemistry & Industry* June 2009 pp. 16-17
- Fraser, S., 2004, *Finance for Small and Medium-Sized Enterprises: A Report on the 2004 UK Survey of SME Finances*
- Gompers, P. and Lerner, J., 2003, Equity financing. In *Handbook of entrepreneurship research*, ed. Z.Acs, and D. Audretsch, 267–98. New York: Springer.
- Galoozis, C., 2005, Tax breaks for angels. *Inc Magazine*, September.  
<http://www.inc.com/magazine/20050901/finance.html> (accessed September 2008).
- Harrison, R.T., Mason, C.M., 1992, International perspectives on the supply of informal venture capital, *Journal of Business Venturing* 7 (6), pp. 459-475
- Hashi, I., 2001, Financial and Institutional Barriers to SME Growth in Albania: Results of an Enterprise Survey, *MOCT-MOST* 11: 221-238, 2001.
- Hodorogel, R. G., 2009, The Economic Crisis and its Effects on SMEs, *Theoretical and Applied Economics*, volume 2009, issue May, pp. 79-88
- INSEAD, 2011, *Global Innovation Index Report 2009-2010*, [www.globalinnovationindex.org](http://www.globalinnovationindex.org)
- Industry Canada, 2009, *Credit conditions survey for small business: preliminary result*
- LE Thi Thuy Van, 2009, Vietnam's policy response to the financial crisis, *EAI Background Brief* No. 447
- Lee, Y., Rhee, C., Sung, T., 2006, Fiscal policy in Korea: Before and after the financial crisis, *International Tax and Public Finance* 13 (4), pp. 509-531

- Levitsky, J., 1997, Best Practice in Credit Guarantee Schemes, *The Financier* 4(1–2): 5-11
- Llisteri, J. J., 1997, Credit Guarantee Schemes: Preliminary Conclusions, *The Financier* 4(1–2): 95–9.
- Madill, J.J., Haines Jr., G.H., Riding, A.L., 2005, The Role of Angels in Technology SMEs: A Link to Venture Capital, *Venture Capital* Vol. 7, No.2, 107-129, April 2005
- Murray, G. C., 2007, Venture capital and government policy. Landström, H. (Eds) *Handbook of research on Venture Capital*) pp. 113-151
- Nitani, M., Riding, A., 2005, Promoting enterprise development or subsidizing tradition? The Japan credit supplementation system, *International Small Business Journal* 23 (1), pp. 48-71
- OECD, 2009a, *Report on the strategic response: fostering innovation for sustainable growth*, C/MIN(2009)9/ANN3
- OECD, 2009b, *Report on the strategic response: the impact of the global crisis on SME and entrepreneurship financing and policy responses*, C/MIN(2009)9/ANN5
- OECD, 2009c, *The impact of the Global Crisis on SME and entrepreneurship financing and policy responses*, OECD working paper
- Petersen, M.A., Rajan, R.G., 1997, Trade Credit: Theories and Evidence, *The Review of Financial Studies* (1986-1998); Fall 1997; 10, 3; ABI/INFORM Global pg. 661
- RBC Financial Group, 2002, *The Path to Prosperity: Canada's small- and medium-sized enterprises*, A study sponsored by Canadian Federation of Independent Business Canadian Manufacturers & Exporters RBC Financial Group
- Riding, A., Orser, B.J., Spence, M., Belanger, B., 2010, Financing new venture exporters, *Small Business Economics*, pp. 1-17
- Riding, A.L., 2008, Business angels and love money investors: segments of the informal market for risk capital, *Venture Capital* Vol. 10, No.4, October 2008, 355-369
- Statistic Canada, 2004, *Survey on Financing of Small and Medium Enterprises*
- Statistic Canada, 2007, *Survey on Financing of Small and Medium Enterprises*
- Tam, P., 2010, Venture-Capital Firms Caught in a Shakeout, the *Wall Street Journal*, [http://online.wsj.com/article/SB10001424052748703915204575104221092909884.html?mod=igoogle\\_wsj\\_gadgv1& march 2010](http://online.wsj.com/article/SB10001424052748703915204575104221092909884.html?mod=igoogle_wsj_gadgv1& march 2010)
- Tanzania Ministry of Industry and Trade, 2002, *Small and medium enterprise development policy*
- Van Osnabrugge, M., and Robinson, R. J., 2000, *Angel Investing: Matching Start-Up Funds with Start-Up Companies: The Guide for Entrepreneurs, Individual Investors, and Venture Capitalists*, Jossey-Bass; 1 edition (April 18, 2000)
- World Bank, 2009 GDP, from [www.wikipedia.org](http://www.wikipedia.org)
- Yokoshima, N., 2007, Support program for SME IP activity in Japan, *WIPO forum on intellectual property and small and medium-sized enterprises*, 13 September 2007

## Appendix 1 Methodology tables

**Table 4.2 Scores and abbreviations**

Category	Economy	Abbreviation	Score
Developed	United States	USA	210.07
	Denmark	De	202.39
	Luxembourg	Lu	191.72
	Netherlands	Ne	191.29
	United Kingdom	UK	190.02
	Spain	Sp	182.7
	Switzerland	Sw	177.62
	Japan	Ja	172.43
	Hong Kong, China	HK	139.67
	Canada	Ca	136.44
	New Zealand	NZ	133.79
	Australia	Au	127.52
	Thailand	Th	118.2
	Austria	Austria	114.19
	Germany	Ge	105.46
France	Fr	105.25	
Non developed	Italy	It	101.79
	Korea, Rep.	Ko	99.65
	Estonia	Es	96.11
	Belgium	Be	92.27
	Greece	Gr	91.54
	Chile	Ch	88.53
	Finland	Fi	82.01
	Slovenia	Sl	78.99
	Hungary	Hu	61.37
	Czech Republic	Cz	48.02
	Brunei Darussalam	Br	37.18
	Romania	Ro	35.76
	Philippines	Ph	28.81
	Mexico	Me	22.03
Peru	Pe	21.03	
n/a	Taiwan	Ta	n/a
	EIB/EIF	EIB	n/a
	E.C.	E.C.	n/a

