



OECD Small and Medium Enterprise Outlook



OECD



2002

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OECD SMALL AND MEDIUM ENTERPRISE OUTLOOK



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FOREWORD

The OECD SME *Outlook* 2002 provides an overview of trends in SME performance and policies in the OECD area and policy profiles for 28 member countries and the Commission of the European Union. Today, most governments apply a range of programmes aimed at alleviating the difficulties that SMEs experience in diverse areas (*e.g.* financing, technology and innovation, e-commerce, management, internationalisation) and seek to identify and implement best practice policies. The *Outlook* aims to broaden and deepen analysis of SME policies and highlight common lessons that can be drawn from member country experiences to ensure that they remain relevant and effective. The report also synthesises thematic work undertaken on a range of topics by the Working Party on SMEs and Entrepreneurship and within OECD's Directorate for Science, Technology and Industry: *i*) Enterprise Demography: Examining Business Dynamism in OECD Countries; *ii*) Taxation, SMEs and Entrepreneurship, *iii*) SMEs and Environmental Management, and *iv*) Global Industrial Restructuring: Implications for SMEs. For the first time, a special chapter is included on a transition economy: Romania, for this edition. The most recent SME data and key indicators for SMEs are included in the statistical annex.

This 2002 edition of the OECD SME *Policy Outlook*, the second in a biennial series, was co-ordinated and prepared by Marian Murphy under the direction of Paul Atkinson and Marie-Florence Estimé. Contributions to Chapter 2 were made by staff of the OECD Science, Technology and Industry Directorate, as follows: Dirk Pilat (*Enterprise Demography: Examining Business Dynamism in OECD Countries*), Frank Lee (*Taxation, SMEs and Entrepreneurship*), Candice Stevens (*SMEs and Environmental Management*), Kentaro Sakai (*Global Industrial Restructuring: Implications for SMEs*). Ricardo Pinto (Investment, Finance and Enterprise Programme of the Directorate for Financial, Fiscal and Enterprise Affairs) contributed Chapter 4, *Special Focus on Transition Economies: Romania*, which is based on the joint OECD-EBRD policy review on "Entrepreneurship and Enterprise Development in Romania" (2002). The OECD Statistics Directorate collaborated in the provision of statistical material. The report is published on the responsibility of the Secretary-General of the OECD.

TABLE OF CONTENTS

<i>Chapter 1. Outlook for SME Performance and Policies</i>	7
<i>Chapter 2. Thematic Reviews</i>	31
Enterprise Demography:Examining Business Dynamism in OECD Countries	31
Taxation, SMEs and Entrepreneurship	42
SMEs and Environmental Management	54
Global Industrial Restructuring: Implications for SMEs	63
<i>Chapter 3. Country Profiles</i>	77
Australia	77
Austria	84
Belgium	90
Canada	92
Czech Republic	100
Denmark	105
Finland	109
France	114
Germany	122
Greece	126
Hungary	130
Ireland	133
Italy	139
Japan	143
Korea	147
Mexico	153
Netherlands	158
New Zealand	163
Norway	168
Poland	172
Portugal	177
Slovak Republic	181
Spain	186
Sweden	193
Switzerland	199
Turkey	203
United Kingdom	208
United States	217
European Commission	222
<i>Chapter 4. Special Focus on Transition Economies: Romania</i>	227
Appendix Tables	236
Statistical Annex	239

OUTLOOK FOR SME PERFORMANCE AND POLICIES

The role of SMEs in the economy

SMEs continue to represent a large share of the business sector economy

The role of SMEs in OECD economies continues to be crucial for strengthening economic performance, particularly in light of the recent slowdown in economic growth, the abrupt downturn in the technology sector and the shock to the business climate caused by the events of September 2001. The strength of OECD economies will depend on the dynamism of a business sector that can respond to opportunities as they emerge, and that restructure and adapt their activities as warranted by the markets. SMEs will continue to represent a large share of the business sector economy and will generate most of the business turnover, continuing to account for a large share of firm entries and a significant share of exits. Although the SME sector is characterised by considerable dynamism and entrepreneurial activity, it should be remembered that the vast majority of SMEs are small mature enterprises serving local markets and for the most part struggling to stay competitive. The challenge facing OECD governments is to provide a business environment that supports the competitiveness of this large heterogeneous business population and that promotes a vibrant entrepreneurial culture.

SMEs represent between 96% and 99% of the total number of enterprises in most OECD economies. Micro-enterprises (0 to 9 employees) account for between 70% and 90% while small firms (10 to 49 employees) constitute at least 95% of the total. Only 0.5% of enterprises in the manufacturing sector employ more than 500 in OECD countries, with a few notable exceptions. Not surprisingly then, SMEs are responsible for the vast majority of new businesses in recent years, *e.g.* in the United States, SMEs generated 90% of new businesses during the 1990s. The increase in new businesses in the Europe-19

Box 1.1. What are SMEs?

There is no single definition of an SME, and employee numbers need not be the sole defining criterion. However, SMEs are generally considered to be non-subsidary, independent firms which employ fewer than a given number of employees. This number varies across countries. The most frequent upper limit designating an SME is 250 employees, as in the European Union. However some countries set the limit at 200, while the United States considers SMEs to include firms with fewer than 500 employees. Small firms are mostly considered to be firms with fewer than 50 employees while micro-enterprises have at most ten, or in some cases, five employees. Financial assets are also used to define SMEs: in the EU, SMEs must have an annual turnover not exceeding EUR 40 million and/or a balance sheet valuation not exceeding EUR 27 million. For the purposes of this report and for reasons of comparability and data availability, figures and tables, including those in the Statistical Annex for two main variables, output and employment are presented using two size classification systems: fewer than 9, 10-49, 50-99, 100-499, 500+ and fewer than 9, 10-49, 50-249, 250+.

countries¹ (15 EU member states plus Iceland, Liechtenstein, Norway and Switzerland) amounted to at least 2.5 million new enterprises or 11% of the total stock of enterprises during the same decade (European Commission, 2001).

SMEs account for a significant share of economic output in OECD countries. In the United States, they account for nearly 40% of total economic activity and 52% of private non-farm GDP. Approximately one-sixth of manufacturing output is accounted for by small firms in OECD countries and an even higher share in countries such as Portugal, Italy, Spain, Belgium, Norway and Japan. In some countries, the SME sector is expected to play a growing role. In Korea, for example, the upward trend of the 1990s is expected to continue; during that time, the SME share in manufacturing output progressed by almost two percentage points. Likewise, Japan looks to the SME sector to reinvigorate the national economy.

SMEs make an important contribution to overall employment, accounting for 60-70% of the manufacturing total in most OECD countries (Figures 1.1a and 1.1b) and small firms provide the vast majority of jobs in the services sector. SMEs are also an important source of new employment. The rates of gross job creation and gross job losses are significantly higher among small firms than among large ones, and there is a clear negative relationship between net job creation rates and size of firms (Schreyer, 1996). During the 1990s, small firms were responsible for up to three-quarters of employment growth in the United States, and businesses with fewer than 20 employees are now generating up to one-half of net new jobs there. In Korea, national statistics indicate that SMEs increased their share of manufacturing employment from 63.5% in 1991 to 74% in 2000. In the Europe-19 countries, although the total number of jobs in the non-primary private sector declined during the 1990s, employment growth was strongest in small, especially micro-enterprises, and employment started to recover well before it recovered for other size classes. In Australia, the share of small business in total employment has been rising since the early 1980s, with average annual growth of 3.1% during that period, compared with 2.5% for large businesses, and small businesses were responsible for over half of all new jobs created during that time. Recent research confirms the significant contribution of a group of small high-growth firms to job creation and innovation (OECD, 2002a).

The role of women entrepreneurs and women-owned businesses

Women constitute a significant share of the self-employed in some OECD countries – between one-quarter and one-third (Figure 1.2). Portugal, Canada, the United States and Poland have the highest share of self-employed women; Turkey, Ireland and Denmark trail. Low female participation rates in the past influence the indicator level for some countries. Female entrepreneurship is very dynamic in some countries. For example, women-owned businesses grew by 90% during the 1990s in the United States, twice as fast as other businesses, and their numbers are expected to increase over the next decade.² However, women entrepreneurs play a much less significant role in other countries. Most businesses owned by women are small and relatively young service-providing firms; in Korea, 96% of such businesses are in the smallest size class (1-4 employees). At a recent OECD conference,³ there was broad consensus on the key role played by culture in fostering or inhibiting women's entrepreneurship; education, training and role models, along with financing, are all crucial factors.

