Export Performance and Job Creation: The Case of SMEs

Lise Préfontaine Pierre J. Tremblay Pierre-Majorique Léger

In collaboration with Régis Milot



Montréal March 1998

TABLE OF CONTENTS

1. Introduction	3
2. RESEARCH METHODOLOGY AND LIMITATIONS	5
2.1 DESCRIPTION OF THE SAMPLE	5
2.2 THE DATA GATHERING PROCESS	5
2.3 LIMITATIONS AND VALIDITY OF THE METHOD	6
3. CHAIN OF IMPACTS OF PUBLIC POLICIES: THE THREE FIRST LINKS	8
3.1 CHAIN OF IMPACTS OF PUBLIC POLICIES	8
3.2 Supra-national initiatives	9
3.3 NATIONAL OBJECTIVES	13
3.4 MECHANISMS AND INSTITUTIONS SUPPORTING SMES	15
3.5 ALIGNMENT BETWEEN SUPRA-NATIONAL INITIATIVES, NATIONAL OBJECTIVES AND	D MECHANISMS 17
4. CHAIN OF IMPACTS OF PUBLIC POLICIES: THE LAST LINK, THE PROGRAMS	19
4.1 THE LOGIC OF GOVERNMENT INTERVENTION	19
4.2 INNOVATIVE PROGRAMS TO SUPPORT SMES AND EXPORTS	19
4.3 THE MAJOR ISSUE FOR GOVERNMENT INTERVENTION	27
5. CONCLUSION	31
APPENDIX 1	32
APPENDIX 2	33
APPENDIX 3	34
APPENDIX 4	35
BIBLIOGRAPHY	36
1. Internet Sites (1997)	36
2 MONOGDADHS AND PADEDS	11

LIST OF EXHIBITS

Ехнівіт 1	ANALYSIS OF REPORTED EXPENDITURES AND PROGRAMS BY POLICY OBJECTIVE	10
Ехнівіт 2	2 SBA Online services	16
Ехнівіт 3	KEY INITIATIVES TO ALLEVIATE THE ADMINISTRATIVE BURDEN	21
Ехнівіт	PUSH MEDIA	30
LIST OF F	TIGURES	
FIGURE 1	CHAIN OF IMPACTS OF PUBLIC POLICIES	8
FIGURE 2	EXAMPLES OF THE OBJECTIVES STATED BY THE 22 COUNTRIES	13
FIGURE 3	EXAMPLES OF INSTITUTIONS SUPPORTING SMES	15
FIGURE 4	THE LOGIC OF GOVERNMENT INTERVENTION	19
FIGURE 5	"One-point-of-entry" shop and "One-stop" shop	22
FIGURE 6	THE MAJOR ISSUE FOR GOVERNMENT INTERVENTION	28
FIGURE 7	HE VIRTUAL EXPORT CENTRE (VEC)	28
LIST OF T	TABLES	
TABLE 1	INNOVATIVE POLICIES AND/OR PROGRAMS IN THE AREA OF INTERACTION WITH GOVERNMENT	20
TABLE 2	INNOVATIVE POLICIES AND/OR PROGRAMS IN THE AREA OF MANAGEMENT CAPABILITIES	24
TABLE 3	INNOVATIVE POLICIES AND/OR PROGRAMS IN THE AREA OF ACCESS TO MARKETS	26
TARIE 1	INNOVATIVE DOLICIES AND/OR DROCK ANS IN THE AREA OF FINANCING	27

1. Introduction

As we get nearer to the turn of the millennium, governments have been looking for new approaches to stimulate the competitiveness of their nations. At the same time, they have come to recognize the growing economic importance of small and medium-sized enterprises (SMEs), which constitute between 75% and 99% of all firms, employ a very large proportion of their workforce and account for a large percentage of their national growth (Hatzichronoglou, 1996). Small firms have been generally more innovative than larger ones and, proportionally, have created more jobs (Schreyer, 1996). Furthermore, small innovative firms share a common characteristic: they conduct a large part of their business activities on foreign markets (Wagner, 1995; Bonaccorsi, 1992). Small innovative firms can create a competitive advantage and governments have become more and more aware of this reality and motivated to promote SMEs and exports through specific public policies.

In the last two decades, therefore, public policies have undergone many changes, first to create and maintain a stable macro-economic environment in which firms could prosper, and then to reinforce and support a business environment conducive to innovation and exports. importance of a suitable macro- and meso-economic infrastructure to enhance industrial competitiveness has been stressed by the work of Porter (1985; 1990) and of others. attention soon shifted from structural determinants to science and technology as means by which governments could create wealth. Lundvall (1985), who put forward the vision of National Systems of Innovation (NSI) to trace knowledge flows and their distribution within and between national boundaries, helped to provide an integrative and holistic framework to orient governments' actions in promoting innovation. More recently, with the emergence and growing importance of information and communication technologies (ICTs), a universal phenomenon is becoming clear. While at the meta- and macro-levels, ICTs modify the global economic environment by reducing distances and creating a global market, at the meso- and micro-levels, they are altering whole industries' value chains (Kalakota and Whinston, 1997) by connecting major players through high-performance networks and eliminating others. At the firm level, core competencies are now more and more embedded in knowledge rather than in products (Nonaka and Takeuchi, 1995) and, the very structure of the organization is dematerializing, thus giving way to a new mode of governance, the virtual firm (Davidow and Malone, 1992).

These changes are taken into consideration in conducting this critical analysis of «best practices» of export promotion programs for SMEs. More specifically, interventions of supranational and national governments are analysed to identify practices that can inspire innovative approaches to stimulate and support exports activities in SMEs. Criteria that guided the selection of public initiatives are threefold. First, this report has adopted a holistic view by examining not only the programs themselves but also the institutions in place to support them, the national objectives pursued by the 22 countries surveyed and a few supra-national initiatives that have influenced governments' actions. Second, programs supporting the knowledge-based economy paradigm are highlighted since innovation necessitates knowledge creation, transfer and diffusion. Finally, this report has emphasized programs that promote or make use of new technologies since ICTs and more specifically the Internet, are "the" tools for doing business in the coming virtual

economy. Finally, the research itself was conducted using the Internet and seeking out the information made available electronically by governments and their agencies.

This document is structured using an analytical framework identified as the "chain of impacts" and sees programs as the final link in a chain that stretches from supra-national initiatives to SMEs. Supra-national initiatives influence governments' objectives and strategies, which are usually formulated (though not always explicitly) into national policies. These in turn are implemented by various mechanisms, institutions and agents in the forms of laws, programs, tax incentives, and so on. This framework is meaningful when one performs an international analysis of export promotion programs. First, it enables the researchers to analyze the innovativeness of all governments' actions. Second, it permits the assessment of the integration between the various steps in the chain. For example, some governments are able to maintain a high level of cohesion and integration from their stated objectives to their policies and institutions, all the way down to their programs. Others, having stand-alone initiatives or programs, often dilute their resources and do not provide the intended benefits.

The present document is divided into five chapters. Following the introduction, the second chapter includes a description of the methodology used to carry out this research and a discussion of its main limitations. Next, the three first links of the chain of impacts of public policies are described. Selected supra-national initiatives of two international organizations, the Organization for Economic Co-operation and Development (OECD) and the European Union (EU), are presented. They are followed by an analysis of national objectives and mechanisms put in place to support these objectives for the 22 countries surveyed. The fourth chapter covers the programs labeled "best practices" and identifies the major issues confronting policy makers. It proposes an innovative approach to supporting SMEs and exports. Finally, a brief conclusion emphasizes the main findings of this research report.

2. RESEARCH METHODOLOGY AND LIMITATIONS

This chapter presents the methodology adopted to perform this study of the best practices supporting SMEs and exports. It is divided into the following three subsections:

- A brief description of the sample;
- The data gathering process;
- The limitations of this study.

2.1 Description of the sample

The 22 countries included in this study were chosen because of their economic importance on the world scene and how well they represent different parts of the world. Asia is represented by Japan, Korea, Malaysia, Singapore and Australia. Countries from the Americas include the United States of America (U.S.A.) and Colombia. Finally, most OECD members and European neighbors were included: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom (U.K.). Countries under development were excluded, except for Colombia, which is the only country from South America that was retained since information on it was available. The countries of Eastern Europe was also excluded for lack of information and since they are undertaking major political and economic changes. The selected countries respect the following criteria: they are recognized as industrialized countries; they represent different parts of the world; and they make use of the Internet to publicize their public policies and programs.

2.2 The data gathering process

The growing recognition by national governments of SMEs' importance to the economy has led them to generate new policies and strategies that take this emerging reality into account. The preliminary analysis for our "best practices" study was based on a traditional literature review using secondary sources of information. Two limitations were encountered. First, the literature on government policies was not easily available from private or public sources (libraries, etc.) in Canada. Second, literature based on secondary sources usually lags behind the current reality. The inherent difficulty of gathering information on rapidly changing policies makes secondary information much less adequate and, for some countries, even irrelevant. This led us to use new forms of data gathering based on the new tools provided by the virtual economy and the information superhighway. Thus, the Internet was our principal tool for data collection.

The literature review included such information as:

• Official documents and web pages from official government sites (ministries, agencies, public banks).

• Official documents from international organizations such as the World Bank and other development banks, the OECD, the EU, UNCTAD, IBID, and others.

The review excluded all unofficial sources of information such as private consultants and individuals' personal web pages (even those of persons working within universities or governments). This decision was based on the assumption that the documents provided there were generally not subject to a proper review as is in the case for traditional papers in monographs or journals.

2.3 Limitations and validity of the method

There are several limitations to any "best practice" study, the first and most important being the difficulty in selecting objective criteria and indicators that can be used to select programs labeled as "the best" to promote SMEs and exports. Only a few governments have started evaluating the impact of their programs, and formal performance indicators are still lacking. Thus, four subjective criteria were retained by the researchers. The following type of information were favored:

- 1. Initiatives, interventions and actions that promote a holistic vision of public policies;
- 2. Programs that can be included in one of the four steps of the process representing the logic of government intervention to promote exports, from indirect support (government intervention and management capabilities) to direct support (access to market and finance);
- 3. Innovative programs that offer a service in an unusual or unique way;
- 4. Programs that make use of information and communication technologies (ICTs) and the electronic superhighway.

The language barrier is another important restriction. Since policies, strategies and programs are oriented towards enterprises at the national level, not all countries have made them available worldwide in a widely used language such as English. The present study has been limited to three main languages: French, English and Spanish.¹

The availability of material was another limitation. Not all governments have started to make extensive use of the electronic tools available nowadays. Therefore, there are differences in the availability and accessibility of information. These limitations were assessed using a Likert scale and all 22 government sites were evaluated according to five criteria (accessibility, connectivity with government, multilingual interface, search engine and user-friendliness). The results of these evaluations are shown in Appendix 1.

Finally, there is one other constraint which must be borne in mind. Most strategies and policies promoted by governments are influenced by internal politics, which themselves are influenced by socio-political factors. Moreover, policies in some countries tend to be developed with a short-term (three to five years) vision. They are frequently affected by democratic political processes. Unfortunately, there is no external means to determine whether a policy has a short-

¹ With further resources, the research could include information in other languages, if required by Industry Canada.

or a long-term prospect. Nonetheless, our research design permits a deeper analysis of these policies since it compares not only stated policies and strategies but also implementation mechanisms (institutions, agencies, etc.) and programs which require longer periods of time to be properly institutionalized.

The validity of this "best practices" study is ensured by using the following triangulation method. All information was corroborated by more than one source of information, thus assuring external validity. This process was complemented by a review of secondary sources such as official reports and published studies in journals and/or monographs. The reliability of the research data is based on a rigorous method which uses information only from legitimate sites that are authorized by national governments or international agencies. Over a period of six months, all sites were revisited frequently and updates were taken into account. It is important to note that there was a definite growth in the information content of the sites in terms of both quantity and quality, between the early and later stages of the research. This clearly supports our choice of methodology: the use of Internet sources of information results in far more up-to-date data than a traditional literature review.