**Table 4.3 GDP**

<b>Country</b>	<b>GDP (millions of USD)</b>
United States	14,119,000
Euro zone	12,455,979
Japan	5,068,996
Germany	3,330,032
France	2,649,390
United Kingdom	2,174,530
Italy	2,112,780
Spain	1,460,250
Canada	1,336,068
Australia	924,843
Mexico	874,902
Netherlands	792,128
Switzerland	500,260
Belgium	468,522
Austria	384,908
Greece	329,924
Denmark	309,596
Thailand	263,856
Finland	237,512
Hong Kong, China	215,355
Czech Republic	190,274
Chile	163,670
Romania	161,110
Philippines	160,476
Hungary	128,964
Peru	126,734
New Zealand	125,160
Luxembourg	52,449
Slovenia	48,477

## Appendix 2 Analysis tables

**Table 5.1 financing difficulties among small businesses**

Question	situation better -----> situation worse						
	1	2	3	4	5	6	7
Small businesses generally face disproportionate difficulties in obtaining business loans.			NZ;		Pe; Br; Ph; Ta; HK; Ca;	Ch;	Th;
Innovative small businesses generally face disproportionate difficulties in obtaining business loans.				Pe;	Ch; Br; Ta;	Th; Ph; NZ;	Ca;
Small firms in certain sectors face particularly difficulty obtaining commercial loans.			Br;	Pe;	Ph; HK; NZ;	Ch; Th; Ca;	

**Table 5.2 financing demand and supply**

Question	situation better -----> situation worse						
	1	2	3	4	5	6	7
Demand for credit available to small firms exceeds the supply			Br; Ph;	Ch; HK; NZ;	Pe; Ta;	Th; Ca;	
Before the GFC supply of credit to SMEs increased.	Ch; NZ;	Pe; Br; Ph;		Th;	HK; Ca;		
Demand for venture capital to small firms exceeds the supply	Th;		Ch; Pe; Br;	NZ;		Ph; Ca;	

**Table 5.3 financing from individuals (including friends and family)**

Question	Strongly disagree -----> strongly agree						
	1	2	3	4	5	6	7
Private individuals (including friends and family) are an important source of financing for small firms in my economy.			Ca;		Ch; HK;	Pe; Th; Br; Ph; Ta;	NZ;

**Table 5.4 Legal system**

Question	situation better -----> situation worse						
	1	2	3	4	5	6	7
The legal system in my economy is consistent with an efficient credit market.	HK; NZ;	Ch; Br; Ta; Ca;	Ph;	Pe;		Th;	
Before the GFC, the legal setting for the credit market in my economy was strengthened.		Br; Ca;	Ch; Pe; Ph;	Th; HK; NZ;			

**Table 5.5 Situation of individual economies (1-7: better to worse)**

Question		Developed				Non-developed				N/A
		HK	Ca	NZ	Th	Ch	Br	PH	Pe	Ta
Difficulty	Small businesses generally face disproportionate difficulties in obtaining business loans.	5	5	3	7	6	5	5	5	5
	<u>Innovative</u> small businesses generally face disproportionate difficulties in obtaining business loans.		7	6	6	5	5	6	4	5
	Small firms in certain sectors face particularly difficulty obtaining commercial loans.	5	6	5	6	6	3	5	4	
Demand and supply	Demand for credit available to small firms exceeds the supply	4	6	4	6	4	3	3	5	5
	Before the GFC supply of credit to SMEs increased.	5	5	1	4	1	2	2	2	
	Demand for venture capital to small firms exceeds the supply		6	4	1	3	3	6	3	
Legal system	The legal system in my economy is consistent with an efficient credit market.	1	2	1	6	2	2	3	4	2
	Before the GFC, the legal setting for the credit market in my economy was strengthened.	4	2	4	4	3	2	3	3	

**Table 5.6 Changes of financing sources**

Source	No. of decreased	No. of increased	Decreased -----No change-----> Increased						
			1	2	3	4	5	6	7
Term loans from private sector lenders	2	4		Ch;NZ;		Ca;Br;	HK;Ph;Th;	Pe;	
Lines of credit/operating loans from private sector lenders	2	5		Ch; NZ;		Br; Th;	Ph;	HK; Pe;	
Leases from private sector financial institutions	4	2		Ca; HK; NZ;	Pe;	Ch; Br;	Ph;	Th;	
Direct loans from government	2	3			Pe; Th;		Ca; Ch; Ph;		
Loans from government-owned financial institutions	1	5			Th;		Ca; Pe; Br;	Ch; Ph;	
Trade credit owing to suppliers	2	4			HK; Th;	Pe;	Ch; Ph; NZ; Br;		
Factoring	1	1			Pe;	HK; Ph; Th;	Ch;		
Personal loans from lending institutions	1	4			HK;		Ph; Pe; Br; Th;		
Personal credit cards	2	4		Ch;	HK;		Ph; Pe; Br;		Th;
Micro-credit	0	4				Pe;	Ch; NZ; Br;		Ph;

**Table 5.7 Change of individual countries**

Sources	Developed				Non-developed			
	HK	Ca	NZ	Th	Ch	Br	Ph	Pe
Term loans from private sector lenders	1	0	-2	1	-2	0	1	2
Lines of credit/operating loans from private sector lenders	2		-2	0	-2	0	1	2
Leases from private sector financial institutions	-2	-2	-2	2	0	0	1	-1
Direct loans from government		1		-1	1		1	-1
Loans from government-owned financial institutions		1		-1	2	1	2	1
Trade credit owing to suppliers	-1		1	-1	1	1	1	0
Factoring	0			0	1		0	-1
Personal loans from lending institutions	-1			1		1	1	1
Personal credit cards	-1			3	-2	1	1	1
Micro-credit			1		1	1	3	0
<b>Summary</b>								
<b>Number of increase sources</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>9</b>	<b>5</b>
<b>Number of decrease sources</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Table 5.8 Four scenarios**