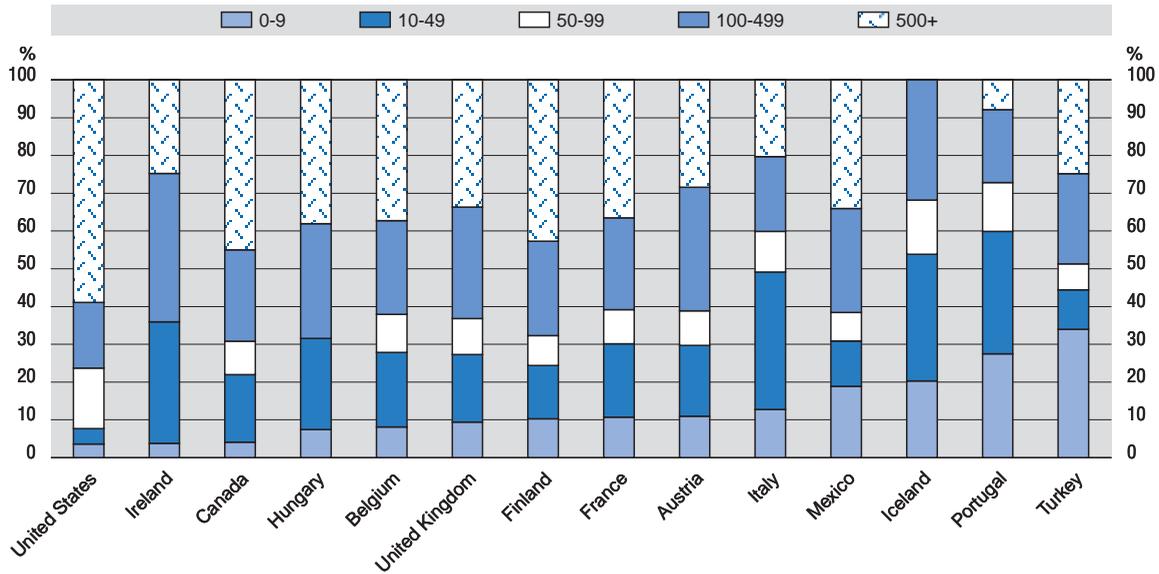
According to a Global Entrepreneurship Monitor survey of 21 countries (Reynolds *et al.*, 2000), the female-to-male start-up ratio was much higher in countries with the highest prevalence of nascent entrepreneurs. In addition, it appears that countries experiencing higher levels of economic growth, such as the United States, Australia, Canada, Korea, Spain and Norway, also have some of the highest levels of women's entrepreneurship. However, no direct link has been established between these two

1. The Observatory of European SMEs, founded in 1992 by the European Commission in order to improve the monitoring of the economic performance of SMEs in Europe, covers 19 countries (18 countries of the European Economic Area and Switzerland).

2. See Office of Advocacy (2000), "The Third Millennium: Small Business and Entrepreneurship in the 21st Century", US Small Business Administration, Washington, DC.

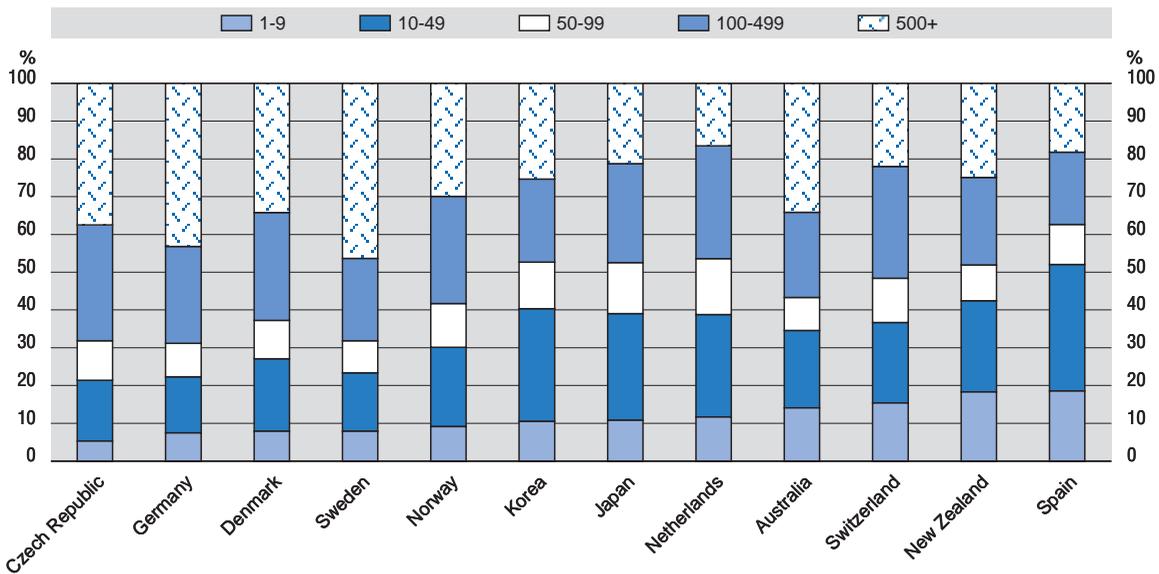
3. Second OECD Conference on Women Entrepreneurs in SMEs: Realising the Benefits of Globalisation and the Knowledge-Based Economy, held in Paris in November 2000.

Figure 1.1a. **Distribution of employment in the manufacturing sector, by size class**
1999 or nearest year



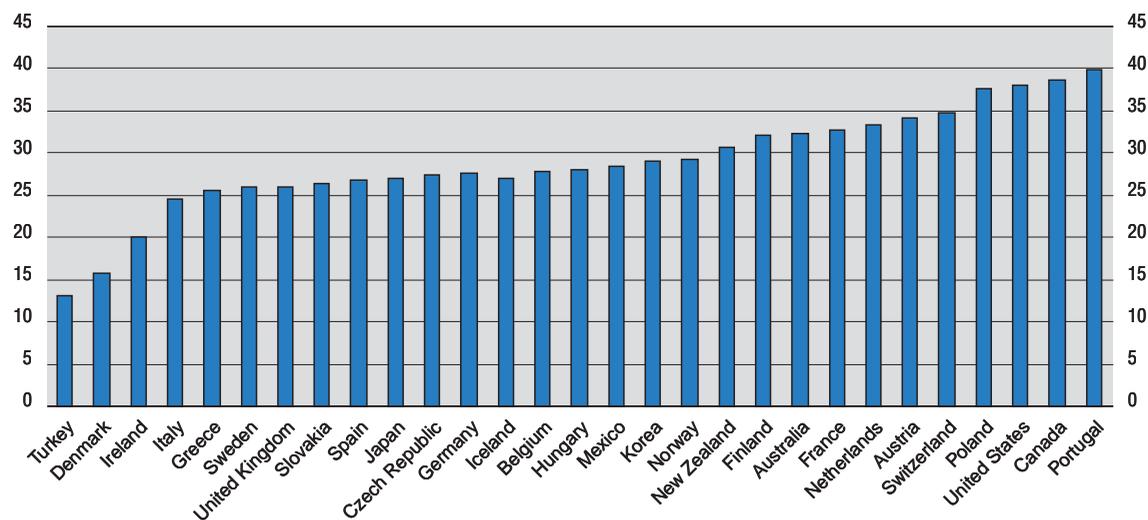
Note: For details on size classes, see Box A1 in Statistical Annex.
Source: OECD, SEC (Statistical Database on Enterprises, by size class); Eurostat (New Cronos).

Figure 1.1b. **Distribution of employment in the manufacturing sector, by size class**
1999 or nearest year



Note: For details on size classes, see Box A1 in Statistical Annex.
Source: OECD, SEC (Statistical Database on Enterprises, by size class); Eurostat (New Cronos).

Figure 1.2. **Share of women in total self-employed, 2001**
Percentages



Source: OECD (2002), *Annual Labour Force Statistics*.