3. CHAIN OF IMPACTS OF PUBLIC POLICIES: THE THREE FIRST LINKS

In this chapter, we will emphasise the importance of an appropriate alignment of public policies in promoting export by SMEs. This will be done in four steps.

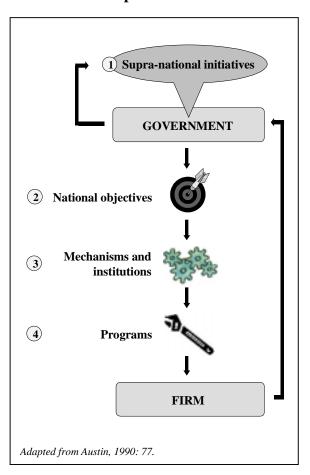
- First, the concept of "chain of impacts" is introduced;
- Next, the importance of supra-national initiatives is presented (first link of the chain);
- Then, national objectives (the second link) are described for the 22 countries under study;
- A list of the mechanisms or institutions put in place by each country follows (the third link);
- Finally, the importance of aligning these three first links is discussed.

3.1 Chain of impacts of public policies

Public policies cannot be regarded as stand-alone political, economic or social choices. They are part of a larger system, identified by Austin (1990) as the "chain of impacts" and developed in figure 1. First, supra-national initiatives are elaborated by international organizations, with the participation of member countries. These supranational initiatives correspond to the first link of the chain. Influenced by these initiatives, governments state national objectives that reflect the goal(s) they are pursuing and/or the strategies they intend to adopt (second link). Mechanisms and institutions put in place to implement these objectives form the third link, and programs come in as the fourth link. Programs correspond to the specific intervention tools governments choose to reach the firms they intend to support.

In a time where resources are scarce and competition is harsh, new strategies for competing internationally must be explored. Even though globalization of the economy and more open channels of information have created new opportunities, they have also contributed to levelling most of the efforts deployed by governments to gain a competitive advantage. In our view, the first means by which a government can be innovative and enhance the added value of

Figure 1 Chain of impacts of public policies



its public policies is by developing a proper alignment between supra-national initiatives, national objectives, mechanisms and programs. By doing so, governments will create the interlink synergy that will reinforce the whole chain of public policies.

3.2 Supra-national initiatives

International organizations play a major role in shaping the world market. For this reason, this section presents an analysis of the supra-national initiatives (first link of the chain of impacts) taken by two international organizations, the Organization for Economic Co-operation and Development (OECD) and the European Union (EU). Both organizations have recognized the importance of SMEs in promoting exports and job creation and have taken specific initiatives in that matter.

3.2.1 The OECD

The OECD's involvement is mainly oriented towards promoting research projects that provide information on the economic welfare of its 26 member countries and disseminating this knowledge. Three categories of initiatives taken by the OECD are particularly relevant to policy makers:

- ① Initiatives directed towards SMEs, exports and job creation;
- 2 Initiatives that propose a systemic approach to promote exports and job creation;
- 3 Initiatives to encourage the use of standards and common indicators.

Each will be discussed briefly.

① *SMEs, exports and job creation*

The OECD is particularly active in supporting research projects, industry forums and conferences that aim at creating and circulating a body of knowledge on public support to industry, and more specifically to SMEs. Many of the reports provided to the Industry Committee and its Working Party on SMEs or to the Science and Technology Directorate are made available to member countries and the general public.

Questions of interest to policy markers have been addressed. For instance, as shown in exhibit 1, an analysis of reported expenditures and programs by policy objective helps one to visualize the relative importance of programs addressing SMEs and exports. The exhibit provides evidence that, even though most countries formally recognize the importance of SMEs and of exports, only 28% of their *expenditures* are directed towards these objectives with a mere 10% towards SMEs. In comparison, almost one-fourth (23%) of the *programs* analyzed during the same period addressed SMEs and 8% related to exports. The costs per program to support exports are therefore much higher per program.

With the increase in unemployment, the OECD has paid more attention to factors affecting job creation. In an overview of selected quantitative studies in OECD member countries, (Schreyer, 1996) demonstrates the link between firm size and job creation. Statistics from the U.S.A., Sweden, the U.K. and Denmark show that SMEs have created more jobs than larger firms.

Another study (Hatzichronoglou, 1996), analyzes the link between exports and job creation and concludes that money and technological transfers, direct investments and import-export are linked with employment since they affect industrial restructuring and development. These initiatives, and many others taken by the OECD, contribute to building a cumulative body of knowledge on SMEs, exports and job creation.

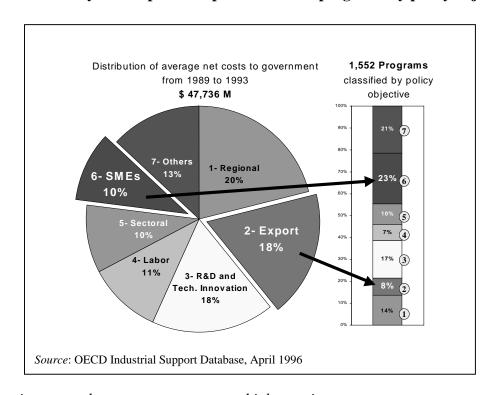


Exhibit 1 Analysis of reported expenditures and programs by policy objective

② A systemic approach to promote exports and job creation

Over the years, the OECD has concurrently promoted the creation of a body of knowledge on national systems of innovation (NSIs) based on the renowned work of the Swedish economist B. Lundvall (1985; 1988). The concept of NSI has enabled researchers to identify knowledge components and distribution within a country and has facilitated comparison between countries by promoting the use of a common language and of comparable indicators of knowledge production, diffusion and transfer. Since exporting can be defined as the transfer of knowledge embodied in products and/or services, it is considered as an indicator of knowledge transfer and is closely linked to the process of knowledge creation.

The systemic approach advocated by the organization to promote exports and job creation is very comprehensive and reflects the multitude and complexity of the interactions between components of NSIs. Exports can therefore be promoted both directly and indirectly. For instance, investments or subsidies to exporting firms can be considered as direct assistance. But other kinds of support are also important. Programs supporting knowledge creation such as joint industry-university research or grants to promote R&D also have an impact on exports in the longer term. Thus, fostering a specialized workforce through education and training is important

since these measures affect the competencies of workers and managers and result in gains in productivity (OECD,1996b).

When considering the growth of national economies, we find that different countries share common tendencies and directions, one being the growing importance of knowledge. Nations able to create, distribute and use knowledge stand out as the most productive. Concepts such as NSI and the "knowledge-based" economy, promoted by the OECD, help develop a shared mindset between member countries.

3 The use of standards and of common indicators

The OECD also plays an important and unique role in encouraging countries to use standard indicators to better evaluate their actions and be able to compare their results with those of other countries. It has promoted the adoption of standards to facilitate and regulate the flow of goods and services between countries. For example, under the OECD's auspices, member countries have reached a consensus on eliminating disparities in the financing terms of exports:

- reimbursement must take place in two years or more;
- the buyer must provide a minimum of 15% of the contract value;
- payments should be distributed over a maximum period of five years for rich countries and 10 years for poor ones;
- a minimum interest rate must be respected;
- there are limits to help provided by the country to which the goods will be exported;
- arms and agriculture are excluded.

The third category of key initiatives taken by the OECD has fostered the sharing of common indicators to facilitate comparisons between countries and the adoption of regulations to promote free trade.

3.2.2 The European Union

As members of the European Union (EU), most Western and Central Europe countries, have joined a supra-national government which focuses on enhancing the wealth of its members by promoting growth, competitiveness and job creation. The initiatives taken by the EU are worth mentioning since:

- ① They are mainly directed towards SMEs, R&D and technology;
- 2 They are implemented with the participation of several levels of governments;
- 3 They make extensive use of ICTs.

① SMEs, R&D and technology

The EU government recognizes the economic importance of SMEs and most policies and programs are centred around small and medium-sized businesses; SMEs, that is, firms that employ fewer than 500 employees, account for 99.8% of all EU firms and are thus the focus of most programs. For instance, the Third Program, called SMEAP, focuses on SMEs from 1997 to the year 2000 and includes support in such areas as loans (ELISE program), promotion of innovation, technological cooperation and training (SPRINT and COST programs), collaboration between industry and academia (ESPRIT program), and cooperative industrial research

involving associations of organizations (FEICRO or AECRO), research, development and technology (20 programs including EUREKA) and cooperative research action for subcontracting research outside the firm (CRAFT program).

Most EU programs specifically address SMEs and they indirectly support exports and job creation since most are centred on R&D and technology.

2 Participation of several levels of government

The policies and programs put in place are implemented in three ways: shared-cost actions with national or regional institutions; concerted actions where national, regional or sectoral institutions and associations participate in the development of the programs; and the EU's own programs. Statistics show that member countries have increased their percentage of exports with other EU countries, an indication that more exchanges are taking place since most national barriers to commerce have been eliminated or at least diminished. The EU government, through its General Directorates, and more specifically GD XVI, promotes transnational activities. Funds such as FEDER or FSE help SMEs to adapt to a single market and enhance their competitiveness at the European level. The creation of a European Electronic Market offers long-term equity capital through the medium of a public share offering and a subsequent listing on the market. Finally, loans offered to SMEs for job creation include special coverage for transnational projects.

The initiatives for integrating supra-national, national and regional policies and programs have been worthwhile and firms have enhanced their competitiveness at the European level.

③ *Use of ICTs*

The EU's contribution to the support of SMEs and exports has also been provided indirectly through the efforts deployed in creating a Community Research and Development Information Service (CORDIS). CORDIS is an original and very comprehensive tool for making information accessible to SMEs and for promoting and supporting networking; it acts as a network of networks, and is linked to the Internet sites and networks of member governments and to specific databases such as:

- EUREKA, a Europe-wide network for industrial R&D;
- IRCs, innovation relay centres;
- VIPs, a scientific press service;
- Patent and intellectual property services;
- OPET, organizations for the promotion of energy technologies;
- RTD help desk.

The creation of the European Electronic Market is yet another innovative initiative that makes use of ICT and supports the efforts of member countries in promoting competitiveness.

3.3 Examples of pursued national objectives

Supra-national initiatives directly influence the national objectives countries decide to pursue. These national objectives (the second link) are expressed in specific laws and are usually well publicized. One should note that only officially declared objectives cited in official documents issued by government institutions such as ministries of trade and industry are included in this section. There is no assessment at this point of their validity or the extent to which they have been successfully implemented. Governments' stated objectives or strategies have been restricted to a maximum of three, and preferably only one, the most important.² Overall, 30 cited objectives were listed; they are presented in Appendix 2. The stated objectives are classified in five categories, as shown in figure 2. They are briefly described below and listed in their order of recurrence, starting with the most often cited set of objectives.

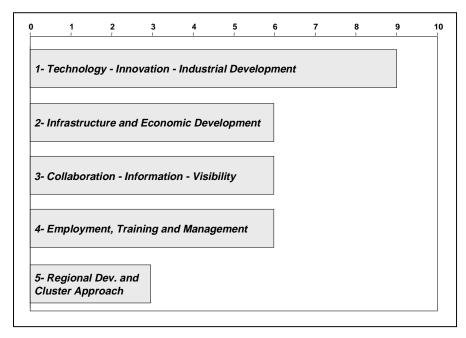


Figure 2 Examples of the objectives stated by the 22 countries

Objectives	Description					
Technology, industrial development and	Strategies aimed at science, technological innovation and industrial modernization.					
innovation						
Infrastructure and economic development	Objectives aimed at improving the level of economic wealth of the country by					
	developing the proper public infrastructures: transport, communications, etc.					
Employment, training and management	Issues related to human resources, for example, the U.K.'s "Best practices"					
	strategies concerned with management issues.					
Collaboration, information and visibility	Objectives specifically addressing the collaboration between various government					
	bodies (national, provincial, regional) and private organizations. They also include					
information services and diffusion mechanisms.						
Regional development and cluster approach Strategies that clearly point to regional development and/or the development of						
	specific sectors or industry clusters.					