	Risk low -----> risk high			
	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Type of small business	printing	printing	printing	pharmaceutical
Situation	Seeking expand	Suffering loses	Start-up	Developing new drug
Financing purpose	New machinery	Cash flow	Cash flow	Human trials
Business history	18 years	18 years	0 years	18 years
Profiting history	Last 5 years	5 years preceding current	0 years	Last 5 years
Expectation	N/A	N/A	Not profitable for at least 1 year	If successful, profit at least double each year for 10 years
Credit history	Yes	Yes	No	Yes
Collateral	Machinery	Inventories and accounts receivable	N/A	Plant and equipment (less than borrowing amount)

**Table 5.9 Information availability to the lender**

Question: "In my economy, the lending bank would be able to access credit histories on the firm as well as on the owner to help with the lending decision."

	Strongly disagree -----> Strongly agree						
	1	2	3	4	5	6	7
Scenario 1				HK;		Ch; Ph; Pe;	Ca; NZ; Br; Th;
Scenario 2				HK;	Pe;	Ch; Ph;	Ca; NZ; Br; Th;
Scenario 3	HK;			Br;	Ph; Pe;	Ch;	Ca; NZ; Th;

**Table 5.10 Loan approval**

Question: *In my economy, there is a very strong likelihood that the owner's loan application would be approved.*

	Strongly disagree -----> Strongly agree						
	1	2	3	4	5	6	7
Scenario 1				Ch; NZ;	HK;	Ca; Pe; Th;	Ph; Br;
Scenario 2			Ch; NZ;	Ca; HK;	Ph;	Pe; Br; Th;	
Scenario 3	Pe;	HK(1.5); NZ;	Ch; Ph; Br;	Ca; Th;			
Scenario 4		NZ;	HK(2.5); Ph;	Th;	Ca; Ch; Pe;		Br;

**Table 5.11 Necessity of loan guarantee and risk sharing program**

Question: *In my economy, the owner's loan application would only be approved under the terms of a loan guarantee or risk sharing program.*

	Strongly disagree -----> Strongly agree						
	1	2	3	4	5	6	7
Scenario 1	Ca; NZ;	HK(1.5);	Ph; Br;	Th;	Pe;	Ch;	
Scenario 2	Ca;	HK;	Ph;	NZ; Br; Th;	Pe;	Ch;	
Scenario 3				HK; NZ; Br; Th;	Ph; Pe;	Ca; Ch;	
Scenario 4		HK;	Th;	Ca; NZ; Br;	Pe;	Ch; Ph;	

**Table 5.12 Importance of patent**

Question: *In my economy, having patent protection would be a significant factor in the firm's ability to access financing.*

Strongly disagree -----> Strongly agree						
1	2	3	4	5	6	7
	Ph;	HK(2.5); Pe;	Ch;	Th;	Ca; Br;	NZ;

**Table 5.13 Interest rate and fees**

Question: In my economy, if the loan application was approved, the interest rate and fees associated with the loan would be relatively low.

	Strongly disagree -----> Strongly agree						
	1	2	3	4	5	6	7
Scenario 1		Pe; NZ;	Ch;	Br;	Ca; HK; Ph;	Th;	
Scenario 2		Ch; NZ;	Ca; Ph; Pe;	HK; Br; Th;			
Scenario 3		Ch; Ph; Pe; NZ;	HK; Th;	Ca; Br;			
Scenario 4		HK; Ch; NZ;	Ca; Ph;	Pe; Th;	Br;		

**Table 5.14 Deal with default**

Question: In my economy, if business conditions deteriorated such that the business missed three successive monthly payments, the lender would seek to foreclose on the collateral (i.e. the lender forces the sale of the assets given as collateral to cover the outstanding debt).

	Strongly disagree -----> Strongly agree						
	1	2	3	4	5	6	7
Scenario 1			Th;	Pe; Br;	Ca; HK; Ch; Ph;		
Scenario 2				Br;	Ca; HK; Ch; Ph; Pe; NZ;	Th;	
Scenario 3				Pe;	Ca; HK; Ch;	Ph; NZ; Br; Th;	

**Table 5.15 Enforcement**

Question: In my economy, if the lender foreclosed on the collateral due to non-payment of the debt, the legal system would enforce the lender's position in a timely manner.

	Strongly disagree -----> Strongly agree						
	1	2	3	4	5	6	7
Scenario 1		Ph;	Br;	Ch; Pe; Th;	HK;	Ca; NZ;	
Scenario 2	Ph;		Br;	Pe;	HK(4.5); Ch; Th;	Ca;	NZ;

**Table 5.16 Availability of financing from venture capital**

*Question: In my economy, the business owner may be able to finance the business start-up/the trials by accessing venture capital.*

	Strongly disagree -----> Strongly agree						
	1	2	3	4	5	6	7
Scenario 3	Ph;	HK(1.5); Th;	Pe;		Ca; Ch; NZ; Br;		
Scenario 4		Ph;	HK(2.5); Th;	Pe;	Ch; Br;	Ca; NZ;	

**Table 5.17 Evaluation of access financing program**

Time	Before the GFC										After the GFC					
Country	Canada		Chile								Canada			Chile		NEECO
Program	CSBF	CORFO	Fund CORFO	Banco Estado		INDAP		SERCOTEC		Risk capital CORFO	CYBF	CORFO	Banco Estado			
Measured benefit	USD4431.4m (9 years)															
Other benefit/ characters	Out performance										Operating cost effective				Support up to \$150m short term credit at any one time	
Shortcoming											Unlikely self-susaining					
Take up rate																
--Number of recipients	10,000	1569	1802	2969	6251	25,326	20,233	11,283	47,586		326	415	480	1802	7,125	
--Amount	USD0.91b	USD147m	USD222m	USD161m	USD325m					USD86m				USD119m	USD36m	
--Year	Per year	2007	2008	2007	2008	2007	2008	2007	2008		06-07	07-08	08-09	2008	Mid 2009	