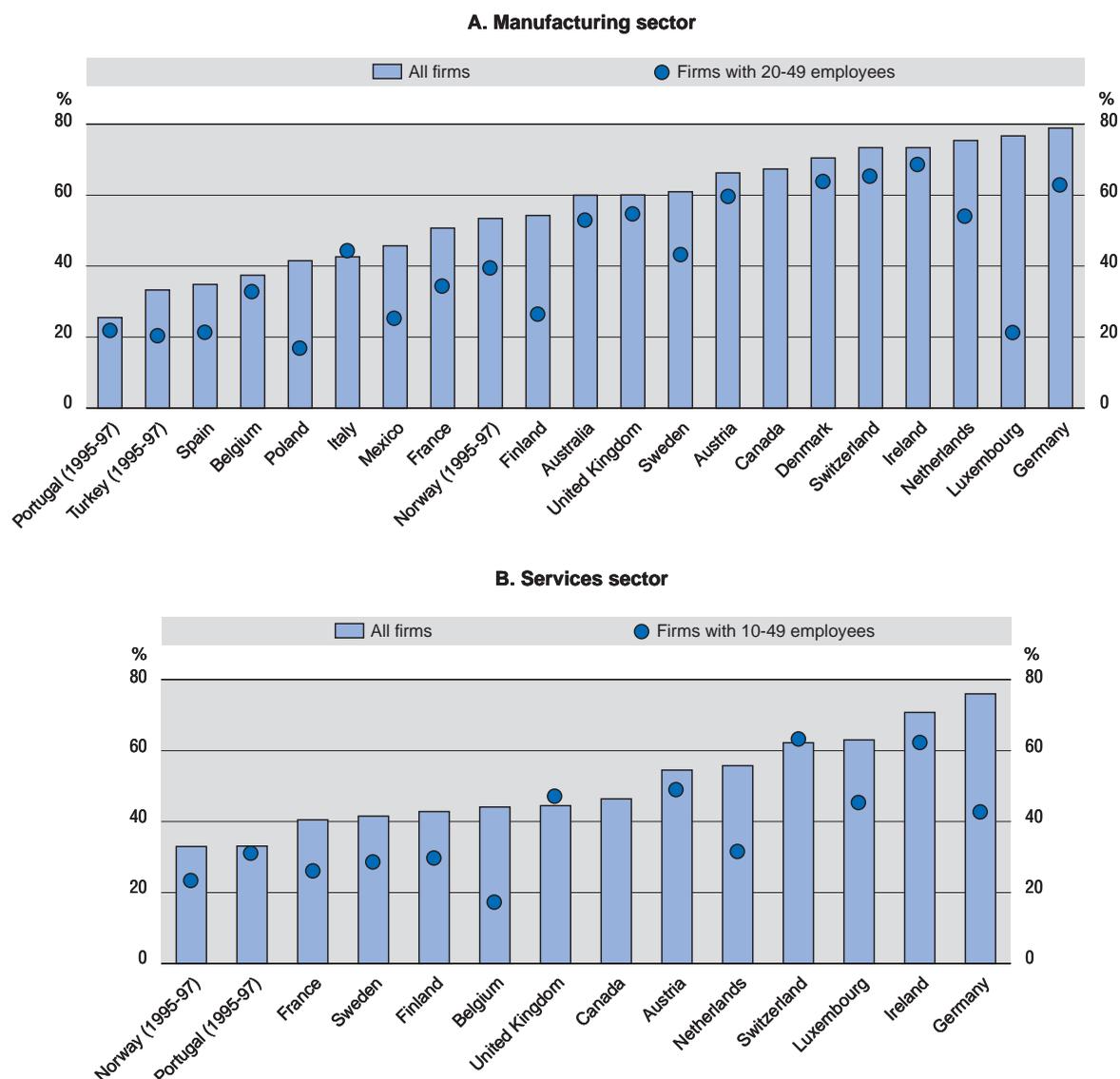
phenomena, and more research is needed to determine whether there is a causal relationship, and if so, its direction. Yet, the broad pattern of women's low representation holds across all countries surveyed. Work by the Kauffman Center found that while women-owned businesses grow more slowly than those owned by men, they tend to stay in business longer and have better debt repayment rates (OECD, 2001a).

SMEs are an important source of innovation

SMEs are an important source of innovation, and some 30-60% of SMEs in the OECD manufacturing sector can be characterised as innovative, according to recent innovation surveys (Figure 1.3). SMEs (fewer than 500 employees) generate as much as one-half of all innovations in the United States and a 1997 National Science Foundation study shows the contribution of small business to innovation to be growing. In general in manufacturing, there are more innovators in large firms than in small firms, although in Italy, Portugal and Belgium, small manufacturing firms are almost as innovative as large firms. In the services sector, small firms appear to be almost as innovative as large ones in the United Kingdom, Switzerland and Portugal. Smaller firms tend to be incremental innovators, engaging in informal R&D efforts and innovating in areas relating to the commercialisation of existing technologies, the creation and re-engineering of products or services and the introduction of flexible work practices. Small innovative firms have the agility required to respond to rapid technological change and customer needs. However, they may have problems in obtaining the resources necessary to respond to rapid changes; some seem to be solving this problem by joining co-operative networks to improve their innovation capability. The sale of intellectual property rights to partners in alliances is providing some small firms with funding for innovation and research activities. Technological advances made by small firms are serving as a spur to large firms to innovate in order to maintain their technological edge. Nonetheless, many SMEs face persistent problems for innovating and for adopting new technologies, among which financing and skilled labour constraints figure prominently.

While small firms play quite an important role in a country's innovative performance, they spend less on R&D than large firms. In the OECD area, business R&D expenditure varies by size class and across countries (Figure 1.4). While firms with fewer than 500 employees may account for more than half

Figure 1.3. Share of firms introducing new or technologically improved products or processes on the market, 1994-96



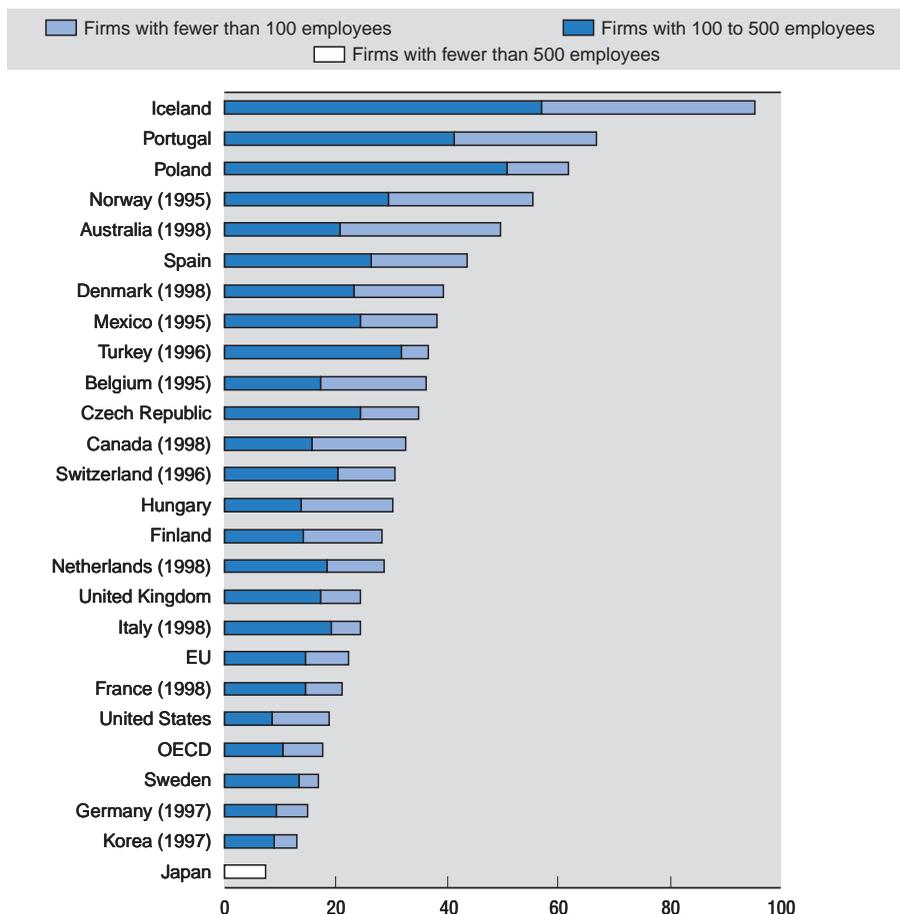
Source: Eurostat and OECD, 2001.

of business R&D expenditure in Norway, Poland, and Portugal, the corresponding share for the United States and the European Union is about 20%. In Japan, the share of such firms amounts to just 7% of total business R&D.