2

² Importance from the governments' point of view, not the researchers'.

Since most policies and programs are directly linked to these objectives, this preliminary assessment of the directions taken by the countries in the sample helps us to visualize the relative importance granted to SMEs and to exporting and job creation.

Some countries have also publicized objectives that specifically address SMEs. Australia, Japan, the U.K. and the U.S.A. are among the countries that have stated such objectives. Australia, Japan and the U.K., address the business conditions of SMEs, the former focusing on alleviating their administrative burden, the second on "best practices", and the latter on support to entrepreneurs and employees. For its part, the U.S.A. has clearly stated that SME exports are one of their main concerns. Presidential support was given to the Small Business Administration, which was added to the President's Export Council, greatly reinforcing this priority.

In many countries, support for SMEs is not directly stated as a prime objective although, in all countries, small firms constitute more than 75% of all enterprises and, in some countries, up to 99%. This fact cannot be interpreted as meaning that no support is offered to SMEs but rather that many governments appear not to have adapted their policies and programs towards SMEs' specific needs.

3.4 Examples of mechanisms and institutions supporting SMEs

This section examines the third link in the chain of impacts, and provides examples, within the 22 countries, of mechanisms and institutions specifically concerned with SMEs. There are two kinds of institutions: a) institutions supporting SMEs, b) institutions providing financial support to SMEs. Details of this analysis are presented in Appendices 3 and 4.

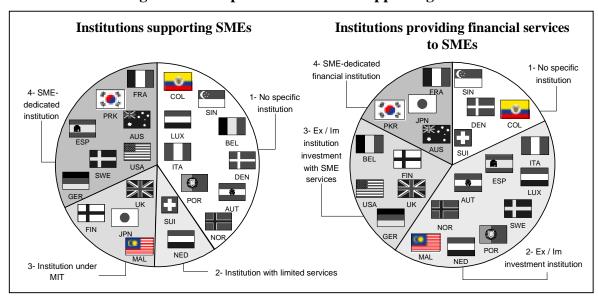


Figure 3 Examples of institutions supporting SMEs

Institutions supporting SMEs

Four categories are distinguished here (see the left side of figure 3). Each one is independent and, contrary to the section on governments' objectives, each country can be represented in only one of the four categories. A country may have:

1. No specific institution or agency concerned with SMEs

Multiple services are offered but no differentiation is made between small firms and large ones.

2. *Institution(s) or agency(ies) delivering a limited range of services*

Some countries have put in place institutions that offer only a specific range of services: for example, the Swiss Government has appointed an SME Council and the Government of the Netherlands has created an SME Research Institute.

3. Dependent institution(s) that are part of larger ministries

Several countries make use of an agency or service which is part of a larger ministry; this is the case in Japan, the U.K., Finland and Malaysia, where the agencies are not independent but operate under the Ministry of Trade and Industry (MTI).

4. A specific and independent institution, ministry or agency for SMEs

Some countries offer services to SMEs through dedicated institutions. For example, the SMBA in Korea and Spain's Institute for SMEs coordinate all programs addressing SMEs in these two countries. But the Small Business Administration (SBA) in the U.S.A. probably represents the best example of a dedicated institution for SMEs. Exhibit 2 describes the extent of SBA Online services offered and provides an example of the role a dedicated institution can play in integrating multiple government's interventions coming from several ministries, agencies or departments.

Exhibit 2 SBA Online services

The SBA Home Page provides SBA services, downloadable files, plus services from agency resource partners, links to other federal and state governments, and direct connections to additional outside resources. Special areas of interest focus on assisting U.S. companies that are setting up an operation, seeking financing, looking to expand, and beginning to engage in exporting. SBA Online also contains information on SBA programs that assist minority- and women-owned businesses. In addition, large libraries of business-focuses shareware, downloadable SBA loan forms, and agency publications are available. A wide variety of services listed by state are provided, including calendars of local training courses sponsored by SBA. Online workshops are offered for individuals to work through self-paced activities that help them start and expand their business. In addition, the home page links directly to the White House home page and the U.S. Business Advisor, which houses a large volume of regulatory information for small businesses. SBA provides full text search capabilities as well as an area for user comments and suggestions.

Institutions providing financial services to SMEs

Once again, we distinguish between four categories, as presented on the right side of figure 3. A country may have:

1. No specific national institution or agency

To the best of our knowledge, some countries, such as Denmark or Switzerland, have no specific national institutions even though, as EU members, they rely on the presence of the European Investment Bank. Countries in this category rely on their banking system for all financial services to business.

2. An independent institution to support imports and exports but no specific services for SMEs

In countries within this category, a national bank, an export-import bank or a related institution supports firms that want to export but does not adapt its financial programs to the specific needs of small firms. Sweden, for instance, promotes foreign investments through ISA and Spain has CERSA. Malaysia has created the Exim Bank of Malaysia and Portugal the Exterior Development Bank.

3. Special services for SMEs through non-SME-dedicated institutions

In some countries, institutions such as the Export Import Bank in the U.S.A. or OND in Belgium provide special financial services focusing on SMEs. Germany uses specialized public and private banks to offer guarantees for SMEs and Finland relies on Postipankki and the Finnish Export Credit Agency.

4. Special services for SMEs through an SME-dedicated institution

Australia, Japan, Korea and France provide examples of countries that have specialized banks, corporations or agencies for handling loans and/or other financial services offered to SMEs. Australia created EFIC, an export and insurance corporation, while in Korea, a specific bank (SME Bank) was set up. In Japan, the Small Business Credit Insurance Corporation complements JEXIM's support. Finally, France uses SOFARIS, a government-controlled corporation, to manage loans and guarantees directed at SMEs.

Several countries offer special financial support to SMEs through public-owned institutions or agencies. It appears that the benefits of such specific institutions for SMEs are manifold. On the one hand, from a government's perspective, a centralized approach to support mechanisms by central institutions facilitates control and evaluation processes. On the other hand, from an SME's perspective, small firms have access to specialized centres (one-stop or one-point-of-entry shops) where they can find a wide range of information on all the available programs with regard to finance, business environment, management capabilities and access to markets.

3.5 Alignment between supra-national initiatives, national objectives and mechanisms

At this point, we would like to emphasize the importance of three distinct levels of alignment that affect the outcomes of public policies in terms of effectiveness and efficiency:

- First, an alignment providing national synergy;
- Second, the degree of coherence between supra-national initiatives, national objectives, mechanisms and programs;
- Finally, the level of integration of all mechanisms and institutions supporting SMEs.

Alignment providing national synergy

Supra-national initiatives play a key role in proposing holistic approaches to guide governments in defining their national objectives, the mechanisms and institutions they put in place and the

programs they implement. They alleviate the differences between members and promote common interests.

In a globalized economy, the path to economic wealth crosses many frontiers and necessitates cooperation between governments. The EU provides a good example of the benefits of regional alignment of public policies. Building a synergy between NAFTA countries could very well bring more prosperity to all.

The degree of coherence between initiatives, objectives, mechanisms and programs

Even though governments do not specifically mention SMEs in their national objectives, most countries do recognize their importance. On that matter, it could be argued that all stated national objectives include strategies that can be of great support to SMEs. It is extremely difficult, if not impossible, to determine the specific impacts of government interventions, whether they are designed to provide direct support to SMEs, direct support for exports or indirect support for one or the other. For instance, promoting R&D and technology transfer makes firms more innovative and, according to many researchers (Lefebvre et al., 1997; Chetty and Hamilton, 1993), innovative firms export their products and create more jobs. In our view, the U.S.A. and Australia have achieved a remarkable degree of coherence between objectives and mechanisms.

If a government intends to prioritize SMEs and exporting, the objective should be clearly stated and specific mechanisms should be put in place to implement this goal and coordinate all related interventions and programs. This coherence will contribute to the effectiveness of public policies.

The level of integration of all mechanisms and institutions supporting SMEs

Since most, if not all governments have limited resources, agencies and ministries should not compete but rather cooperate in order to offer a "package of solutions" for all firms in need of assistance. Three levels of cooperation can be identified: i) between government agencies or ministries, ii) between local, regional and national levels of governments, and iii) between the private and public sectors. In the U.S.A., the SBA coordinates the efforts of several ministries that offer programs directed at SMEs. The French government offers a remarkable example of cooperation with excellent multi-level government integration with the Chambers of Commerce on one hand, and with the EU on the other hand. Examples of this will be provided in the next chapter. Both the Korean and the Australian governments have also put in place dedicated institutions for providing and integrating financial and other types of support to SMEs.

The synergy between government support actions will be amplified if all levels of governments and agencies supporting these programs cooperate to complement their individual efforts. Furthermore, collaboration with the private sector should be encouraged. This integration will contribute to the efficiency of public policies.

4. CHAIN OF IMPACTS OF PUBLIC POLICIES: THE LAST LINK, THE PROGRAMS

This chapter concentrates on describing several innovative programs that support SMEs and exports.

- First, it proposes a sequential approach termed the "logic of intervention";
- Next, we provide a description and synthesis of the programs identified as "best practices";
- Finally, an innovative approach to major issues facing governments is proposed.

4.1 The logic of government intervention

Innovative programs are manifold but the fact remains, according to statistics provided by the Australian government, that 95% of all SMEs do not use any government program. Governments, for their part, have principally intervened by providing financial support programs, often neglecting the fact that the road to exports does not start with loans, guarantees or other financial tools. As depicted in figure 4, SMEs and their managers first access government institutions for information. If they encounter a lack of management capabilities, they will need training or counseling before they can gather and analyze information to gain access to specific markets. Only then, having located potential markets and customers, will they require financial help to support their export activities. By taking into account this logic of intervention, policy makers can ensure that they respond to the specific needs of SMEs and their chief executive officers (CEOs) as they acquire the capabilities and information that will lead to exports.

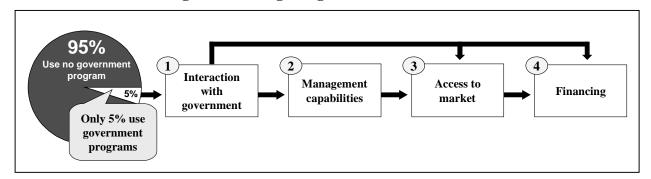


Figure 4 The logic of government intervention

4.2 Innovative programs to support SMEs and exports

Following the OECD's classification in the report *Best Practice Policies for SMEs* (OECD, 1995) and the logic of government intervention presented above, innovative programs were classified in four separate areas, even though some programs apply to more than one. This section will examine each of these areas: ① interaction with government; ② management

capabilities; ③ access to markets; and ④ financing. For each subsection, an overview of the specific programs is provided, followed by a short description of a few innovative programs.

4.2.1 Innovative programs in the area of interaction with government

Programs related to this first category aim at creating a favorable environment for SMEs to communicate with government institutions or services.