**Table 5.18 Money allocation for SME angel-VC-PE financing measures**

Country	Money located	Time
New Zealand	a fund of NZ \$40 million (USD 27.2 million)	BF
Thailand	Total= 212,400 mil. Baht (USD 6,372 million)	BF
New Zealand	NZ \$ 20 million (USD 12.6 million)	AT-E
Australia	“AUD83 million (USD 68.89million) over a three year period”	AT
Austria	€40 million (USD 52million) per annum for 2009 and 2010	AT-E
Hungary	HUF 35 billion (USD156.39 million)	AT
Hungary	“between €1 million (USD1.3million) and €20 million (USD26 million), of around €5 to €7”	AT
UK	£75 million (USD110.5 million) of equity	AT
Slovenia	€35 million (USD45.5 million)	AT
EIB/EIF	€550 million (USD715 million)	AT

Note: A “BF” sign means program carried out before the GFC; “AT” means program carried out in responding to the GFC; “AT-E” means program was carried out before the GFC, but was improved after the GFC.

**Table 5.19 Target of SME angel-VC-PE financing measures**

Country	Target	All SME	Specific sector/ entrepreneur	SMEs above certain criterion	SMEs below certain criterion
New Zealand			High-tech		Seed and start up
Thailand			Technology and auto-part	High performance	Micro
New Zealand			High-tech	High growth	Early stage
Australia			Innovative	High potential	Young
Australia		Y			
Hungary					Early/growth, less than 5 years, annual turnover less than HUF 1.5b
Hungary		Y			
UK				Viable business models, and growth potential	Turnover up to €50 million, need long term capital
Chile			Innovative	High growth potential	
Slovenia			Innovative	High growth potential	Early stage
Estonia					Below self-financing ratio

**Table 5.20 Delivery of SME angel-VC-PE financing measures**

Country	Program name	Financing	Time
New Zealand	Introduction of the Seed Co-Investment Fund (SCIF)	“up to NZ\$8 million(USD5.44 million) in deals identified by an angel partner network”; “up to NZ \$0.5 million(USD0.34 million) in a company”	BF
New Zealand	Annex Fund	NZ\$1 for every NZ\$2 of private sector capital”. NZ\$5m per VC fund, no more than NZ\$2, per company	AT-E
Hungary	New Hungary Venture Capital Programme	“investment may have a transaction size of an annual €1.5 million” (USD 1.95 million)	AT
UK	The Capital for Enterprise Fund	£250,000 to £2 million (USD367 thousand and USD2.99 million) to each company	AT

Note: A “BF” sign means program carried out before the GFC; “AT” means program carried out in responding to the GFC; “AT-E” means program was carried out before the GFC, but was improved after the GFC.

**Table 5.21 Funding allocated to loan guarantee programs (\$US)**

Country	Money allocated (million US dollar)	Time
Chile	USD3	BF
HK	HK\$6 (USD0.78)	BF
Chile	USD130.00	AT-E
Chile	USD50	AT-E
HK	USD12,800.00	AT
Australia	USD3,087.29	AT-E
Czech Republic	USD82.42	AT
Hungary	USD132.22	AT
Japan	USD215,573.38	AT-E
Italy	USD604.04	AT
Korea	USD8,400.00	AT-E
Netherlands	USD107.38	AT
UK	USD1,778.55	AT
EIB/EIF	USD13,423.00	AT
Germany	USD20,134.5	AT-E
Greece	USD3,489.98	AT
Switzerland	USD133.29	AT

Note: A “BF” sign means program carried out before the GFC; “AT” means program carried out in responding to the GFC; “AT-E” means program was carried out before the GFC, but was improved after the GFC.

**Table 5.22 Target of loan guarantee program**

Country	All	SME and other	SME	specific sector/entrepreneur	SME above	SME below
Chile		Y				
Chile						Y
HK			Y			
Philippines				Y		Y
Taipei						Y
Chile				Y(exporter)		
Chile						Y
Australia	Y					
Chile	Y					
Chile						Y
Chile				Y(exporter)		
HK		Y				
Taipei		Y				Y
Spain			Y			
France		Y				
Germany			Y			
Hungary			Y			
Italy			Y			
Mexico			Y			
Switzerland			Y			
UK						Y
UK						Y
UK						Y
EIB/EIF			Y			
No. of program	2	4	8	3		9
No. of economy	2	4	8	2		4

**Table 5.23 Loan guarantee program delivery**

Country	Guarantee rate	Delivery through	Fees	Other measure	Guaranty amount	Guaranty period	Target	Time	Duration
Chile	up to 80%						SME and other	BF	
Chile	50%-70%						SME below	BF	
Chile		CORFO					sector	BF	
HK	up to 50%						SME	BF	
Philippines		financial institutions					SME below	BF	
Taipei	40%-100%	4 approach	Y		up to more than NTUSD200m		SME below	BF	
Australia			Y	Guarantees deposits and wholesale debt			All	AT	T
Chile					increase USD1.43b		All	AT-E	T
Chile	40%-70%	CORFO					below	AT	T
Chile				extend eligible SME and the cover, build online postulation system	increase USD1m		sector	AT-E	P
HK	80%	PLIs			to HK12m(USD1.5m for each)	60 months or to Dec.31 2014	SME and other	AT	
Taipei			Y	financing amount to SMEs exceeded NTUSD55b for June and July 2009; see table for others	to NTUSD45.2b		SME and other	AT	T
Chile		CORFO					below	BF	P
Netherlands				Expand credit insurance and guarantee payment of large transactions				AT	
Spain		Instituto de Credito Oficial					SME	AT	