SMEs can be an important source of flexibility in OECD economies, but they frequently lack resources to undertake organisational change

The SME sector can provide a large share of the flexibility increasingly required in OECD economies. Dynamic rates of business turnover facilitate the fundamental restructuring required to shift

Figure 1.4. **Funding of business R&D by size classes of firms**
 1999 data unless otherwise specified



Source: OECD (2001e).

resources towards growing areas and away from declining areas, and to adjust the structure of production to meet market needs. At firm level, many smaller enterprises are inherently more flexible than larger firms, as they are less likely to be “locked in” to existing plant, technologies or organisational structures. However, small firms lack the resources to invest in organisational change when these are warranted by market developments, although studies show that changes in management structure and work organisation can procure higher marginal benefits for SMEs than for larger firms (Murphy, 2002). Bryson (1999) found that for the United Kingdom, the adoption of certain work practices involving even limited worker participation and consultation is particularly beneficial to small firms. Canada’s Pilot Workplace and Employee Survey found that roughly half of the surveyed enterprises had made no organisational changes in the previous three years, and most of these were small firms (Statistics Canada, 1998). When they do invest in organisational change, small firms tend not to implement the same types of changes as large firms; in particular, they invest less in employee training. Large firms have the resources to develop customised educational and employee training tools and, in some cases, even set up corporate universities. Many SMEs needing to re-organise or re-engineer their operations are severely constrained by such information and resource gaps.

In a global marketplace, SMEs are progressively internationalising

In a global marketplace, internationalisation is vital for SMEs. Although most SMEs continue to focus on local markets, a significant share are becoming internationalised and need to design products and services for international markets. Approximately one-third of all European SMEs reported an increasing number of international business contacts over the last five years, with 30% of micro-enterprises and 50% of medium-sized enterprises concerned (European Commission, 2001). SMEs account for between a quarter and two-fifths of worldwide manufactured exports. Approximately one-fifth of European SMEs, depending on firm size, draw between 24% and 32% of turnover from cross-border activities (European Commission, 2002). In the United States between 1992 and 1997, the number of exporting SMEs (firms with fewer than 500 employees) grew by 107% and in 1999 SMEs generated one-third of US exports. In that year, SMEs represented nearly 97% of all exporting firms in the United States and two-thirds of exporting firms had fewer than 20 employees (Small Business Administration, 2000). In Korea, SMEs account for roughly 40% of manufacturing exports and the SME share of investment in foreign countries jumped from 8% of the total for manufacturing in 1998 to 65% in 2000. In Europe, 20% of SMEs (fewer than 250 employees) are engaged in exports; the share increases with class size: micro firms (19%), small firms (32%); and medium-sized firms (46%).

SMEs are increasingly faced with the opportunities and challenges presented by global industrial restructuring. Market liberalisation and deregulation, which contributed to the global restructuring trend, is exposing many SMEs to fierce international competition and imposes substantial adjustment costs on them. The perceived increase in competition from foreign firms is also related to firm size; nearly half of European medium-sized firms are experiencing more competition compared with one-fifth of micro firms (European Commission, 2001). In addition, the growing complexity of technology and the high cost of R&D are driving small firms to seek global linkages and alliances. Such arrangements include partnerships in international strategic alliances; participation (whether actively or as targets) in cross-border mergers and acquisitions; acting as specialised suppliers to multinational enterprises; involvement in globalised informal and/or electronic networks. Many SMEs are unprepared for participating in these kinds of business linkages and need assistance for accessing strategic information (including legal and linguistic assistance) and technology, especially information and communication technologies (ICT); many SMEs also lack adequate management skills and highly skilled employees in order to meet the challenges of a global market.

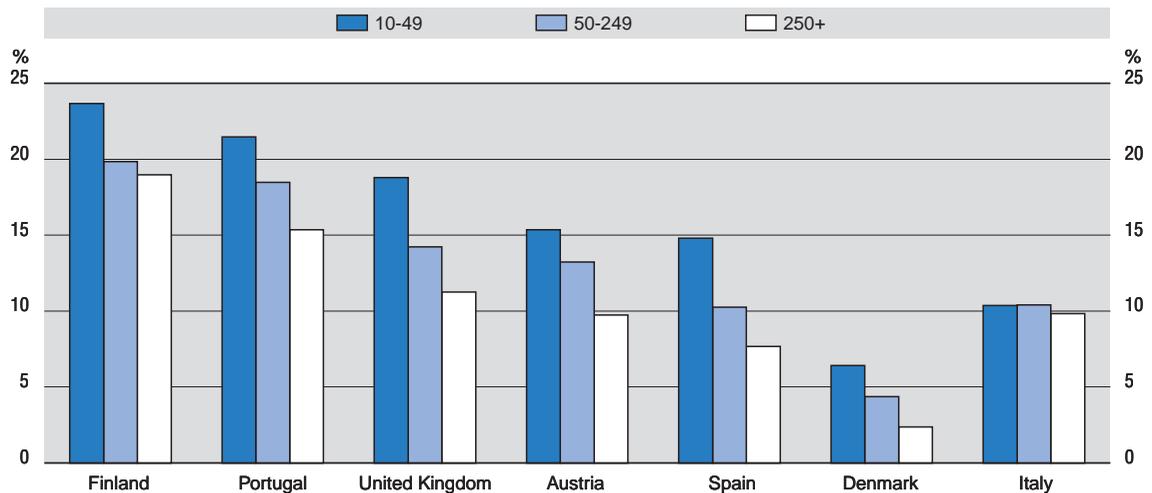
Although they invest significantly in ICT, SMEs are slow to engage in online transactions

Recent studies have found that ICT adoption holds out the prospect of improvements in overall firm performance for both small and large firms. One major benefit is improved business processes through better information sharing among managers and employees and a potential increase in labour productivity. Electronic commerce, whether business-to-business or business-to-consumer, opens up a range of potential benefits and opportunities for firms, including reduced communication costs, easier market entry, inexpensive distribution of digital services and products, and the conduct of business without time or geographical constraints.

While many small firms have computers and Internet access and some have Web sites, they are generally less actively engaged in on-line transactions, particularly sales, than larger firms.

It appears that most small firms, especially the smallest, will not adopt Internet e-commerce strategies unless they are convinced that the benefits outweigh the investment required. It also appears that a significant share of SME managers lack the necessary competence themselves or do not have the personnel with the appropriate ICT skills to use the Internet, as Figure 1.5 illustrates for a number of European countries. However, the reverse appears to be true in Canada, where Internet penetration is relatively high; a 1999 study found that small Canadian businesses that are not on line do not see significant barriers to going on line; if they do not use the Internet it is principally because they are not aware of the benefits of e-commerce. Costs for engaging in e-commerce are likely to be disproportionately high for small firms, which sell relatively small consignments at one time. A major

Figure 1.5. **Percentage share of businesses lacking qualified personnel or know-how to use the Internet, by firm size, 2000**