Table 1 Innovative policies and/or programs in the area of interaction with government

Country	Program or Policy
1. Australia	The Regulatory Reform introduced to alleviate the regulatory burden for SMEs is particularly
	extensive and covers the review and reform of over 15 laws or regulations in fields such as
	securities, retirement saving accounts, product recall requirements, regulatory regime for
	patent attorneys, copyright, licences, customs, conformity assessment, health, immigration
	and others.
2. Belgium	"One-stop-assistance" centres for new businesses; simplified and reduced formalities for
	registration in government programs (Siprocom Program).
3. Denmark	"One-stop-shops" enable businesses to deal with one authority even though programs may be
	supported by the Danish government or by the EU.
4. France	Most government programs are implemented with regional partners, usually the Chambers of
	Commerce; this collaboration between levels of government is particularly important.
5. Germany	Information on all programs is accessible on the Internet and presented in an easily
	understandable format.
6. Italy	Most government programs are implemented with regional partners, usually the Chambers of
	Commerce; they address specific clusters of firms and provide information support to
	networking: DIT, the Chambers of Commerce network, offers information, training, technical
	assistance and consultancy, and specific sectorial support.
7. Japan	A series of measures for strengthening the management base and rectifying disadvantages
	facing SMEs have been adopted by various government bodies: financial measures; tax
	measures; organization measures; measures for proper subcontracting; measures for
	adjustment of business sectors; measures to secure public-sector demand.
8. Korea	Korea is known as a largely corporatist state and government interactions with markets and
	firms are common. "Chaebol governance" where large firms make use of a structured
	network of subsidiaries, suppliers and customers characterizes the Korean business
	environment.
9. Sweden	ALMI Företagspartner: this organization, owned by both government and local authorities,
	incorporates the best of centralized and decentralized help for SMEs. Located in the business
	milieu, it has central headquarters to support local actions.
10. Switzerland	The program in place to alleviate the administrative burden for SMEs uses a single point-of-
	entry strategy. Generalists in place can assess the specific needs of a firm and direct it to
44 4	specialists in specialized government agencies according to the type of assistance needed.
11. United	An original project is the Wessex Virtual Business Park, hosted by Bournemouth University,
Kingdom	which takes into account the hype concerning the Internet and the information superhighway
	and offers a free Internet site to participating organizations which, in return, provide a detailed
	case study for the costs and benefits incurred.
	CASBA, the Centre for Applied Superhighway Business Advantage, provides a single point
10 TI 1/ 1 C/ /	of access to skills and resources available to local and national SMEs.
12. United States	SBA is accessible from the Internet and offers a small guide for entrepreneurs wishing to
of America	export as well as online information on most of the programs available.

Table 1 describes such programs in 12 countries. The large number of programs in this area shows that governments have been especially active in trying to put in place "user-friendly" measures for small enterprises.

Four types of programs have been designed with that objective:

① Programs that alleviate the administrative burdens of doing business with government agencies

The Regulatory Reform introduced by the Australian government is a good example of a program in this category. If we take into account SMEs' very low rate of participation in government-supported programs (a topic on which statistics will be presented in a subsequent section), it could be argued that alleviating the regulatory burden is probably the best and most promising means of supporting SMEs since they lack the time and personnel to go through all the administrative paperwork necessary to participate in government programs. Compliance costs are also very burdensome for SMEs; for instance, an Australian report affirms that "Small businesses with one or two employees spend on average 120 hours a year on tax matters. This rises to about 250 hours for businesses with more than 10 employees" (Commonwealth of Australia, 1997b). Exhibit 3 presents key initiatives taken by the Australian government on the In the Netherlands, statistics show that the cost per employee of administrative obligations is 21 times higher in very small firms than in large firms. The efforts made by the Belgian government, which has adopted simplified registration formalities for all firms, should be mentioned. Japan has also adopted a series of measures to rectify the disadvantages faced by SMEs in doing business with government. In fact, it should be noted that most governments have initiated some actions in that regard.

Exhibit 3 Key initiatives to alleviate the administrative burden

Small businesses with one or two employees spend on average 120 hours a year on tax matters. This rises to about 250 hours for businesses with more than 10 employees.

Tax compliance affects every small business operator. Small business wants certainty and simplicity in the reporting and compliance arrangements. The Government has delivered a comprehensive programme aimed at addressing these issues.

The Government knows that many small businesses have problems with the taxation system and has already:

- introduced capital gains tax rollover relief;
- provided capital gains tax exemption on the sale of a small business for retirement;
- reduced the provisional tax uplift factor from 8 per cent to 6 per cent; and
- agreed to set up a new Small Taxation Claims Tribunal.

(Source: Commonwealth of Australia, 1997b)

② Programs that promote "one-stop" shops or "one-point-of-entry" shops

Many countries have created one-stop shops (Belgium, Denmark, U.S.A.) or one-point-of-entry centers (Australia, Switzerland) (see figure 5). Each type offers benefits and disadvantages, for government as well as for the clients who consult them:

One-stop shops offer all types of services in one location. Supported by multidisciplinary teams, the shops can respond rapidly to a diversity of needs. But in the long run, specialists tend to lose contact with state-of-the-art knowledge in their discipline and become generalists. For government, one-stop shops require that specialized resources to be present in various regions, multiplying operation costs.

One-point-of-entry shops act as dispatchers for all of the government's services. Generalists analyze clients' specific needs and refer them to the appropriate service. Teams of specialists are centralized, therefore reducing operational costs while developing expertise centers. Clients, who often need various types of support, have to shift from one office to another.

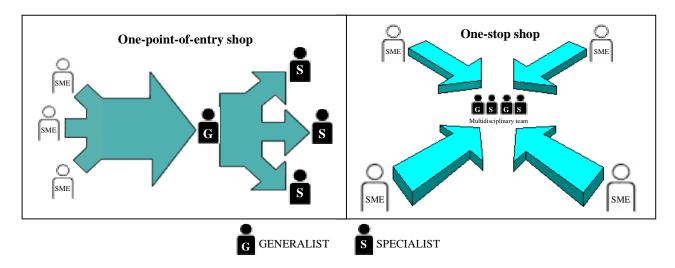


Figure 5 "One-point-of-entry" shop and "One-stop" shop

3 Programs that are built on cooperation between levels of government

The Australian government, in collaboration with the state, territorial and regional governments, has reviewed all programs affecting SMEs in an effort to reduce, as much as possible, any overlaps between programs and government levels. This review has helped Australia to reduce the administrative burden on SMEs, as discussed in section i). What is more, the one-point-of-entry shop, as explained in section ii), dispatches SME clients not only to programs maintained by federal (or Commonwealth) agencies but to all programs provided by any governments within Australia. Similarly, in the U.S.A., the federal agency (SBA) has joint responsibility with the State of California for guarantees to California exporters.

Countries such as France, Italy and Sweden have worked with local partners, often Chambers of Commerce, to implement regional offices, which incorporate the best of centralized and decentralized help for SMEs. These offices serve as one-stop or one-point-of-entry centres and have the advantage of bringing government agencies closer to their potential clients.

Programs that bring information directly to the small firm via the Internet and business networks

Measures in the fourth category are probably the most innovative since they use the Internet and electronic superhighway to reach SMEs and provide access to databases and networking. Governments have developed extensive sites where objectives, policies and specific programs are presented.

For example, the German site providing information for SMEs is particularly remarkable for its simplicity and accessibility. Japan's site is probably the most extensive with regard to SME networks (private and public). The U.K.'s Centre for Applied Superhighway Advantage (CASBA), is exceptional for providing access to skills and resources to local and national SMEs. On the site, one can even find registration forms to apply for the support programs offered. The U.K.'s use of the Web to create a virtual business park is most original. Finally, the U.S.A.'s SBA agency not only provides its programs online but also assists SMEs via computer software that can be downloaded online for business improvements, such as (to name only one) business plan preparation software.

Government efforts to provide online support where small firms can find information and resources, while very innovative, are nevertheless useless if the proper electronic infrastructure is not in place and if firm owners and managers lack the willingness and/or training to use these new technologies. For this reason, the German government has developed an action plan to make sure Germany develops into an information society. These actions include sensitization and education activities to change the mindset of business people towards a better understanding of the "information society". Working in the same direction, Singapore is investing heavily in the development of an information and telecommunication network and is making strategic use of information technology to support trade (TradeNet and Globalink projects).

4.2.2 Innovative programs in the area of management capabilities

In the area of management capabilities, governments organize forums and conferences in order to disseminate knowledge on topics of interest to SMEs. They provide information and access to external expertise and training. Technology transfer, production modernization and R&D activities are also promoted since they are closely linked to innovation and job creation. Governments also support networking and, most of all, sectorial networking since knowledge and know-how are mainly industry-specific. Table 2 describes such programs adopted by eight countries.

One program worth singling out in this area is the KEKO program adopted by the Finland government. This program is innovative in two ways. First, the program's collaborative infrastructure includes several ministries, labor organizations, training firms and private enterprises and makes it possible to offer tailor-made training, education, counseling and consultancy. Secondly, the program makes use of unemployed professionals, thereby rendering services to both the professionals and the client firms. Malaysia has adopted a similar type of support by encouraging mentor/mentee relations while, in the U.S.A., the SCORE program resorts to retired managers on a voluntary base to help out small firms and their managers.

Italy, on the other hand, has adopted a cluster approach and most programs are industry-specific. For instance, to enhance management capabilities, the Italian government makes use of several programs to reinforce national competence centres. As an example, in the microelectronic domain, the MEPI and SUMIS programs help support seminars, training courses and workshops to make SMEs aware of the opportunities of using electronic circuits in their production.

Table 2 Innovative policies and/or programs in the area of management capabilities

	Country	Program or Policy
1.	Denmark	The Ministry of Foreign Affairs has put in place a special unit to assist in maintaining and
		improving the quality of Danish aid for all projects and programs targeting industrial
		development assistance; the evaluations are carried out by interdisciplinary teams mostly
		composed of external consultants.
2.	Finland	The KEKO program, a collaborative and cooperative program from the Ministry of Labor,
		the Ministry of Commerce and Industry and the Ministry of Education, promotes foreign
		trade, marketing and quality development, along with labor organizations, enterprises and
		training organizations. It aims to respond to the needs of both SMEs and unemployed
		professionals: it finds SMEs with realistic projects and well-educated unemployed
		professionals and it organizes and plans the required tailor-made training and education as
	<u> </u>	well as counseling and consultancy.
3.	Italy	Programs are mainly centred on specific industries; for instance, the MEPI and SUMIS
		programs in the microelectronic domain focus on reinforcing national centres of competence;
		seminars, training courses and workshops are offered to SMEs to make them aware of the
		opportunities of using electronic circuits.
4.	Japan	The Japanese government's interventions to assist SMEs are centred on supporting managers self-help efforts; managers must demonstrate pro-activity.
5	Korea	Networking and subcontracting or partnering with organizations from other countries is
٥.	Kurea	looked at as a means to foster technology transfer and capabilities building and encouraged
		through positive investments.
6	Malaysia	One program for supporting Bumiputra entrepreneurs does this through mentor/mentee
υ.	Maiaysia	relations.
7	United	Programs are mainly centred on best practices and address management and innovation
' '	Kingdom	capabilities; they promote the importance of intangible assets, which definitely differs from
	Kinguoiii	other governments' interventions, which are aimed at technology, R&D or employment.
8.	United States	Through the DOC program, 51 Districts of Consultation offer support from 1,700 firms and
••	of America	experts in international commerce (850 of whom are retired managers participating in the
		SCORE program) on a voluntary basis.
Щ_		[]

Japan has adopted a diametrically opposed approach to enhance management capabilities; all of the government's interventions are centered on supporting the self-help efforts of managers, who must demonstrate their pro-activity in order to benefit from government support.

The U.K. also differentiates itself with regard to the importance of promoting "intangible assets" such as quality, best practices and management capabilities rather than focusing on R&D or technology.

Special mention should be made of "the Asian way of doing business", for in Japan, Korea, Malaysia and Singapore, intricate networks and partnerships have traditionally been developed and governments have always been very closely linked to the business milieu. These countries have been known as largely corporatist states and government interactions with markets and firms are common. *Chaebol* governance in Korea and *Keiretsus* in Japan imply that large firms make use of a structured network of subsidiaries, suppliers and customers, customs that have no

equivalent in the Western world. Tremendous efforts to harmonize worldwide conditions for doing business have been deployed by the OECD and all member countries.