**Table 5.23 continued**

Country	Guarantee rate	Delivery through	Fees	Other measure	Guaranty amount	Guaranty period	Target	Time	Duration
Austria				low interest loan programme increase to €600m; new micro-loan program (up to €30,000) endowed with a total of €50m	from €3 to €5.3 b; €400m/year			AT	
France				important portion linked to short-term credit	up to €4b		SME and other	AT	
Hungary	up to 80%				to HUF900m(€3m)		SME	AT	
Korea				collateralised bond obligation worth USD1.4b; increase SME loan by USD10b	guarantees volume USD8.4b			AT	
Luxembourg					€500m			AT	
Netherlands					to €1.5m per company, for start up to €0.2m			AT	
Switzerland					guarantee limit to CHF 1m (0.66m) per company		SME	AT	
UK	up to 50%				worth up to €22.7b			AT	
UK				work with existing or new founders to assist with immediate liquidity problems			SME below	AT	T
E.C.				urge member to reduce administrative burdens and help entrepreneurship				AT	T
EIB/EIF				€30b fro loans to SMEs, reinforce by €1b a year its lending to mid-sized corporations, second level guarantee				AT	

Note: A “BF” sign means program carried out before the GFC; “AT” means program carried out in responding to the GFC; “AT-E” means program was carried out before the GFC, but was improved after the GFC. “T” means temporary program; “P” means permanent program.

**Table 5.24 Evaluation of loan guarantee programs**

Country	Program	Number of operations	Loan amount	Coverage	Year	Take up rate	Additionality	Estimated positive effects	Time	Duration
Chile	FOGAPE	24,071	USD456m	USD330m	2008	3.50%	increase in SME credit volume up to 40%; FOGAPE clients have 14% more chances to be clients of formal financial system	SME sales 6%, SME utilities 4%, social profitability USD 94,500 m.	BF	
		24,374	USD460m	USD336m	2007					
Chile	FOGAIN	1802	USD222m	USD119m	2008				BF	
Chile	CORFO							estimated 10,000 transfers	BF	P
HK	SGS				Mar-08		Increase guarantee ceiling of the Business Installation and Equipment Loan (BIE) to HKUSD5 million (USD 641,026). Introduced a new Working Capital Loan (WCL) guarantee of HKUSD1 million (USD 128,205)		BF	
Philippines	SBS		Php200-300m/year			very small			BF	
Taipei	Taiwan SMEG	3.6m	NTUSD6,375.25b (15.25% of total SME loans)	NTUSD4,275.29b	1974-End of 2008	285,000 SMEs/year			BF	
Chile	FOGAPE	more than 31,500	USD832m	USD564m	2009				AT-E	T
Chile	Line of guarantee for reprogramming of debts	2,085	USD157m	USD72m	since Jan 2009					T

**Table 5.24 continued**

Country	Program	Number of operations	Loan amount	Coverage	Year	Take up rate	Additionality	Estimated positive effects	Time	Duration
Chile	COBEX	580			2009	10.5% of total SME exporters			BF	
Chile	extend COBEX	1545	USD476m		Oct.2008-Aug.09				AT-E	P
HK	SpGS						1) "SpGS is effective in helping enterprises secure loans to tide over the liquidity problem during the crisis" 2) SMEs reflected to be easier to obtain loans.		AT	
Taipei	Three-Pillars-of-Support Policy		NTUSD22.2b		Nov.08-Jul.09		Almost 100% among the enterprises are extended guaranteed loans since the GFC; Financing amount to SMEs exceeded NTUSD55b for Jun and July 09, breaking record for the amount of guarantee per month since the establishment of Taiwan SMEG		AT	T

**Table 5.24 continued**

Country	Program	Number of operations	Loan amount	Coverage	Year	Take up rate	Additionality	Estimated positive effects	Time	Duration
New Zealand	Expansion of Export Credit Scheme							"to provide short-term trade credit insurance on export contracts with payment terms of less than 360 days"	AT-E	
Japan	Increase emergency guarantee schemes and loans provided by government-affiliated financial institutions	17000	3.9 trillion yen( € 9.8m)		2008				AT-E	
		49500	564.8b yen (€ 4.3b)		Q4-2008					
Korea	Expanding guarantees and increasing SME lending							increase SME lending by USD35.7b in 2009	AT-E	
Switzerland	Strengthening the loan guarantee scheme						(negative) only remained a marginal measure		AT-E	
UK	Enterprise Finance Guarantee Scheme							"It will enable them to secure loans of between £1,000 and £1 million (€1.1 thousand and €1.1 million)."	AT	T

Note: A "BF" sign means program carried out before the GFC; "AT" means program carried out in responding to the GFC; "AT-E" means program was carried out before the GFC, but was improved after the GFC. "T" means temporary program; "P" means permanent program.

**Table 5.25 Exporter target of export facilitation programs**

Exporter Country	Time	All	SME and other	SME	Specific sector	SME above	SME below
Australia	BF					Profitable, fast-growing	
New Zealand	BF					Creditworthy	Turnover less than USD50m
New Zealand	BF					Creditworthy, at bonding limits	
Canada	AT-E	Y					
Australia	AT			Y			
Slovenia	AT-E			Y			

Note: A "BF" sign means program carried out before the GFC; "AT" means program carried out in responding to the GFC; "AT-E" means program was carried out before the GFC, but was improved after the GFC.