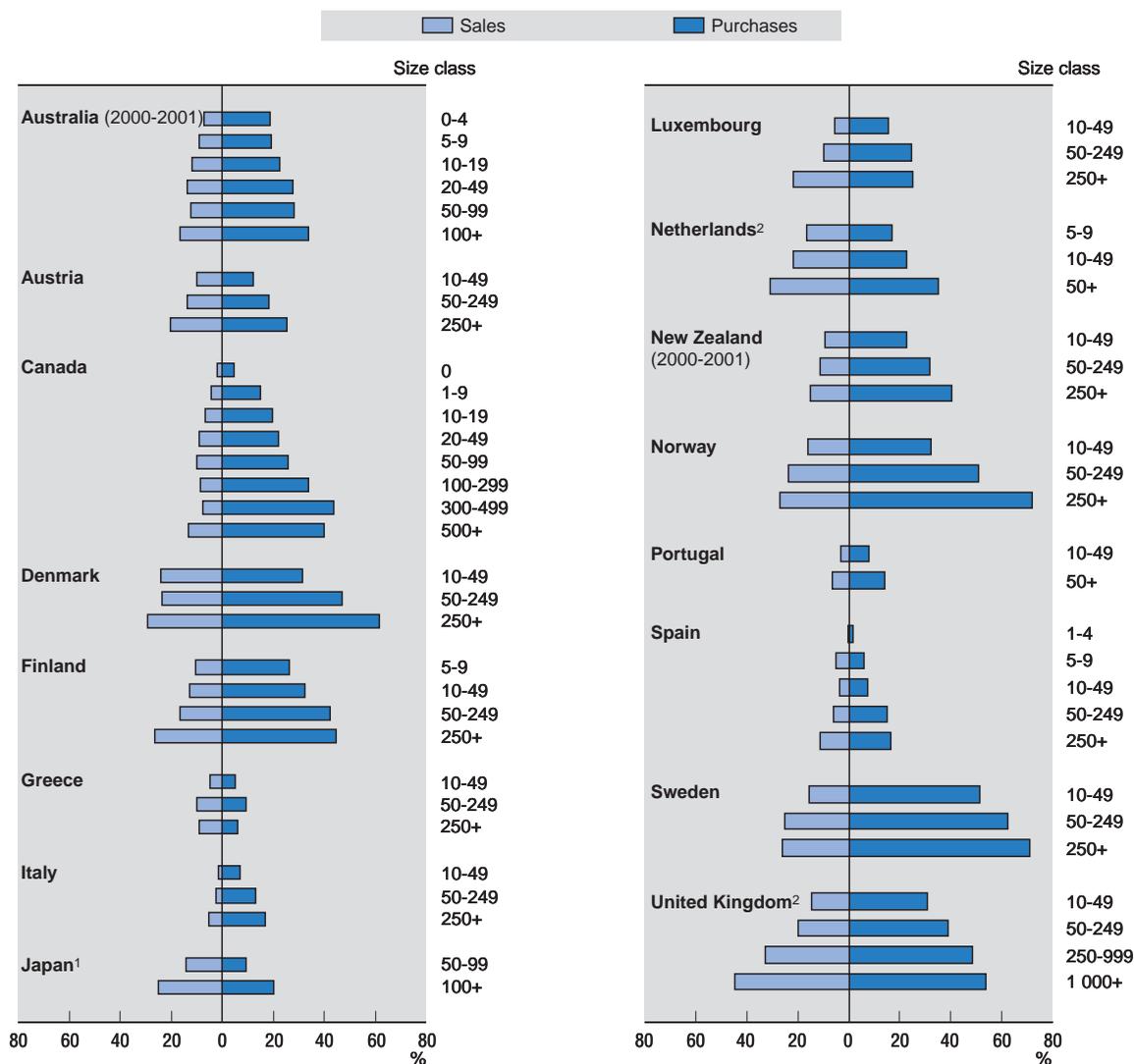
Source: Eurostat E-commerce Pilot Survey, 2001.

challenge is how to reconcile digital transactions and physical delivery of products in sparsely populated regions. As well as security concerns, SMEs also stress the need to make progress on mechanisms for dispute resolution.

Nevertheless, there is evidence that small firms are gradually becoming more aware of the potential benefits of ICT for their business operations. Data sources indicate that in the United States, SME business spending on ICT continues to grow and a survey of 7 600 SMEs (fewer than 250 employees) in 19 European countries found that more than half had already introduced either a stand-alone or networked computer, or both, although 21% of micro-enterprises were still operating without a computer (European Commission, 2002). It is estimated that in 2000 some 80-90% of all businesses with ten or more employees had access to the Internet in OECD countries. However, while nearly all small businesses may have computers, only 40% use them for electronic commerce purposes, according to a US study based on 1999 data (Katz, 2001). The share of businesses with a Web home page is increasing rapidly in some countries, especially in Sweden and the United Kingdom. In 2000, one-quarter of small businesses in the United States expressed their intention to invest in developing a Web site or Internet marketing during the course of that year (Dun and Bradstreet, 2001). However, ICT adoption varies significantly by sector, and many small firms in some traditional sectors are still adopting ICT relatively slowly, in contrast to enterprises in business services activities which continue to lead in ICT adoption.

In general, Internet access is highest in larger enterprises, and differences in Internet access in countries for which information is available are greater for smaller enterprises (OECD, 2002b). The case is sometimes made that increased use of computers and the Internet by SMEs merely reflects faster catch-up by the relatively larger SMEs. Whatever the validity of this claim, it is clear that the volume of SME sales and purchase activity over the Internet remains quite small even in advanced OECD countries, and on-line purchases are more common than on-line sales, matching the overall e-commerce development trend (Figure 1.6). Of those businesses in the United States that have Web sites, 17% of them attributed more than 10% of total firm sales to their Web site. Generally, the most common function of the Internet is the diffusion of product and service information. In the United States, for example, most small businesses restrict their use of the Internet to obtaining general information and electronic mail. In Finland, firms use the Internet primarily for their supply chain and in

Figure 1.6. **Internet and electronic purchases and sales, 2000**
Percentage of businesses in each size class



1. All businesses with 50 or more employees.
2. Orders received or placed over the Internet and other computer-mediated networks.
Source: OECD, ICT database and Eurostat (2002).

banking, with 82% of Finnish enterprises with Internet access using it for e-banking. There are encouraging signs for future electronic transactions, as one-quarter of US small businesses use the Internet to seek new customers and to sell on line, 44% have already made business purchases on line and 60% expect to increase their use of Internet. “Inadvertent internationalisation” via the Internet is also occurring, as some small local firms, are being unexpectedly contacted by new international customers, who have discovered their activities through their Web site.

Country data on ICT and e-commerce adoption by SMEs are still quite scarce. Available data for some advanced OECD countries show an increase in use of computers and the Internet by SMEs, but they tend to reflect faster catch-up by medium-sized enterprises and do not necessarily capture well

the reality of micro firms, family businesses and the self-employed. For example, according to the OECD's broad definition of electronic transactions,⁴ in the US manufacturing sector, e-commerce shipments/ordering on line accounted for 18.4% (USD 777 billion) of the total value of manufacturing shipments in 2000 (US Department of Commerce, 2002). However, most of the e-commerce was conducted through EDI (electronic data interchange) over closed value-added network systems between firms. Transactions over the Internet represented only 5%. The data suggest that a major part of electronic transactions is dominated by established networks among medium-sized and large firms in which few small suppliers or micro firms participate and that the volume of electronic transactions over the Internet is very small even in countries where e-commerce is considered to be fast growing.

SMEs and environmental management

SMEs need to integrate social and environmental concerns into their ongoing business operations and interactions with various stakeholders – shareholders, employees, customers, suppliers and the wider community. Environmentally responsible behaviour is a major strand of corporate social responsibility, which may incur costs but also procures considerable benefits. Among the benefits a firm may derive from environmentally responsible behaviour are improved image and reputation, increased sales and loyalty on the part of customers and potentially positive effects on supplier networks and employee retention (European Commission, 2002).

From the data available it is not possible to gauge the environmental impacts of SMEs or to make cross-country comparisons. One study has grouped SMEs into the following four broad categories, according to their levels of environmental awareness and environmental management capacity: *i*) environmentally high-profile; *ii*) environmentally aware; *iii*) environmentally capable; and *iv*) environmentally constrained (see Chapter 2). Although some small firms are environmental innovators, building on market niches in environment-related products and services, most SMEs are believed to have little environmental awareness.

In view of their numbers and their share in the enterprise population, SMEs are found in pollution- and resource-intensive sectors as well as in relatively environmentally benign sectors. Awareness, resources and attitudes, recent research concludes, constitute the main reasons why SMEs may not consider the environment to be an important business issue. Generally, SMEs are more difficult to reach than large firms and more difficult to engage in environmental improvement. In many instances, small firms will need technical and financial assistance, as they generally lack environmental staff and the financial resources to undertake environmental improvement projects. SMEs also need, and are frequently accorded, some flexibility to achieve a level of compliance with environmental regulations.

The limited evidence emerging from a 2001 survey of European SMEs (European Commission, 2002) seems to show that European SMEs are relatively little engaged in environmentally responsible activities directly related to their own operations. It also appears that a positive relationship exists between enterprise size and the availability of a formal environmental management system or an *ad hoc* environmental policy. Most SMEs are considered to be “vulnerably compliant” as far as existing legislation and regulations are concerned, as they do not know enough about environmental legislation or regulations to ensure that they are always compliant; finally, ethical considerations do not seem to be a driving force behind environmentally responsible activities by SMEs.