4.2.3 Innovative programs in the area of access to markets

To promote access to markets for SMEs, governments rely on policies and programs that favor SMEs in government procurement; they also provide information, facilitate training for trade promotion and support potential exporters. But the most innovative programs in this area make strategic use of information technology and the electronic superhighway to reduce distances and ensure that their country is part of the global marketplace currently "under construction". Table 3 describes such programs located in seven countries.

Access to foreign markets is made easier by simplified laws and regulations regarding customs, requirements, patents, licences and immigration. The first step taken by governments must therefore be centred on internal access to information and support. As mentioned earlier, Australia and Belgium have been very active in alleviating the administrative and regulatory burden of doing business with government. Making it easier to get information and support through one-stop or one-point-of-entry shops and the use of the Internet has also helped SMEs in many countries.

The second step to be taken is to use the same technologies to facilitate access to external markets. The Italian Institute for Foreign Trade (ICE), operates an electronic foreign trade information system called SICE that promotes trade, industrial and technical cooperation and circulates information on Italy around the world. The U.K. has put in place an Export Market Information Centre (EMIC), a "self-service" library and research facility with advice pages aimed specifically at smaller businesses new to exporting; individual market menus are offered as well as information on products, markets, opportunities, contacts, statistics and research papers. Australia offers a similar service through "Australia World Direct" from Austrade (Australian Trade Commission Online).

The U.S.A. also makes extensive use of the Internet to provide information on foreign markets. It has also created a physical network of Exportation Assistance Centers that offer marketing and financial assistance with the cooperation of national agencies and teams of specialists. These centres perform market scanning activities in each industrial sector to detect exporting opportunities for American products and pass on this information to interested parties. Japan's Chamber of Commerce and Industry (JCCI) also gathers information for SMEs seeking international trade, investment and technology ties. JCCI holds seminars, publishes a bulletin, introduces potential business partners and offers mediation and consulting services. A specific program called JETRO promotes cooperation agreements with external firms by providing information and financing. Creating an online electronic marketplace is a most innovative initiative. Spain has already put such a tool in place, aiming to help the development of SMEs with limited resources; it currently operates as a subscription service and offers customized business information on all industries and trades.

Table 3 Innovative policies and/or programs in the area of access to markets

	Country	Program or Policy
1.	Australia	The Regulatory Reform introduced to alleviate the regulatory burden for SMEs is particularly extensive and covers the review and reform of more than 15 laws or
		regulations in fields such as securities, retirement saving accounts, product recall
		requirements, regulatory regime for patent attorneys, copyright, licences, customs, conformity assessment, health, immigration and others.
2.	Italy	ICE, the Italian Institute for Foreign Trade, operates SICE, an electronic foreign trade
		information system that promotes trade, industrial and technical cooperation and circulates information on Italy around the world.
3.	Japan	Japan's Chamber of Commerce and Industry gathers information for SMEs seeking international trade, investment and technology ties and provides them with business opportunities; the JCCI holds seminars, publishes a bulletin, introduces potential business partners and offers mediation and consulting services. The JETRO program promotes cooperation agreements with external firms by providing financing and information. A new law tentatively named "Law for facilitating creative business activities of SMEs" will be enacted to facilitate the trailblazing of new markets and the starting-up of new companies through technological development by SMEs and the commercialization of their achievements.
4.	Singapore	Information technology is used strategically with TradeNet and Globalink, both of which support trade.
5.	Spain	The online global marketplace is certainly a tool for future development, specifically for SMEs with limited resources; it currently operates as a subscription service and offers customized business information on all industries or trades.
6.	United	EMIC, the Export Market Information Centre, is a "self-service" library and research
	Kingdom	facility with advice pages aimed specifically at smaller businesses new to exporting;
		individual "market menus" are offered as well as information on products, markets, opportunities, contacts, statistics and research reports.
7	United States	Exportation Assistance Centers offer marketing and financial assistance in one location
′ •	of America	with the cooperation of counselors and national agencies such as SBA, Eximbank, the
		Department of Commerce, the International Development Agency and others. These
		agencies are supported by a team of specialists from Washington who perform market scanning activities in each industrial sector to detect exporting opportunities for American products.

4.2.4 Innovative programs in the area of financing

Most countries offer credits, loan guarantees, capitalization funds for new businesses, and tax benefits or incentives. Indirect assistance that involves facilitating the supply of informal equity and providing information services promoting the linkages between investors and investees has been excluded from this section.

Financing-related programs located in three countries attracted the attention of our researchers and are summarized in table 4. The first program worth mentioning was initiated by the Belgian government. A special "financial package" approach is used. It includes an array of incentives of various kinds which can be combined to offer optimal customized financial aid to SMEs. This approach implies a comprehensive view of all types of support offered as well as a proper analysis of the specific needs of each applicant firm.

By putting in place a special corporation to provide financial support for SMEs in the form of credit insurance, the Japanese government has ensured that SMEs' specific needs are well

understood and taken care of. Another initiative from Japan has been the creation of an investment loss reserve for businesses commercializing seed technologies. The risks inherent to research can thus be shared by both the government and the SME.

Table 4 Innovative policies and/or programs in the area of financing

Country	Program or Policy						
1. Belgium	An investment incentive framework with a package approach involving incentives which can						
	be mixed to offer the optimal combination of direct aid in the form of a grant linked to						
	investment, favorable tax schemes, labor incentives and training measures, R&D and						
	international trade opportunities.						
2. Japan	The Small Business Credit Insurance Corporation (a government-affiliated institution) is						
	specifically dedicated to providing financial support for SMEs in the form of a credit						
	insurance system for machinery and modernization of equipment. Assistance for small-scale						
	seed technology research and creation of an investment loss reserve for businesses						
	commercializing seed technologies are initiatives worth mentioning.						
3. United States	Exportation Assistance Centers offer marketing and financial assistance in one location, with						
of America	the cooperation of counselors and national agencies such as SBA, Eximbank, the Department						
	of Commerce, the International Development Agency and others. These agencies are						
	supported by a team of specialists, from Washington who perform market scanning activities						
	in each industrial sector to detect exporting opportunities for American products.						

The United States government has created Exportation Assistance Centers (EAC) that offer marketing and financial assistance in one location. These simplify the search for help and, since they are linked to adequate expert resources, these centres can be very effective in supporting an SME that wants to export. Both the SBA's Export Working Capital Program (EWCP) and Eximbank's Working Capital Guarantee Program (WCGP) are available in these centers and in several approved commercial banks; one application form can be used for both programs. However, compared to Belgium's "package", the EAC's analogous package is less comprehensive, although it gives the applicant firms access to both export financing and the SBA's assistance and companion loans. The Belgium program is more customized focusing solely on financial contents.

Programs designed to stimulate informal investment activities and start-ups or foster innovation or R&D were not included since they do not directly promote exports. Even though the link between access to venture capital, whether formal or informal, and exports and job creation has yet to be proven, many countries are providing such funding for start-ups and innovation, especially for SMEs in the high-tech sector. The French government's efforts to support new businesses are particularly extensive and many SME-dedicated programs are available.

4.3 The major issue for government intervention

In our effort to identify and describe the best practices in use to support SMEs and exports, we have come to the conclusion that the major problem facing policy makers lies not so much in composing the most innovative and extensive portfolio of support programs but rather in reaching the large proportion of SMEs who do not traditionally use any government program (see figure 6). For this reason, this last section will propose a solution, the virtual export centre, briefly defining the concept and exploring its feasibility and advantages.

95%

Interaction with government

How to reach the other 95% that traditionally use no governement program?

Access to market

Financing

Figure 6 The major issue for government intervention

The virtual export centre

While this report has enabled us to identify the main concerns facing governments that want to promote exports and job creation in SMEs, it has also provided examples of programs implemented by several countries to counteract threats or to take advantage of opportunities created by the global and virtual economy which is now developing. The use of the electronic highway stands out as one of the most promising avenues of intervention since a government can be present in every firm and offer several services in the form of a customized help-desk in a **virtual export centre**.

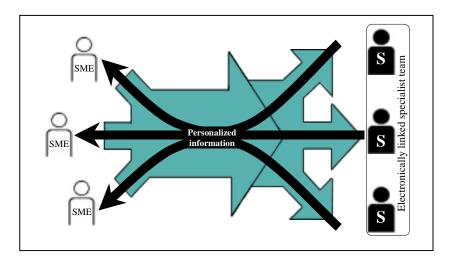


Figure 7 The virtual export centre (VEC)

The virtual export centre (VEC) acts as both a one-stop and a one-point-of-entry shop (see figure 7). Specialists, though centralized in expertise centres, are electronically linked and can intervene directly with a manager whenever there is a need for their specific field of competence. Furthermore, teams of specialists can confer on cases and propose integrated packages of well-adapted solutions, respecting the logic of intervention in promoting exports.

Specialists, even though geographically dispersed, must be able to work together to offer a global, integrated portfolio of solutions. They must act as a team.

The core node of the VEC is embedded in a feedback loop, where SMEs consult government services on one hand, but where government also offers personalized information through the use of *push media* on the other hand. For a better understanding of the concept of push media, please consult exhibit 4. This feedback is represented by the bidirectional arrows in figure 7. The channel of push diffusion could be developed on an existing diffusion platform such as Point Cast.

The information content of "pushed" to SMEs must be enlightening, useful and relevant. Only if firms benefit on a day-to-day basis from worthwhile information will they change their attitude towards government support and engage in a trusting relation.

But integrating and facilitating access to government support programs is only part of the solution since the fact remains that SMEs are usually unwilling to seek and make use of government support programs. Policy makers must therefore try to enter the closed set of selected, explicit linkages CEOs develop with a restricted number of preferential partners. These networks have two characteristics: they are geographically localized (Acs, 1990) and industry-centred (Chakrabarti, 1990; Porter, 1985). Some of the programs to promote exports and job creation by small firms should therefore be directed towards existing networks, professional associations, industrial clusters and others. By providing information and services to these business networks and collaborating with them to offer these services to SMEs, governments can ultimately reach managers and benefit from the climate of trust and cooperation which characterizes their functioning. VECs could offer industry-specific specialized services and include links with private services available for SMEs.

The VEC needs to implement close collaboration with existing business networks and with the socio-economic actors already involved in industry.

The development of VECs directly accessible by managers from their desktops and by industrial clusters or business associations will contribute to the effectiveness and efficiency of government support programs. The creation of this unique help desk necessitates the integration of programs between several levels of government - local, regional and national – and should reduce the red tape a CEO in need of help must currently face.

Exhibit 4 Push Media

With its millions of web sites, the Internet currently offers an overwhelming amount of information. Unfortunately, finding the desired information can often be quite difficult in the existing "browsing" mode.

Push Media constitute a new multimedia tool that can directly transmit rich and diversified content to net surfers. By allowing the users to specify the types of information they would like to receive, Push Media offer a personalized access to Internet. The traditional, passive model of the Internet requires the individual to navigate through hypertext links to obtain the desired information. By contrast, Push Media operate according to a broadcasting mode and automatically issue information to the user (as television does).

First, users register by downloading the free software that will enable them to receive the broadcast. Then, customers select the channels they prefer, *The Globe and Mail* or *Wired Magazine*, for example. Users personalize each channel by selecting their domains of interest. After registration, for each customer, a broadcast session will occur whenever its computer enters the screen saver mode. Users that have a permanent connection to the Internet will continuously receive updated broadcasts. People using dial-up access to the Internet can manually update their information each time they connect.

PointCast (www.pointcast.com) is the pioneer in Push Media. More than two million users have downloaded the free PointCast software since the launch of the final version in May 1996, and one million Internet surfers regularly use PointCast. The company finances its activities by selling advertisement space. Ads appear next to the content.