**Table 5.26 Delivery of export facilitation programs**

Country	Time	Durati on	Measure	Through	Notes
Australia	BF	P	Working capital guarantee	bank	
New Zealand	BF			partnership with financiers and government department	“Up to USD30m of guarantees can be underwritten at any one point.”
New Zealand	BF			partnership with financiers and government department	“Up to USD45m of bonds can be guaranteed at any one point.”
New Zealand	BF			partnership with financiers and government department	“Up to USD100m of bonds can be guaranteed at any one point.”
Canada	AT-E	p	inject money		
Australia	AT	p	Expansion of the role of the EFIC		
Czech Republic			Inject money		
Denmark		T	long-term credits		
Denmark			short-term credits	debtor insurance	
Germany		T	Various products of “Hermes” have been improved and extended		
Italy			discount on fees	managed by the Institute for Foreign Trade (ICE)	
Luxembourg	AT-E		Inject money	Handled by “Office du Ducroire”	
Mexico	AT-E		provide working capital credit and necessary equipment	BANCOMEXT	
Switzerland	AT-E		promote export activities; broaden export insurance scope		
Slovenia	AT-E		additional funds specify for exporting SMEs to banks		

Note: A “BF” sign means program carried out before the GFC; “AT” means program carried out in responding to the GFC; “AT-E” means program was carried out before the GFC, but was improved after the GFC. “T” means temporary program; “P” means permanent program.

**Table 5.27 Delivery of pro-investment programs**

Country	Financing SMEs			All SME	Other
	R&D	Environment	Innovative		
Austria	Y	Y			
Belgium					Supplementary means for investment credits & public investment programs & stimulation of green investments & has reduced VAT in the construction sector (to 6% from 21%)
Canada			Y		
France					"accelerated depreciation possibilities either on all categories of assets or on specific ones"
Germany					
Italy					
Germany	Y				
Hungary				Y	bank financing with capped interest rate
Hungary				Y	interest rates based on 3 monthly ERIBOR rate with a 4-6% spread
Hungary				Y	
Spain				Y	financing 80%-90% new productive assets
USA					tax incentive
E.C.					margin of manoeuvre & investment project
EIB/EIF					mezzanine

**Table 5.32 Program measures—detail**

Aim	Labour	Financing				Increase competition			Market recession	Liquidity	Reduce cost
Programs	Skilled labour	Accessing financing	Angel-VC-PE	Extend credit	Loan Guarantee	Export facilitation	Spur entrepreneurship and innovation	Pro-investment	Reduce market risk	Working capital	Taxation
<b>Initiative</b>											
<b>Financing</b>											
<i>Loan</i>											
Provide loan		Br;Ca;Ch	Th	Be;HK	Ta	De,Me,Sl					
Increase loan ceiling				Ca;Fi							
Credit mediator									Be,Fr		
Remove sub-ceiling										HK	
<i>Guarantee</i>											
Loan guarantee					Ta,Ch,HK,Austria,Fr,Hu,Ko,Lu,Norway,Sw,UK,EIB	Au				Hk,Ca	
Second level guarantee					EIB						
Guarantee other financial tools					Au,Ko						
Increase guarantee ceiling				Ca;Fi							
Extend eligible SME and the cover					Ch,Ta						
<i>Other financial market measures</i>											
Financing via security market									Ca		
Create fund/inject money		Pe;	NZ;Hu;UK								
<b>Market recession</b>											
Government purchases										Sl,Me	
Monitor									USA	Fr	
Public measures							Ch				
<b>Liquidity crisis</b>											
Extend repayment period		Br									

**Table 5.32 continued**

Aim	Labour	Financing				Increase competition			Market recession	Liquidity	Reduce cost
Programs	Skilled labour	Accessing financing	Angel-VC-PE	Extend credit	Loan Guarantee	Export facilitation	Spur entrepreneurship and innovation	Pro-investment	Reduce market risk	Working capital	Taxation
<b>Initiative</b>											
Extend guarantee period					HK						
Raise reimbursement rate				Ca							
Tax reimburse in cash											Fr
Faster tax refunds											Ro,Fr,It
Pay government bill											Fr
Granted payment on facilities and public procurement											Be,Fr
Transfer SME unpaid debts to participation fund											Be
Provide resources to factoring including interest rate										Ch	
Cap payment delays										Fr,Ne,UK	
<b>Reduce cost</b>											
Low interest loan					Austria						
Interest or tax privilege/subsidy		Br						Be,Hu,USA			Ro,Ja,Ca,It,Be,De,NZ
Reimburse transaction cost		Ch									
Reduce fee					Ta	It					
<b>Attracting and retaining qualified workers</b>											
Attracting qualified labour	Ca										
<b>Increase competition</b>											
Provide equipment						Me					
Promote export						Sw					

**Table 5.32 continued**

<b>Aim</b>	<b>Labour</b>	<b>Financing</b>				<b>Increase competition</b>			<b>Market recession</b>	<b>Liquidity</b>	<b>Reduce cost</b>
<b>Programs</b>	Skilled labour	Accessing financing	Angel-VC-PE	Extend credit	Loan Guarantee	Export facilitation	Spur entrepreneurship and innovation	Pro-investment	Reduce market risk	Working capital	Taxation
<b>Initiative</b>											
Create fund/inject money						Ca	Ca	Austria,Ca,Hu,Be,E.C.,El B,Sp			
<b>Regulation</b>											
Favorable policy		Ph						Fr,Ge,It			
Reduce paper work burden				Ca	Ch						

## Appendix 3 Copy of the APEC Questionnaire

### Access to Credit for Small Businesses in the APEC Region

The purpose of this questionnaire is to examine perceptions of access to finance for small- and medium-sized firms (SMEs) for the economies in the APEC region. This survey begins by reviewing the period that preceded the so-called global financial crisis (GFC), then examines the perceived impact of the crisis on SME financing and concludes by identifying ways in which governments have intervened (if any) during the GFC.

#### Section 1: The Financial Markets for SMEs, June 2005-June 2008

In answering the questions posed in this first section, please use the three-year period ending in June 2008 as the reference period.