Government policies and programmes for SMEs

OECD governments need to provide a conducive business environment for their business communities, and acknowledgement of the role that SMEs and entrepreneurship play in achieving economic and societal goals should be reflected in government policies. Appropriate competition

4. OECD member countries have agreed on two definitions of electronic commerce transactions (although several issues remain open and are still under discussion). The broad definition of an e-commerce transaction includes electronic transactions conducted over computer-mediated networks; the narrow definition applies to transactions conducted over the Internet.

policies, open capital markets, flexible labour markets, a competitive taxation regime, an educational system which promotes entrepreneurship and a culture supportive of entrepreneurial behaviour comprise the main framework conditions that will underpin a vibrant SME sector. For example, competition policy can play an important role in entrepreneurship and innovation, as competitive markets allow new business entrants to compete with the market's leading firms and ensure that larger firms do not misuse their market power. Promoting a regulatory environment conducive to the creation and development of smaller firms is a major policy priority for OECD governments, and much remains to be done to alleviate the regulatory burden on small businesses, in particular by improving the quality, transparency and enforcement of regulations. Policy makers in a number of OECD countries are taking action to promote a more flexible labour market and to reduce compliance burdens on firms by reforming unfair dismissal laws and restrictive regulations that affect the hiring and laying off of workers. Many governments acknowledge that high non-wage costs in the form of employers' contributions tend to thwart job creation. The fiscal framework for SMEs is improving as many OECD governments, motivated by efficiency and equity objectives, apply lower tax rates to small businesses and implement schemes to simplify the tax regime. Tax policy is recognised to be an effective policy instrument to influence entrepreneurial behaviour, and important tax measures, directed at enterprise creation and SMEs, have recently been introduced in many OECD countries.

In June 2000, the first international conference on SMEs at Ministerial level was held in Bologna, Italy, organised jointly by the OECD and the Italian government. It resulted in the adoption of the Bologna Charter on SME policies by the governments of almost 50 OECD member and non-member economies. The Bologna Charter implies willingness on the part of governments to redesign SME policies in the context of a coherent and integrated approach to economic growth and social development both in OECD countries and the rest of the world. It also provides a frame of reference for countries concerned that more might be done to improve the efficiency of policies and programmes directed at fostering entrepreneurship and assisting the development and competitiveness of smaller firms at local, national and international levels. This process, to which so many governments have subscribed, has come to be known as the "Bologna Process".

If OECD governments have seen the need to subscribe to the Bologna Process, this is not unconnected to the fact that most governments have developed and implemented a large array of targeted SME policies and programmes to assist businesses to start up, grow and prosper. These targeted SME programmes address specific needs of firms in a number of key areas important for SME competitiveness and growth, including financing, technology and innovation, management and internationalisation. The shift away from direct financing measures continues and many SME programmes consist of qualitative support – information diffusion, management enhancement programmes, educational and training programmes. In view of the growing evidence of their positive effects, collaborative and partnership approaches, networks and clusters are actively promoted by OECD governments to help alleviate the disadvantages of small firms with respect to resources and location.

Policies to promote entrepreneurship reflect the diversity of factors influencing its development

The creation of new businesses and the demise of unproductive firms are key to business dynamism in OECD economies. Policy measures to promote entrepreneurship tend to be multifaceted, reflecting the multidimensional nature of entrepreneurship and the variety of factors influencing its development. The underlying national culture is also a significant factor in the development of entrepreneurship. Together with the overall economic context and framework policies, a number of factors determine the vigour of entrepreneurship. The range of policy measures devised by OECD governments to support entrepreneurship includes regulatory reform, educational programmes, ease of access to financing, technology, and markets, as well as actions to foster a culture which does not stigmatise failure.

Enterprise entry and exit rates are highly correlated, so countries with high entry rates tend also to have high exit rates. Studies show that the survival rates of firms for the first year or two vary across countries, but then tend to converge. First-year survival rates are highest in the United States, where less than 10% of new firms close in their first year. In other countries with comparable data (Finland, the

United Kingdom, Germany, France, Italy and Portugal), about 20% of new firms close in their first year. Thus the performance of countries in fostering firm creation and entrepreneurship is very important for their overall growth. Microeconomic studies based on data from the United Kingdom and Finland, for example, show that entry and exit of new firms explain between one-third and one-half of growth in multifactor productivity in the 1990s in these two countries, largely owing to the exit of less productive firms and the entry of more highly productive ones.

In order to support entrepreneurship, some countries have engaged in major institutional reform. Sweden, for example, formed new public institutions and established a national competence centre for enterprise development. To reduce barriers to entry, legislative changes amending (and eventually repealing) the Establishment of Business Act were announced by the Dutch government, and amendments to their Bankruptcy Act are under way. Spain's New Enterprise project goes a step further than the one-stop shop for enterprises by creating a legal status appropriate to small enterprises, so that such firms are placed in a simple corporate legal framework which makes extensive use of ICT. Furthermore, Spain plans a simplified accounting system and a financial and fiscal framework that would alleviate the difficulties faced by SMEs. The United Kingdom's "Think Small First" campaign, run by the Small Business Service, has been given the possibility to recommend reforms of practices of a number of ministries.

An entrepreneurial culture may be encouraged by promoting entrepreneurial behaviour throughout the educational system, starting ideally at the primary level. Finland aims to develop broader "entrepreneurship attitudes" involving flexibility, creativity, capacity for risk taking and capacity for taking initiative. In 2004 Finland's Entrepreneurship Project will provide a new curriculum that requires primary schools to incorporate entrepreneurship in their programmes. Austria, Germany and Norway are among the countries that have introduced entrepreneurship programmes in primary schools. In Norway, educational methods, starting with six-year-olds, lead pupils to experience, investigate and conduct innovative research. In Austria, secondary school pupils are encouraged to set up a JUNIOR business in their schools, develop a business plan and produce and sell products and services for the local market. In Germany, the JUNIOR school project establishes mini-companies operating under market conditions.

At the tertiary level, various policy actions, such as the creation of university chairs for enterprise studies (Austria, Germany, Ireland) and the promotion of the entrepreneurial capability of graduates, are undertaken in a growing number of countries. Australia's Promoting Young Entrepreneurs programme and Italy's IG Students and Startech programmes are examples. The "virtual firm" is a compulsory element of learning in all Austrian business schools. Frequently, the financial burden associated with such measures is shared with banks and other business-sector partners. Business simulation programmes tested successfully with adults and youth in the Basque country and in Madrid will soon be extended throughout Spain. In the United States, studies show that, compared to other business school alumni, graduates who are taught entrepreneurship are three times more likely to start new businesses (Charney and Libecap, 2000).

Entrepreneurship campaigns are favoured by some countries and can involve competitions and the award of prizes. Experience shows that to be effective, these campaigns should be visible, empowered and regionally based. Many entrepreneurship policies have a regional focus, and many regional development agencies provide business development tools to potential entrepreneurs. On-line information and self-assessment services, skills acquisition, training, market access services and funding feature prominently among the support services provided. Most OECD governments have such regional programmes; Canadian examples are the Atlantic Canada Opportunities Agency and Canada Economic Development for Quebec Regions.

Correcting for women's under-representation among entrepreneurs and fostering women-owned businesses

Women are broadly under-represented among entrepreneurs in OECD countries. Culture is considered to be a key factor and women face a number of important barriers, including difficulty in accessing financing. Encouraging female entrepreneurship is the objective of programmes

implemented by the European Commission and by many OECD countries, including Australia, Finland, Ireland, Norway, Sweden, Turkey, and the United States.

For example, the Swedish Business Development Agency, NUTEK, promotes women entrepreneurship and Sweden's ALMI programme has a special loan scheme for women-owned enterprises. A specific focus of Australia's Small Business Enterprise Culture Programme is developing business skills of women who manage small businesses; another Australian programme, Women in Small Businesses, launched at the end of 2000, offers two certificate qualifications in small business and a suite of learning resources. It has been noted in Germany that a disproportionate share of women entrepreneurs have been availing themselves of non-targeted loan programmes.