Most Push Media software has recently begun to provide the technical information that is necessary to create a diffusion channel. Consequently, it is now possible for public and private organizations, as well as individuals, to broadcast through this new medium, free of charge. Push Media providers also prepare specific modules of information relevant to different categories of customers. For example, PointCast provides several industry-related channels, like telecommunications, banking and even the U.S. government.

Other well-known companies offering Push Media services include Microsoft Active Desktop, Netscape Netcaster, and Marimba Castanet.



PointCast weather channel



PointCast news channel

5. CONCLUSION

SMEs and exports are now recognized as major determinants of national competitiveness (Hatzichornoglou, 1996). This report provides key insights for the formulation of specific public policies aimed at SMEs and exporting. "Best practices" from export promotion programs for SMEs in 22 countries were surveyed on the basis of their holistic approach, their relevance and effectiveness in a knowledge-based economy and their use of information and communication technology.

This document highlights two major conclusions. First, significant benefits can be gained by aligning supra-national initiatives with national objectives, mechanisms and programs, the four links in the chain of impacts. Synergy between supra-national initiatives and national objectives, coherence between the four links of the chain and integration of all mechanisms and institutions supporting SMEs are the three levels of alignment that governments should specifically focus on.

Our second conclusion stresses the importance of respecting "a logic of intervention" in order to reach a larger proportion of SMEs, particularly those who traditionally use no government programs, and to offer them a portfolio of programs that meet their specific needs. An innovative approach, the virtual export centre, was proposed to deal with this major issue and provide customized, client-centred service to SMEs and their managers.

Small firms are now increasingly considered as major actors in promoting exports and job creation. The alignment of public policies addressing SMEs and the adoption of an integrated and customized approach to offering the needed support will facilitate access to the "knowledge economy" which will characterize the beginning of the 21st century and ensure the country's growth and wealth.

Table A: Evaluation of the availability and accessibility of information on government Internet sites

Co	Country Criteria used to assess the availability and accessibility of information on governmen Internet sites ¹					on government
		Accessibility	Connectivity with gov't	Multilingual interface	Search engine	User- friendliness
1.	Australia	6	5	2	4	5
2.	Austria	5	3	5	2	5
3.	Belgium	6	6	7	3	6
4.	Colombia	4	3	3	2	3
5.	Denmark	5	5	1	5	4
6.	Finland	6	6	2	1	5
7.	France	6	6	6	7	6
8.	Germany	5	5	3	3	6
9.	Italy	5	5	1	5	6
10.	Japan	6	6	5	6	6
11.	Korea	4	2	2	2	4
12.	Luxembourg	5	6	4	6	6
13.	Malaysia	5	4	5	3	6
14.	Netherlands	6	5	3	2	5
15.	Norway	7	7	5	6	7
16.	Portugal	6	7	5	7	6
17.	Singapore	6	7	3	6	5
18.	Spain	5	5	3	2	4
19.	Sweden	6	5	3	3	5
20.	Switzerland	6	6	7	2	6
21.	United Kingdom	7	7	2	6	6
22.	United States of America	7	7	2	5	7

¹ Measured using a seven-point Likert scale.

Table B Main stated objectives supporting government policies

			Category				
		Technology - Innovation - Industrial Development	Infrastructure and Economic Development	Collaboration - Information - Visibility	Employment, Training and Management	Regional Development and Cluster Approach	
Country	Main stated objectives supporting government policies	1	2	3	4	5	
1. Australia	Support SMEs and alleviate the regulatory burden			~			
2. Austria	Cluster policy					V	
3. Belgium	Employment				~		
4. Colombia	Social development through education, housing and jobs, the "salto social"		~			~	
5. Denmark	Industrial development	~					
6. Finland	Collaboration between governments and visibility			'			
7. France	Economic assistance, technological development and information	~	/	~			
8. Germany	Employment and shaping for the information age			/	V		
9. Italy	Clusters and regional development					'	
10. Japan	Productivity and business conditions of SMEs, entrepreneurs and employees	V		'	V		
11. Korea	Science and technology	V					
12. Luxembourg	Production modernization and innovation through R&D	V					
13. Malaysia	Economic growth through manufacturing	V	'				
14. Netherlands	Cluster approach and technology	V				'	
15. Norway	Employment				V		
16. Portugal	Modernizing markets and infrastructure development		'				
17. Singapore	Economic growth and infrastructure development (including telecommunications)		'				
18. Spain	Modernization of the scientific and technical system	V					
19. Sweden	Support and information			~			
20. Switzerland	Technology	'					
21. U.K.	Best management practices				'		
22. U.S.A.	Preserve free competitive enterprise and exportation		~				

Table C Institutions supporting SMEs

			Category ¹				
			No specific institution	Institution with	Institution under MTI	SME dedicated institution	
	Country	Institutions supporting SMEs	1	2	3	4	
1.	Australia	AusIndustry, a partnership between Commonwealth and State and Territory Governments				~	
2.	Austria		V				
3.	Belgium		~				
4.	Colombia		V				
5.	Denmark		~				
6.	Finland	The Ministry of Trade and Industry (MTI) Business Services			V		
7.	France	The Direction de l'action régionale et de la petite et moyenne industrie				/	
8.	Germany	The German Directorate - General II				'	
9.	Italy		'				
10.	Japan	Small and Medium Enterprise Agency (under MITI)			~		
11.	Korea	SMBA, the Small and Medium Sized Businesses Agency				/	
12.	Luxembourg		'				
13.	Malaysia	The Ministry of Entrepreneur Development and SMIDEC, a corporation under MITI			~		
_	Netherlands	The Research Institute for SMBs		~			
	Norway		'				
	Portugal		'				
	Singapore		'				
	Spain	IMPI, the Institute for SMEs				~	
	Sweden	ALMI Företagspartner, a public/private-owned institution				~	
	Switzerland	The Swiss Government's Federal Council		~			
	U.K.	Under MTI, a Ministerial Group and a Report			V		
22.	U.S.A.	SBA, Small Business Administration				~	

Table D Institutions providing financial services to SMEs

		Category			
		No specific national institution	Ex / Im investment institution	Ex / Im investment institution with SME services	-dedic ution
Country	Institutions providing financial services to SMEs	1	2	3	4
1. Australia	Export Finance and Insurance Corporation (EFIC) offers special services to SMEs				~
2. Austria	The AKB, Austrian Kontrollbank		>		
3. Belgium	The Office National du Ducroire (OND) offers special coverage for SMEs			~	
4. Columbia	Banco de la República	~			
5. Denmark	European Investment Bank and Nordic Investment Bank	~			
6. Finland	Postipankki and Finnish Export Credit Agency, offer banking services to SMEs and others			~	
7. France	 SOFARIS, a company for financing guarantees for SMEs COFACE, a quasi-governmental agency provides insurance Banque Nationale and private banks 				~
8. Germany	Specialized public and private banks offer guarantees for SMEs			~	
9. Italy	SACE, the Italian credit insurance body		/		
10. Japan	Small Business Credit Insurance Corporation and JEXIM, the Ex/Im Bank of Japan				~
11. Korea	SME Bank and Export-Import Bank				~
12. Luxembourg	Société Nationale de Crédit à l'Investissement (SNCI)		~		
13. Malaysia	Exim Bank of Malaysia		~		
14. Netherlands	The Central Bank and specialized export financing companies set up by large commercial banks (NV Export Financiering Maatschappij)		~		
15. Norway	The Central Bank and Eksportfinans A/S, which acts on behalf of the government to administer trade subsidy schemes		~		
16. Portugal	The Exterior Development Bank		/		
17. Singapore	Asian Development Bank	~			
18. Spain	CERSA, a refinancing company		~		
19. Sweden	ISA, Invest in Sweden Agency, promotes foreign investment		1		
20. Switzerland	European Investment Bank	~			
21. U.K.	Small Firms Loan Section in the DTI SME services in Bank of England and others			~	
22. U.S.A.	Eximbank with special programs for SMEs and OPIC (Overseas Private Investment Corporation)			~	

1. Internet Sites (1997)

Australia

http://www.dist.gov.au/

Australian Department of Industry, Science and Tourism (AusIndustry)

http://www.autrade.gov.au/

Australian Trade Commission

http://www.efic.gov.au/

Export Finance and Insurance Corporation (EFIC)

http://www.agps.gov.au/

Australian Government Publishing Service

Austria

http://www.tradecompass.com/library/dos/ecopol/AUSTRIA.html

Austria Key Economic Indicators

http://www.wk.or.at/aw/aw_int/business/

Austrian Federal Economic Chamber (Foreign Trade Department)

http://www.bmwf.gv.at:80/forsch/f&eoe/

Federal Ministry of Science and Transport

Colombia

http://www.tradecompass.com/library/books/com_guide/COLOMBIA.html

Colombia Country Commercial Guide

http://www.axesnet.com/correval/

Correval SA (Investing in Colombia)

http://www.worldbank.org/html/extdr/offrep/lac/colombia.html

Colombia (World Bank Group)

http://www.aexp.com/smallbusiness/resources/expanding/global/reports

Small Business Exchange (Colombia Export: Trade Overview)

http://www.kreller.com

Kreller Business Information Group

http://wwwaccess.digex.net/~coltrade/62.html

Colombian Government Trade Bureau in Washington, DC

Denmark

http://www.ks.dk/oecd95uk.html

Annual Report on Competition Policy in Denmark 1995

http://www.um.dk/english/

Danish Ministry of Foreign Affairs

Finland

http://www.vn.fi/vn/ktm/english

Ministry of Trade and Business

http://www.eva.fi/julkaitsut/esielmat/pet1196.html

Centre for Finnish Business and Policy Studies (EVA)

http://www.vatt.fi/

Finnish Economic Research Institute

http://www.vn.fi/vn/um/finfo/english/competitiveness.html

Virtual Finland

http://www.uwasa.fi/taky/esbs/esbs.html

University of Vaasa, Small Business Seminar

http://kalajyu.fi/contedctr/eucen/keko.html

KEKO: Key Personnel for SMEs

France

http://www.tradecompass.com/library/dos/bnotes/FRANCE.html

U.S. Department of State (Background Notes: France)

http://www.tradecompass.com/library/dos/ecopol/FRANCE.html

France Key Economic Indicators

http://www.evariste.anvar.fr

Evariste (Ministry of Industry)

http://www.saem~ales.fr/europe/europe.french.html

Alès en Europe (SMEs and Export)

http://www.ance.asso.fr/

Agence Pour la Création d'Entreprise

http://www.cordis.lu/esprit/src/smehome.html

A Global Marketplace for SMEs (G-7 Information Society Pilot Project)

Germany

http://www.kp.dlr.de/BMWi/gip/programme

Info2000: Germany's Way to the Information Society

Priority for Employment

Economic Incentives in Germany's New Federal States: An Overview

Economic Assistance for Small and Medium-Sized Enterprises in Western Germany

Indonesia

http://coombs.anu.edu.au/~ecopac/indoproj.html

Indonesia Project (Australian National University)

http://ourworld.compuserve.com/homepage/arno_winarno/smesform.html

Indonesia Online Homepage (Small Business)

http://www.oecd.org/dsti/

OECD: DSTI National Innovation Systems Project

http://www.dprin.go.id/data/aboutus.html

Ministry of Industry and Trade of the Republic of Indonesia

(PusData Online)

gopher://emailhost.ait.ac.th:70/00/Asia

Indonesia (Key Economic Indicators)

http://www.indonesianet.com/indotoda/maydere.html

Executive Summary of May 1995 Deregulation Package

http://indag.dprin.go.id/

Ministry of Industry and Trade (Republic of Indonesia)