##### Overview of the Credit Market

**1. What formal sources of credit-based financing are available to SMEs (however your economy defines an SME) in your economy? CHECK ALL THAT APPLY**

- a. Term loans to the business from private sector commercial lenders
- b. Lines of credit/operating loans from private sector commercial lenders
- c. Commercial credit cards
- d. Leases from private sector financial institutions
- e. Direct loans from government
- f. Loans from government-owned financial institutions
- g. Commercial credit cards
- h. Trade credit owing to suppliers
- i. Factoring
- j. Personal loans to the business owner(s) from lending institutions
- k. Personal credit cards
- l. Micro-credit

**2. Is the amount of private sector credit in your economy measured?**

- a. No
- b. Yes

If "Yes", what is the average ratio of total private sector credit to GDP during the 2005/08 reference period?

\_\_\_\_\_ per unit GDP

**3. If the amount of private sector credit available is measured in your economy, what proportion of private sector credit available was accounted for by loans to SMEs during the reference period?**

- a. Not measured
- b. Proportion of private sector credit loaned to SMEs was \_\_\_\_\_%.

**4. Is the amount of private sector venture capital under management in your economy measured?**

- a. No
- b. Yes

If “Yes”, what is the average ratio of total private sector venture capital under management to GDP during the 2005/08 reference period?

\_\_\_\_\_per unit GDP

**5. During the reference period, was credit to SMEs in your economy facilitated by means of one or more government-funded loan guarantee or risk sharing programs?**

- a. No
- b. Yes

If “Yes”, please described the broad parameters of such programs per the headings in the following table (if there are multiple programs, please complete one such table for each program).

Name of program / URL	
What is the primary goal of the program?	
Which segment(s) of the SME population is targeted by the program (size, sectors, etc.)?	
How is the program delivered?	
What is the annual volume of loans under the program?	
What is the take-up rate of the program (for what proportion of total annual SME lending does the program account)?	
Has the incrementality (additionality) of the program been estimated? If so, with what results?	
Have the economic benefits attributable to the program been estimated? If so, with what results	

**6. Has your government developed an official published public policy strategy or framework on entrepreneurship / innovation?**

- a. No
- b. Yes

If "Yes", are issues related to access to financial capital included within it?

- a. No
- b. Yes

**7. During the reference period (June 2005 – June 2008) were government policies or programs introduced or changed to facilitate access to credit for SMEs in your economy?**

- a. No
- b. Yes

If "Yes", please describe the nature of each policy or program by including information related to the headings in the table below. Please complete one copy of the table for each reform.

Name of program / URL	
What was the general nature of the reform? Interest rate subsidy? Additional funding/support for an existing program? Is it a temporary or permanent initiative? To whom is the program targeted? SMEs? Lenders? Business associations? Non-profit groups?	
What is the primary goal of the program?	
Which segment(s) of the SME population is targeted by the program (size, sectors, etc.)?	
How is the program delivered?	
What is the annual rate of usage under the program?	
Has the program been evaluated? If so, with what results	

**8. Again with reference to the 2005/08 reference period, did any level of government in your economy provide loans directly to SMEs?**

- a. No
- b. YES, through a government program

Please describe briefly all such program(s) or provide website reference(s)

- c. YES, through a government-owned financial institution

Please describe briefly all such program(s) or provide website reference(s)

## Perceptions of the Credit Market

**AGREE/DISAGREE??** Again with reference to the 2005/08 reference period, to what extent would you agree/disagree with the following statements? A “1” signifies that you agree strongly with the statement; a “7” that you disagree strongly; and a 4 that you neither agree nor disagree.

It was a widely-accepted view within my economy that small businesses generally face disproportionate difficulties with respect to obtaining business loans.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE
It was a widely-accepted view within economy that innovative small businesses generally face disproportionate difficulties with respect to obtaining business loans.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE
It was a widely-accepted view within my economy that the demand for credit available to small firms exceeds the supply of credit.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE
It was a widely-accepted view within my economy that the demand for venture capital to small firms exceeds the supply of venture capital.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE
Private individuals (including friends and family) are an important source of financing for small firms in my economy.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE
The legal system in my economy is consistent with an efficient credit market.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE
Over the 2005 to 2008 period, the supply of credit to SMEs in my economy increased.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE
Over the 2005 to 2008 period, the legal setting for the credit market in my economy was strengthened.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE
It is a widely-accepted view within my economy that small firms in certain sectors (for example, knowledge-based businesses, exporters, minority-owned, etc.) face particularly difficulty obtaining commercial loans.	Don't Know	STRONGLY DISAGREE 1-----2-----3-----4-----5-----6-----7 STRONGLY AGREE

## Section 2: The Financial Markets for SMEs, June 2008 to the present

In answering the questions posed in this second section, please use the period from June 2008 to the present as the reference period.

### Overview of Changes in the Credit Market

#### 9. To what extent would you say that the supply of each of the following sources of financing for SMEs has changed?

Term loans to small businesses from private sector commercial lenders	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Lines of credit/operating loans to small businesses from private sector lenders	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Commercial credit cards	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Leases from private sector financial institutions	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Direct loans from government	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Loans from government-owned financial institutions	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Commercial credit cards	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Trade credit owing to suppliers	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Factoring	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Personal loans to the business owner(s) from lending institutions	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Personal credit cards	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7
Micro-credit	Don't know	Not applicable in my economy	Decreased Substantially 1-----2-----3-----4-----5-----6-----7	No Change	Increase Substantia 6-----7

**10. If the amount of private sector credit available in your economy is measured, what was the ratio of total private sector credit to GDP as of the end of the first quarter of 2009?**

- a. Not measured
- b. Ratio of private sector credit to GDP \_\_\_\_\_per unit GDP

**11. If the amount of private sector credit available in your economy is measured, what proportion of private sector credit available in your economy was accounted for by loans to SMEs as of the end of the first quarter of 2009?**

- a. Not measured
- b. Proportion of private sector credit loaned to SMEs was \_\_\_\_\_%.