The 2nd Conference on Women Entrepreneurs in SMEs, organised in 2000 by the OECD and hosted by the French Ministry of the Economy, Finance and Industry, emphasised the observed increase in recent years in the demand for enterprise statistics broken down by gender. However, it was stressed that merely obtaining data was not sufficient; the data should also be diffused and marketed so as to draw the attention of the relevant actors to the valuable role of women-owned businesses in the economy and in society, and thus contribute to eliminating some of the obstacles still facing women entrepreneurs.

SMEs continue to experience considerable difficulty in gaining access to financing

Despite efforts by financial institutions and by the public sector to close financing gaps in the market, SMEs continue to experience considerable difficulty in obtaining risk capital. Access to financing for SMEs therefore remains a policy priority for governments. Canadian research has found that the marketplace gaps that government financing programmes attempt to fill are as relevant today as when the first programmes were introduced. These financing gaps may be related to firm size, risk, knowledge or flexibility. Therefore, the rationale for continuing government financing programmes is as follows: SME borrowing requirements are usually small and frequently do not appeal to financial institutions; more collateral may be required than SMEs can pledge; financial institutions may lack expertise in understanding knowledge-based businesses; and the flexibility in terms and conditions that many SMEs require may not be available. Governments usually complement private financial institutions and government policies are geared mainly to easing access to existing sources of financing, although for some time now strong emphasis has been placed on newer sources of financing, such as venture capital and business angels.

Recognising the role that information plays in the business environment, many government Web sites, such as Canada's Sources of Financing, offer on-line information to small businesses. The Dutch SME account (MKB*Balans*) was developed by the Dutch government in co-operation with an accounting organisation to reduce information asymmetry between financiers and entrepreneurs and to provide information for policy makers.

SMEs experience considerable difficulty in obtaining financing during the start-up stage, and in many cases they need to look to alternative financing sources, such as credit unions, leasing companies, personal and family relations. Those that do borrow on financial markets, typically do so with commercial banks. In the United States, these account for 54% of total traditional small firm credit. Traditional government schemes complement private financial institutions by supporting reduced and more flexible loan terms and by offering loan guarantees. Korea's SME Promotion Fund and Finland's FINNVERA are both active in providing loans to start-ups and SMEs.

Seed capital funds have been developed in many countries to provide projects involving high risk with capital and competence at an early stage. Austria's Seed Financing programme supports young high-technology businesses, offering management assistance as appropriate. Hungary recently raised the amount of micro-credit that the Hungarian Foundation for Enterprise Promotion (HFEP) can award. Spain's ENISA agency provides a participatory loan (halfway between venture capital and a traditional loan, and which is a subordinate and long-term loan), with an interest rate (having both lower and upper bounds) that is indexed to the business's future profitability.

However, many government programmes have not been meeting the financing needs of high-risk, frequently knowledge-based and technology-based businesses, whose financing needs are being increasingly met by newer instruments like venture capital and business angel networks, and this has prompted policy makers to champion the development of these instruments.

Governments can affect the supply of venture capital in several ways, including through the rules that govern who may make venture capital investments. The United States and Finland are among the countries that have enhanced opportunities for venture investment by pension funds. Several OECD countries are considering liberalising the rules for venture investments. From ongoing work at the OECD it is emerging that effective venture capital policies include encouraging a diversity of venture investors, evaluating the effects of tax incentives, directing venture capital to seed firms in growth sectors and evaluating and phasing out government equity schemes as private markets mature.

Much of the venture capital raised in OECD countries goes to small business. The provision of venture capital in the United States rose from USD 20 billion in 1998 to USD 100 billion in 2000 before dropping to USD 38 billion during the slowdown in 2001. The US Small Business Association (SBA) licenses private companies – known as small business investment companies – to provide venture capital to small businesses and take investment positions in small business. In 2001, 4 000 business investments totalling USD 4.4 billion were made. Other OECD government programmes which provide access to venture capital for SMEs include: Australia's Innovation Investment Fund, Germany's Venture Capital for Small Technology Companies programme and the United Kingdom's Regional Venture Capital Funds. In the case of Canada and the United Kingdom, the cost to government of such schemes is minimal. In the former, all venture capital programmes offered through the Business Development Bank of Canada (BDC) operate on a commercial basis, and in the latter, small-scale equity is provided on a strictly commercial basis to SME businesses displaying growth potential. In Finland, extensive public efforts have now been followed by large private venture investments, mainly by pension funds, although government capital amounted to one-fifth of new funds raised in 2000.

Business angel networks are promoted by OECD governments in the hope that they will become a mainstream source of finance. A number of governments provide tax relief in support of these networks: Korea allows specified tax deductions for one year and certain capital gains tax exemptions for business angels; the UK government provides tax relief to investors in small companies through the Enterprise Investment Scheme and Venture Capital Trust; likewise, Enterprise Ireland's Business Expansion Scheme provides income tax relief for private investors investing long-term in companies, especially new and small firms. The German government supports the strengthening of the business angels market, through the Business Angel Network Germany programme and SwedBAN, the Swedish Business Angel Network, launched in 2001, is organised as a co-operative economic association with a board of directors, the majority of whom are business angels. The Angel Road Shows sponsored by the Netherlands government involves the organisation of regional meetings of innovative entrepreneurs and informal investors.

Secondary stock markets are valuable for raising capital for small firms and offer a convenient exit mechanism. Listing requirements and fees are generally much lower than on main markets. In the United States, the market value requirement is USD 5 million on NASDAQ's smallcap market compared to USD 60 million on the New York Stock Exchange, and listing fees are 50% lower. Several governments, most recently, in New Zealand, have supported the establishment of a secondary market.

Support schemes to assist financing of start-ups by targeted groups exist in many countries. The United Kingdom's Phoenix Fund targets potential entrepreneurs living in deprived areas and Sweden's Support for Entrepreneurial Start-up encourages the unemployed to start a business by prolonging their unemployment benefits for six months while they do so. In Poland, start-ups in rural areas and by redundant coal miners and metalworkers are the beneficiaries of public support.

Late payments practices are a major issue for SMEs and can be fatal for small businesses. A number of government schemes address these and other credit management difficulties frequently encountered by small firms. The UK government, through its Late Payment of Commercial Debts (Interest) Act 1998, provides small suppliers with a statutory right to claim interest on invoices that are paid late, and in addition, plans a Better Payment Practice Group (BPPG), a partnership with the private

sector to help small businesses tackle late payment. Late payments by the UK public sector are covered by this action and payment performance tables for central and local government will be published along with league tables showing average payment times of public limited companies and their large private subsidiaries.

How governments are improving SMEs' technology base and strengthening their innovation culture

To help bridge the innovation shortfall, governments have developed comprehensive programmes for improving SMEs' technology base and strengthening their innovation culture. In particular, SMEs face many challenges for financing innovation, acquiring and adopting new technologies and business models, and protecting intellectual property. Direct financing measures and tax incentives continue to play a significant role among public support measures for innovation. There is also a growing recognition among policy makers that collaborative efforts, such as partnerships, networks and clusters, can make a major contribution to innovation performance and that these arrangements can allow SMEs to combine their inherent flexibility with the advantages of scale and scope. Consequently, many policies currently implemented by OECD countries actively promote these kinds of joint efforts and partnerships.

OECD governments continue to operate a number of programmes and schemes, involving a wide range of support instruments to encourage R&D and technology undertakings by SMEs. Under the Small Business Innovation Research (SBIR) programme launched in 1999, Japan provides subsidies and other support for SME efforts to commercialise R&D. In 2000, Spain launched the Fostering of Technical Research Programme (PROFIT) to promote firms' technological absorption capacity. In the 2000-2001 fiscal year, New Zealand launched a programme to provide grants for private sector R&D. Australia's "Backing Australia's Ability", begun in 2001, comprises a number of support instruments: increased R&D tax concessions, tax rebates, extended funding for R&D START grants, research grants and the provision of infrastructure.

The aim of many programmes is the commercialisation of new technologies and products. During 1999-2000, Australia's COMET programme supported over 250 SMEs through grants and advisory services in order to commercialise emerging technologies. Likewise, Canada's Industrial Research Assistance Programme (IRAP) provides a range of support instruments to enhance SME innovation capacity and improve commercialisation outcomes. Portugal, through the Technological Development Mobilising Projects Incentive Scheme, supports research by consortia of firms to create new products, processes or systems that involve a large degree of technological innovation. Since 1997, Poland has encouraged innovation by sponsoring the Polish Product of the Year competition to promote new and innovative technical solutions that can be operational within three years.