Italy

http://www.minindustria.it/sme_web/eng/orgs/ice/whatice/html

Italian Institute of Foreign Trade - ICE

http://www.research.ec.org/esp-syn/text/7500.html

Special Action in Microelectronics for Italy

http://apollo.cordis.lu/cordis-cgi/srchidadb?ACTION=D&SESSION=322841997-12-

12&DOC=7

Cordis: La commission soutient les petites entreprises en Italie

http://www.italyemb.nw.dc.us/italy/ecojun97/indicators.html

The Italian Economy - Main Indicators

http://indis.msu.ru/ftp/Cordis/smes/smes_italy

SME Stimulation Measures

http://www.italyweb.nw.dc.us/italy/

Economic and Statistical Data

http://www.akf.dk/eng/udland7.html

Energy Policy Instrument (Italy)

http://www.minindustria.it/sme_web/eng/index.html

Italian Home Page for SMEs

http://www.tradecompass.com/library/dos/bnotes/ITALY.html

U.S. Department of State (Background Notes: Italy, July 1995)

http://www.tradecompass.com/library/dos/ecopol/ITALY.html

Italy (Key Economic Indicators)

Japan

http://www.jcci.or.jp/home-e.html

The Japan Chamber of Commerce and Industry

http://www.sme-net.go.jp/japan.html

Small and Medium Enterprises Information of Japan

http://www.miti.go.jp/

Ministry of International Trade and Industry

http://www.jsbc.go.jp/

Small and Medium Enterprises in Japan

http://www.epa.go.jp/

Economic Planning Agency

http://www.jef.or.jp/

Japan Economic Foundation

http://www.mol.go.jp/jil/

Japan Institute of Labor

http://www.mol.go.jp/english/index.htm

Ministry of Labor

http://www.japanexim.go.jp/

Export-Import Bank of Japan

http://www.jetro.go.jp/top/index.html

Japan External Trade Organization

http://www.jinjapan.org/index.html

Japan Information Network (JIN)

Korea

http://www.smba.go.kr/eng/e_policy.html

Object of Korea's SME Policy

http://www.smipc.or.kr/UPD/ginfo/keco/

Korean Economy

SMBA & SMEs

Foreign Investment in Korea

Korean Tax System

Korea's Trading System and Trade Policy

The Major Statistics of the Korean Economy

Overview of the Korean Economy

http://www.kois.go.kr/bizeconomy/economy/

Korean Overseas Information Service (Business & Economy)

Luxembourg

http://www.restena.lu/gover/documents/porteco/porteco.html Portrait économique du Luxembourg http://statec.gouvernement.lu/

Service central de la Statistique et des Études

http://www.restena.lu/gover/documents/info.html

Service Information et Presse du Gouvernement

http://indis.iief.fta-berlin.de/ft.../smes/smes_luxembourg/

SME Stimulation Measures (Luxembourg)

Malaysia

http://mastic.gov.my/mastic/pcation.html

National Survey of Innovation in Industry

http://mastic.gov.my/mastic/mastic.html

Malaysian Science and Technology Information Centre (MASTIC)

Ministry of Science, Technology and the Environment Malaysia (MOSTE)

http://www.jaring.my/msia/rnd/Rnd.html

Research & Development (Malaysia Homepage)

http://www.mtdc.com.my/

Malaysian Technology Development Corporation

http://www.jaring.my/mida/

Malaysian Industrial Development Authority

http://miti.gov.my/matrade.html

Malaysia External Trade Development Corporation (MATRADE)

http://miti.gov.my/small.html

Small and Medium Industries Development Corporation (SMIDEC)

http://www.kpun.gov.my/kpunhome/

Ministry of Entrepreneur Development

http://www.jaring.my/msia/economy/eco-chal.html

The Malaysian Economy: Challenges and Prospects for 2020

Netherlands

http://iaehv.nl/users/kerstens/beleid.html

Small Business Netnews

http://www.tradecompass.com/library/dos/bnotes/NETHERLA.html

U.S. Department of State (Background Notes: Netherlands)

http://dsbb.imf.org/country/nldcats.html

IMF DSBB Netherlands: Index of Data Categories

http://www.eur.nl/few/ocfeb/topics.html

Erasmus Universiteit Rotterdam (Economic Research Program)

http://minez.nl/aep/

Economic Policy Directorate (AEP) of the Netherlands Ministry of Economic Affairs

Norway

http://www.norway.org/economy.html

Business & Economics (Norway)

http://www.norway.org/eea.html

Government (Norway and the European Economic Area: EEA)

http://odin.dep.no/fin/publ/policy

Policies for a Better Environment and High Employment

(Ministry of Finance and Customs)

http://odin.dep.no/fin/eng/econ.html

Norwegian Economy: Economic Policy and Development

(Ministry of Finance and Customs)

http://odin.dep.no/ud/publ/ees/index.html

Norway, the European Economic Area (EEA) and the EU's Internal Market

(Ministry of Foreign Affairs)

http://odin.dep.no/ud/publ97/statistikk/

Norwegian Mini-Guide (Ministry of Foreign Affairs)

http://www.norges-bank.no/english/speeches/annual97/index.html

Annual Address: Economic Perspectives (Norges Bank)

http://www.norges-bank.no/english/publications/reprints_list.html

List of Reprints (Norges Bank)

Portugal

http://www.tradecompass.com/library/dos/bnotes/PORTUGAL/html

U.S. Department of State (Background Notes: Portugal)

http://www.Portugal.org/doigbus/investing/portguideinvestor/portguideinvestor.html

Guide for Investors

(ICEP: Investimos, Comercio e Turismo de Portugal)

http://www.Portugal.org/doingbus/buyingfrom/statistics/statistics.html

External Trade Statistics

http://www.Portugal.org/doingbus/investing/economicdata/economy/economy.html

The Portuguese Economy: Perspective and Prospects

Singapore

http://www.tdb.gov.sg/

Singapore Trade Development Board

http://www.singstat.gov.sg/PUBn/op-list.html

Statistics Singapore Home Page

http://www.gov.sg/mti/

Ministry of Trade and Industry (MTI)

http://web.ntu.edu.sg/nbs/publications/abstract-strat_and_buspolicy.htm

Nanyang Business School (Strategy and Business Policy)

http://web.ntu.edu.sg/nbs/publications/regional_issues_in_economics.htm

Nanyang Business School (Applied Economics Research Series)

http://203.120.163.5/sinews/aug95/aig1.html

Singapore Investment News (Economic Development Board of Singapore)

Spain

http://www.tradecompass.com/library/dos/bnotes/SPAIN.html

U.S. Department of State (Background Notes: Spain)

http://www.tradecompass.com/library/dos/ecopol/SPAIN.html

Spain: Key Economic Indicators

http://www.cgtd.com/global/europe/spain.html

Spain: Trade and Marketing Information (Centre for Global Trade Development)

http://www.DocuWeb.ca/SiSpain/english/

Spanish Embassy in Ottawa

Sweden

http://www.ihb.se:8001/iui

Industrial Institute for Economic and Social Research

http://www.euroinfo.se/eic swed/eic swed.html

Swedish Euro Info Centres

http://www.com.wesnet.se/almi/small.html

Small Business in Sweden (ALMI)

http://www.kommers.se/engorgan.html

National Board of Trade

http://www.smorgasbord.se/sweden/industry

Sweden Industry & Trade

http://www.deutsche-bank.de/dbr/

Deutsche Bank Research

http://www.si.se/english/factsheets/economy.html

The Swedish Economy (Statistics Sweden)

Switzerland

http://www.swissemb.org/business.html

Switzerland Business & Economy (Swiss Embassy in the U.S.A.)

http://www.ethz.ch/swiss/Switzerland_Eco_Details.html

Details about the Economy of Switzerland

http://www.cyberhaven.com/fortress/alandof.html

Switzerland: A Land of Opportunity

http://www.treasury.boi.ie/country/switzel.html

Switzerland's Economy

http://www.tradecompass.com/library/dos/ecopol/SWITZERL.html

Switzerland - Key Economic Indicators

http://www.admin.ch/bfk/

Swiss Federal Office for Economic Policy

http://www.admin.ch/biga/invest

Investment Center Switzerland

United Kingdom

http://www.bucc.co.uk/home

Bournemouth University: Wessex Virtual Business Park

http://www.parliament.uk/post/home.htm

Parliamentary Office of Science and Technology (POST)

http://www.fco.gov.uk/

Foreign & Commonwealth Office

http://bankofengland.co.uk/

Bank of England (Press Releases)

http://www.open.gov.uk/ecgddata/

Export Credits Guarantee Department

http://www.dti.gov.uk/

Department of Trade and Industry

United States

http://www.business.gov.

U.S. Business Advisor

One-Stop Electronic Link to Government for Business

http://www.access.gpo.gov/

Government Printing Office

http://www.sbaonline.sba.gov/

Small Business Administration

http://www.ita.doc.gov

International Trade Administration

http://www.cci2.com/related.html

Export Expert Related Websites

http://www.tradecompass.com/library/dos/ecopol.html

U.S. Department of State: Economic Policy and Trade Practices

European Union

http://europa.eu.int/

European Union Main Point of Entry

http://europa.eu.int/en/comm/dg23/guide en/index2.htm

DGXXIII at the European Commission, Index of SME Policy Issues

http://www.cordis.lu/

Community Research and Development Information Service (Cordis)

Inter-American Development Bank

http://www.iadb.org

OECD

http://www.oecd/ OECD http://www.oecd/org/dsti/ Directorate for Science, Technology and Industry

The World Bank Group

http://www.worldbank.org

2. Monographs and Papers Consulted

- Acs, Z.J. (1990) *High Technology Networks in Maryland*. Paper for Workshop on Networks of Innovators. H.E.C., Montreal.
- Alic, J.A. (1996) *The North American System of Innovation in the Global Context*. Summer Institute of the University of Waterloo (Canada). (Web-linked to the Informal Workshop on National Innovation Systems of the OECD CSTP Working Group on Innovation and Technology Policy (TIP)).
- Austin, J.E. (1990) Managing in developing countries: strategic analysis and operating techniques. New York, Free Press, p. 77.
- Barroclowgh & Co. (1996) Enterprise *Improvement Through Innovation*. Studies into Enterprise Improvement (EI) programs initiated by Office of AusIndustry.
- Berry, A., Escandon, J. (1994) "Colombia's Small and Medium-Size Exporters and Their Support Systems". *Policy Research Working Paper* No. 1401. Washington, The World Bank.
- Berry, A., Levy, B. (1994) "Indonesia's Small and Medium-Size Exporters and Their Support Systems". *Policy Research Working Paper* No. 1402. Washington, The World Bank.
- Bonaccorsi, A. (1992) "On the Relationship Between Firm Size and Export Intensity". *Journal of International Business Studies*, Vol. 23, No. 4, pp. 605-635.
- Bryant, K., Healy, M., Lombardo, L. (1996) *Charting National Innovation Systems An Australian Approach*. Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.