**12. If the amount of private sector venture capital invested in SMEs in your economy is measured, what was the ratio of total private sector venture capital under management to GDP as of the end of the first quarter of 2009?**

- a. Not measured
- b. Ratio of private sector venture capital under management to GDP was \_\_\_\_\_per unit GDP

**13. During the global financial crisis reference period (June 2008 – present) were any additions or changes made to the policies and programs in your economy aimed at further facilitating access to credit for SMEs?**

- a. No
- b. Yes

If “Yes”, please describe the nature of each such reform by including information related to the headings in the table below. Please complete one copy of the table for each reform.

Name of program / URL	
What was the general nature of the reform? Interest rate subsidy?  Additional funding/support for an existing program?  Is it a temporary or permanent initiative?  To whom is the program targeted? SMEs? Lenders? Business associations? Non-profit groups?	
What is the primary goal of the program?	
Which segment(s) of the SME population is targeted by the program (size, sectors, etc.)?	
How is the program delivered?	
What is the annual rate of usage under the program?	
Has the program been evaluated? If so, with what results	

## Section 3: Sample Scenarios

In answering the questions posed in this section, please use the present as the reference time period.

### Scenario 1

The owner of a small printing business in your economy that employs six people is seeking to expand by adding an additional printing press. The business has been in operation for eighteen years and has operated profitably for the last five years. The business has previously borrowed from a local commercial lending bank and has repaid all prior borrowing on schedule. The owner is seeking a term loan from the same bank to finance the entire cost of the new machinery with the machinery to be used as collateral security for the loan.

*Under this scenario, to what extent would you agree/disagree with each of the following statements?*

In my economy, the lending bank would be able to access credit histories on the firm as well as on the owner to help with the lending decision.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, there is a very strong likelihood that the owner's loan application would be approved.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, the owner's loan application would only be approved under the terms of a loan guarantee or risk sharing program.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if the loan application was approved, the interest rate and fees associated with the loan would be relatively low.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if business conditions deteriorated such that the business missed three successive monthly payments, the lender would seek to foreclose on the collateral.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if business conditions deteriorated such that the business missed three successive monthly payments, the lender would seek to foreclose on the collateral (i.e. the lender forces the sale of the assets given as collateral to cover the outstanding debt) .	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if the lender foreclosed on the collateral due to non-payment of the debt, the legal system would enforce the lender's position in a timely manner.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>

**Scenario 2**

The owner of a small printing business in your economy that employs six people is seeking to address business losses and the ensuing cash flow difficulties arising from the poor economy of the last year or so. The business has been in operation for eighteen years and has operated profitably for the five years preceding the most current year. The business has previously borrowed from a local commercial lending bank and has repaid all prior borrowing on schedule. The owner is seeking an operating loan from that bank to finance the business' cash flow needs with the firm's inventories and accounts receivable to be used as collateral security (assets given as collateral) for the loan.

*Under this scenario, to what extent would you agree/disagree with each of the following statements?*

In my economy, the lending bank would be able to access credit histories on the firm as well as on the owner to help with the lending decision.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, there is a very strong likelihood that the owner's loan application would be approved.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, the owner's loan application would only be approved under the terms of a loan guarantee or risk sharing program.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if the loan application was approved, the interest rate and fees associated with the loan would be relatively low.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if business conditions further deteriorated such that the business missed three successive monthly payments, the lender would seek to foreclose on the collateral (i.e. the lender forces the sale of the assets given as collateral to cover the outstanding debt).	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if the lender foreclosed on the collateral due to non-payment of the debt, the legal system would enforce the lender's position in a timely manner.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>

**Scenario 3**

The owner of a new printing business in your economy is seeking to finance the start-up of the enterprise. The owner has presented a business plan that shows that the firm will not become profitable for at least 12 months but projects a substantial and growing profit for several years thereafter. The owner of the firm is new to the community and has no personal or professional history with the local lending bank. The owner is seeking an operating loan from that bank to finance the business' cash flow needs during the start-up period.

*Under this scenario, to what extent would you agree/disagree with each of the following statements?*

In my economy, the lending bank would be able to access credit histories on the firm as well as on the owner to help with the lending decision.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, there is a very strong likelihood that the owner's loan application would be approved.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, the owner's loan application would only be approved under the terms of a loan guarantee or risk sharing program.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if the loan application was approved, the interest rate and fees associated with the loan would be relatively low.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, the business owner may be able to finance the business start-up by accessing venture capital.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if business conditions further deteriorated such that the business missed three successive monthly payments, the lender would seek to foreclose on the collateral (i.e. the lender forces the sale of the assets given as collateral to cover the outstanding debt).	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>

**Scenario 4**

The owner of a small pharmaceutical firm with six employees is seeking financing for human trials of a patented new drug that has shown great effectiveness in laboratory and animal trials for the treatment of Type II diabetes. If successful, it is expected that the firm’s sales and profits will at least double each year for the next 10 years until the patent expires. The business has been in operation for eighteen years and has operated profitably for the last five years. The business has previously borrowed from a local commercial lending bank and has repaid all prior borrowing on schedule. The owner is seeking an operating loan from the same bank to finance the (significant) entire cost of the human trials. The firm’s plant and equipment will be used as collateral security for the loan but the amount of borrowing is expected to exceed the value of the collateral.

*Under this scenario, to what extent would you agree/disagree with each of the following statements?*

In my economy, there is a very strong likelihood that the owner’s loan application would be approved.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, the owner’s loan application would only be approved under the terms of a loan guarantee or risk sharing program.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, if the loan application was approved, the interest rate and fees associated with the loan would be relatively low.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, the business owner may be able to finance the trials by accessing venture capital.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>
In my economy, having patent protection would be a significant factor in the firm’s ability to access financing.	<b>STRONGLY DISAGREE</b> 1-----2-----3-----4-----5-----6-----7	<b>STRONGLY AGREE</b>