- Cabinet Office, United Kingdom. (1996a) Competitiveness. Creating the Enterprise Centre of Europe A Summary. Competitiveness White Paper.
- Cabinet Office, United Kingdom. (1996b) Competitiveness. Helping Business to Win: Consultation on New Approaches to Business Support. Competitiveness White Paper.
- Chakrabarti, A.K., (1990) "Innovation and Productivity: An Analysis of the Chemical, Textiles and Machine Tool Industries in the U.S.". *Research Policy*, Vol. 19, No. 3, 1990, pp. 257-269.
- Chetty, S.K., R.T. Hamilton (1993) "Firm-level Determinants of Export Performance: A Meta-analysis". *International Marketing Review*, Vol. 10, No. 3, pp. 26-34.
- Commonwealth of Australia (1996) *Time for Business*. Report of the Small Business Deregulation Task Force, November.
- Commonwealth of Australia (1997a) *Annual Report 1995-1996*. Department of Industry, Science and Technology, Canberra, Australian Government Publishing Service.
- Commonwealth of Australia (1997b) Guide to the Government's Small Business Statement More Time for Business.
- Commonwealth of Australia (1997c) Trade Outcomes and Objectives Statement, February.
- Commonwealth of Australia (1997d). A Portrait of Australian Business. Results of the 1995 Business Longitudinal Survey. Small Business Research Program. Productivity Commission, Department of Industry, Science and Tourism.
- Davidow, W.H., Malone, M.S. (1992) *The Virtual Corporation*. New York, Harper Collins Publishers.
- den Hertog, P., Roelandt, T.J.A., Boekholt, P., van der Gaag, H. (1995) Assessing the Distribution Power of National Innovation Systems. Pilot Study: The Netherlands. STB/95/051. Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.
- Department of Trade and Industry. (1996) *An Empirical Study of the UK Innovation System*. Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.
- Dominguez, R. (1996). "Promoción y Restructuración de Pequeñas y Medianas Empresas en Canadá, España, Italia y Japón". *Infraestructura y Mercados Financieros Publicaciones* 6/96, IMF96-102, S, Inter-American Development Bank.
- Edquist, C. (1997). "Systems of Innovation Approaches Their Emergence and Characteristics". in C. Edquist (1997) (ed.) *Systems of Innovation*. London, Pinter Publishers.

- Esser, K., Killebrand, W., Messner, D., Meyer-Stamer, J. (1993). *International Competitiveness in Latin America and East Asia*. London, Frank Cass.
- Etzkowitz, H. (1996) *The Triple Helix: A North American Innovation Environment*. Summer Institute of the University of Waterloo (Canada). (Web-linked to the Informal Workshop on National Innovation Systems of the OECD CSTP Working Group on Innovation and Technology Policy (TIP)).
- Freeman, C., Soete, L., (1994) Work for All or Mass Unemployment? Computerized Technical Change into the 21st Century. London, Pinter Publishers.
- Hatzichronoglou, T. (1996) "Globalization and Competitiveness: Relevant Indicators". *STI Working Papers* 1996/5. Directorate for Science, Technology and Industry, Paris, OECD.
- Hutschenreiter, G., Joerg, L., Ohler, F., Polt, W. (1996) Tracing Knowledge Flows within the Austrian System of Innovation Pilot Case Study for the OECD Project on Knowledge Flows in National Innovation Systems. Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.
- Itoh, M., Urata, S. (1994) "Small and Medium Size Enterprise Support Policies in Japan". *Policy Research Working Paper* No. 1404. Washington, The World Bank.
- Kalakota, R., Whinston, A.B., (1997) *Electronic Commerce*. Reading, Mass., Addison-Wesley.
- Kim, L., Nugent, J. (1994) "The Republic of Korea's Small and Medium-Size Exporters and Their Support Systems". *Policy Research Working Paper* No. 1404. Washington, The World Bank.
- Kim, R.S. (1996) The Korean System of Innovation and the Semiconductor Industry: A Governance Perspective. Paper written as part of the Science Policy Research Unit/Sussex European Institute Joint Project "Innovation Dynamics of Pacific Asia: Implication for Europe" (Web-linked to the Informal Workshop on National Innovation Systems of the OECD CSTP Working Group on Innovation and Technology Policy (TIP)).
- Laursen, K., Christensen, J.L. (1996). *The Creation, Distribution and Use of Knowledge A Pilot Study of the Danish Innovative System*. Danish Agency for Trade and Industry. Ministry of Business and Industry. Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.
- Lefebvre, L.A., Lefebvre, E., Mohnen, P. (1997) From the Virtual Enterprise to the Virtual Economy: Innovation Strategies for the 21st Century. CIRANO. Discussion paper prepared for Industry Canada.

- Levy, B., Berry, A., Itoh, M., Kim, L., Nugent, J., Urata, S. (1994) "Technical and Marketing Support Systems for Successful Small and Medium-Size Enterprises in Four Countries". *Policy Research Working Paper* No. 1404. Washington, The World Bank.
- Lundvall, B. (1985) *Product Innovation and User-Producer Interaction*. Aslborg, Aalborg University Press.
- Lundvall, B. (1988) "Innovation as an Interactive Process: From User-Producer Interaction to National Systems of Innovation". in G. Dosi & al. (1988) (eds.) *Technical Change and Economic Theory*. London, Pinter Publishers.
- MITI (1995), Outline of Small and Medium Enterprise Policies of the Japanese Government. N-95-46. Small and Medium Enterprise Agency, MITI.
- MITI (1997) The Action Plan for Economic Structure Reform (Summary), MITI.
- Mowery, D.C. (1996) *The U.S. National Innovation System: Recent Developments in Structure and Knowledge Flows.* Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.
- Meyer-Stamer, J. (1995) *Brazil: Facing the Challenge of Competitiveness*. German Development Institute. Reports and Working Papers 3/1995.
- Nonaka, I., Takeuchi, H. (1995) *The Knowledge-Creating Company*. New York, Oxford University Press.
- Numminen, S. (1996) *National Innovation Systems: Pilot Case Study of the Knowledge Distribution Power of Finland*. Report of the first phase of the work for the OECD and for the Ministry of Trade and Industry of Finland. Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.
- OECD (1995) Best Practice Policies for Small and Medium-Sized Enterprises. Paris, OECD.
- OECD (1996a) *Public Support to Industry*. Report by the Industry Committee to the Council at Ministerial Level. OECD/GD (96) 82. Paris, OECD.
- OECD (1996b) The Knowledge-Based Economy. OECD/GD (96) 102. Paris, OECD.
- OECD (1997) Globalisation and Small and Medium Enterprises (SMEs): Synthesis Report. Paris, OECD, pp 126-131.
- Papconstantinou, G., Sakuri, N., Wyckoff, A. (1996). "Embodied Technology Diffusion: An Empirical Analysis for 10 OECD Countries". *STI Working Papers* 1996/1. Directorate for Science, Technology and Industry, Paris, OECD.

- Paquet, G. (1996) *Technonationalism and Meso Innovation Systems*. Summer Institute of the University of Waterloo (Canada). (Web-linked to the Informal Workshop on National Innovation Systems of the OECD CSTP Working Group on Innovation and Technology Policy (TIP).
- Pol, E., Garett-Jones, S. (1996) Raising R&D in Australia. Analysis of Innovation Impediments and Incentives Among IR&D Board Client Groups. Overview. Centre for Research Policy at the University of Wollongong. Studies into Enterprise Improvement (EI) programs initiated by the Office of AusIndustry.
- Porter, M.E. (1985) *Competitive Advantage: Creating and Sustaining Superior Performance.*New York, Free Press.
- Porter, M.E. (1990) The Competitive Advantage of Nations. New York, Free Press.
- Potì, B., Cioffi, E. (1996) *Italian System of Knowledge OECD Pilot Project*. ISRDS/CNR. Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.
- Price Waterhouse (1996). The Longer Term Impacts of Participation in the AusIndustry Enterprise Improvement Program. Report for the Office of AusIndustry. September. Price Waterhouse, Economic Studies and Strategies Unit. Studies into Enterprise Improvement (EI) programs initiated by the Office of AusIndustry.
- Sakuri, N., Ioannidis, E., Papconstantinou, G. (1996). "The Impact of R&D and Technology Diffusion on Productivity Growth: Evidence for 10 OECD Countries in the 1970s and 1980s". *STI Working Papers* 1996/2. Directorate for Science, Technology and Industry, Paris, OECD.
- Schreyer, P. (1996) "SMEs and Employment Creation: Overview of Selected Quantitative Studies in OECD Member Countries". *STI Working Papers* 1996/4. Directorate for Science, Technology and Industry, Paris, OECD.
- Science and Technology Agency, Prime Minister's Office, Japan. (1996) White Paper on Science and Technology 1996.
- Smith, K., Dietrichs, E., Nås, S.O. (1996). *The Norwegian National Innovation System: A Preliminary Overview and Assessment*. STEP Group, Oslo. Paper for the Informal Workshop on National Innovation Systems held by the OECD CSTP Working Group on Innovation and Technology Policy (TIP) Paris, October 3.
- Strategic Industry Research Foundation and the Victoria University of Technology. (1996) Understanding the Benefits of R&D. Summary Report. Studies into Enterprise Improvement (EI) programs initiated by the Office of AusIndustry.

- U.S.A. (1994a) *Small Business Administration Reauthorization and Amendments Act of 1994*. (To amend the Small Business Act and the Small Business Investment Act of 1958, and for other purposes). 103rd Congress of the United States of America. (S.2060; Enrolled bill).
- U.S.A. (1994b). National Competitiveness Act. Congressional Record Online via GPO Access.
- U.S.A. (1996) Analytical Perspectives, *Budget of the United States Government*, Fiscal Year 1997. (Budget of the U.S., FY 1997 Online via GPO Access).
- U.S.A. (1997) "Small Business Administration" *Budget of the United States Government*, Fiscal Year 1998, pp. 987-1000. (Budget of the U.S., FY 1998 Online via GPO Access).
- U.S. Federal Register (1995). "Small Business Administration. Semiannual Regulatory Agenda". *Federal Register* Vol. 60, No. 228, Nov. 28. / Unified Agenda, pp. 60843-60860.
- U.S. Federal Register (1996). "Business Loan Programs". *Federal Register* Vol. 61, No. 21 January 31. / Rules and Regulations, pp. 3226-3266.
- U.S. Federal Register (1996). "Small Business Size Standards". *Federal Register* Vol. 61, No. 21 January 31. / Rules and Regulations, pp. 3280-3304.
- U.S. Federal Register (1996). Executive Order 12991 "Adding the Small Business Administration to the President's Export Council", *Federal Register* Vol. 61, No. 47 March 8. / Rules and Regulations, pp. 9585-9587.
- U.S. General Accounting Offices (1995). *Interim Report on the Small Business Technology Innovation Research Program. Federal Research.* GAO/RCED-95-59. Washington, DC.
- U.S. General Accounting Offices (1996). *Comparative Analysis of U.S. and European Union Export Credit Agencies. Export Finance.* Report to the Honorable Barney Frank, House of Representatives. GAO/RCED-96-1. Washington, DC.
- U.S. General Accounting Offices (1996). *Comparison of SBA's 7(a) Loans and Borrowers With Other Loans and Borrowers. Small Business.* Report to the Committee on Small Business, U.S. Senate. GAO/RCED-96-222. Washington, DC.
- U.S. General Accounting Offices (1996). Preliminary Information on the Small Business Technology Transfer Program. Federal Research. GAO/RCED-96-19. Washington, DC.
- U.S. General Accounting Offices (1997). Results Act: Observations on the Small Business Administration's Draft Strategic Plan. GAO/RCED-97-205R. Washington, DC.
- U.S. General Accounting Offices (1997). Small Business. Update of Information on SBA's Small Business Investment Company Programs. Report to the Chairman, Committee on Small Business, U.S. Senate. GAO/RCED-97-55. Washington, DC.

- US Code Title 12 Section 635 (1996) . "Title 12 Bank and Banking, Chapter 6A -- Export-Import Bank of the United States Subchapter I -- General Provisions. Section 635. Powers and Functions of Bank". (From U.S. Code Online via GPO Access).
- US Code Title 15 Section 631 (1996) . "Title 15 Commerce and Trade, Chapter 14A -- Aid to Small Business. Sec. 631. Declaration of Policy". (From U.S. Code Online via GPO Access).
- US Code Title 15 Section 636 (1996). "Title 15 Commerce and Trade, Chapter 14A -- Aid to Small Business. Sec. 636. Additional Powers". (From U.S. Code Online via GPO Access).
- Wagner, J. (1995) "Exports, Firm Size and Firm Dynamics". *Small Business Economics* Vol. 7, pp. 29-39.