Technology transfer is crucial for SMEs, and well co-ordinated networks help SMEs to link with technological services and providers. The Netherlands and Sweden apply an innovation cluster policy by promoting co-operation between large and small companies. Finland's TEKES develops research and technology co-operation between large enterprises, research organisations and SMEs. Sweden launched technology transfer networks to increase co-ordination; a particular network-based project is Technology Transfer for SMEs, which helps SMEs find adequate technological services. Similarly, Austria's programme Industrial Centres and Networks of Excellence (K_{ind} and K_{net}) promotes technology acquisition by SMEs through networks of competence led by industrial technology clusters.

A number of programmes promote co-operation partnerships between small enterprises and researchers. Sweden's technopoles are centres for young, high-technology companies with growth potential and are designed for researchers who wish to see their ideas develop into new products. Many programmes pursue co-operation partnerships with the private sector to invest in R&D in key growth sectors; in certain cases, businesses repay public investments with sales-based royalties. Technology Partnerships Canada (TPC) supports innovative SMEs across Canada, and partners with the private sector to invest in R&D in key growth sectors, and participating firms repay the investments through sales-based royalties. The EU gate2growth initiative supports the Proton Europe network of industrial liaison offices in public research organisations which facilitates interaction and exchange of good practice between these offices and intellectual property managers.

Technology incubation is practised by many countries – Australia's Building on IT Strengths (BITS) Incubator Programme is designed to assist small companies in the information industries sector to grow and to increase linkages across all areas of the ICT sector in order to develop innovative solutions for local and overseas markets. Technology incubation projects are also funded by many other OECD countries, including Ireland, Korea, New Zealand and Poland.

The promotion of technology and innovation presupposes a strategy for supporting human resource development and training in SMEs, which SMEs need in order to adopt technology and new business models. Some current programmes involve the temporary transfer of staff from enterprises to research facilities and *vice versa*, as in the case of Germany's PROgram INNOvation Capabilities for SMEs, the UK's Teaching Company Scheme and Norway's SMB-*kompetanse* programme. Other programmes supporting skills training include the professional education taskforces implemented by the Netherlands and supporting vocational training and encouraging best practice transfer between sectors.

Policies that governments are implementing to encourage SME interest and investment in online transactions

A number of framework policies and enabling factors are necessary for the development of e-commerce in the SME population: competition policies, education policies, taxation, and intellectual property regimes lay the basis for e-business development. Enabling factors include the network infrastructure, secure on-line settlement and payment, consumer and privacy protection, and on-line authentication and certification. A legal framework that puts electronic transactions on an equal footing with paper-based transactions is necessary. Progress in e-government practices will also have a significant influence on e-commerce development patterns. Open and competitive telecommunication markets contribute to the development of e-commerce in general. Continued growth in the number of secure servers and policies for Internet access prices and the availability of flat-rate metering practices affect the level of Internet usage. The availability of high-speed Internet access, at a reasonable price, would benefit small firms, as slow Internet connection and data transfer discourage Internet use.

Recent OECD analysis indicates that new policies may also be needed in the ICT area, as ICT connectivity is now less an issue than the rather low levels of interest among firms. Many firms are using electronic networks for inter-firm transactions rather than for sales to customers. It is important to remember that ICT is an enabling technology, and investment in ICT does not compensate for poor management, lack of skills or lack of competition. Factors affecting the diffusion of ICT include the direct costs of ICT, costs and implementation barriers relating to enabling factors, risk and uncertainty, the nature of the business and competition.

Few firms are investing in the organisational changes and skills upgrading needed to realise ICT benefits, and SMEs are of particular concern in this respect. While many small firms have computers and Internet access, and some have Web sites, they are generally less actively engaged in on-line transactions, particularly sales, than larger firms. This owes much to the types of businesses in which SMEs are most concentrated. Some potentially high-growth SMEs would greatly benefit from engaging in more business-to-business (B2B) e-commerce. However, ICT investments carry risks that are more difficult for small firms to bear. SMEs are particularly concerned about their ICT competence and legal issues related to payment and security. Sophisticated IT solutions (*e.g.* a web site with a secure environment for credit card transactions) may not be applicable to most SMEs. The same is true for package collection, shipment and other logistics services that can be expensive for smaller firms to outsource. Governments should perhaps target those SMEs that might benefit most from e-business and focus on linking them to supply networks and enhancing confidence and trust factors.

Specific government action in support of e-commerce uptake by SMEs may be warranted when small businesses find themselves shut out of certain B2B markets as a result of arrangements between existing buyers and sellers in that market. Working to ensure that SMEs can afford effective out-of-court dispute settlement mechanisms is also crucial for confidence building.

The degree of preparedness for e-business varies considerably among SMEs. Government programmes supporting the uptake of e-commerce by SMEs need to take into account the heterogeneity of the SME sector and the diversity of their needs. Internet access and on-line presence via a company homepage may suffice for small businesses serving local markets, whereas others may need to develop Internet sales and purchases rapidly, which is likely to involve a complete change in their business model. Many governments are reorienting their support programmes to reflect the fact that small businesses need quite customised assistance.

As surveys indicate that many small firms are not yet aware of the potential benefits of e-commerce, awareness-raising and ICT training programmes will continue to be a main pillar of government e-commerce policies (Table 1.1). Government support for employee and management training in order to enhance their ICT skills will help compensate for small firms' lack of qualified personnel and in-house expertise. Seminars and workshops to familiarise small businesses with

Table 1.1. **Examples of ICT/e-commerce awareness and training programmes for SMEs**

	Programme	Description
Austria	Let's e-Biz	On-line information source established by the Ministry of Economics and chambers of commerce covering all aspects of e-business. The prize programme annually awards the best e-business and multimedia products.
Finland	eASKEL	Aims to increase the management competence of SMEs for developing an e-business strategy. Private consultants analyse the participating company and develop an action plan for it. Each company is allowed 2-5 consulting days and the government covers 85% of consultant fees.
Ireland	PRISM initiative	The chamber of commerce, using positive local SMEs experience as a catalyst for further e-business adoption, helps SMEs to respond to e-business challenges through e-business capacity building. E-business strategy training courses are to be provided to over 2 000 SMEs by mid-2002.
Luxembourg	APSI/CRP-HT Guide	A guide to promote e-business for SMEs produced by the Association of Professionals of ICT (APSI) and the Henri Tudor public research institute (CRP-HT). The Chamber of Commerce, the Federation of Luxembourg Industrials (FEDIL), etc., ensure the wide distribution of the guide to their members.
Netherlands	Netherlands Go Digital	Supports trade organisations to develop their ICT strategy and stimulate their members' adoption of the Internet and e-commerce. National branches and 250 consultants help SMEs and entrepreneurs to prepare and implement ICT action plans. Sector-specific SME organisations are also supported.
Sweden	SVEA	Aims at raising awareness of the commercial possibilities of e-commerce and how e-business can be used in different parts of the business process. Programme includes seminars, case studies and access to IT solution providers.
United Kingdom	UK Online for Business	500 introductory seminars across the country outline key business benefits, including cutting costs, finding new markets and improving customer service, with participation by successful businesses. E-commerce demonstrators tour the country, providing live demonstrations, presentations, video case studies and audience interaction. The target is small businesses with fewer than 50 employees.
United Kingdom/Wales	Wales Information Society (WIS) initiative	ICT business consultants/advisers work on a one-to-one basis with SMEs across the region. They investigate SMEs' specific business needs and map these to the most appropriate technology and application solutions. Demonstrations of new technologies are made to more than 10 000 firms.

Note: Description of each programme is partial. Some programmes include a training aspect.

Source: European Commission (2002).

e-business and business case studies are valuable for demonstrating e-commerce possibilities. Austria's 2000 e-business in the new economy initiative focuses on awareness and information diffusion. In 2000, Ireland launched the Empower initiative to serve as a fast-track e-commerce project for small businesses, and in 2001 entered a joint venture with Newfoundland (Canada), to form ONLINE Inc. to develop the E-learning Repository for Small Enterprise to provide training modules using interactive learning activities. Industry New Zealand has developed an eight module e-commerce training programme aimed at SMEs. In addition to the provision of tax credits for e-commerce developments realised through associative and partnership efforts, Italy plans to launch a project to promote networks of firms using e-commerce.

Many government programmes now include one-to-one consultation and support for the development of e-business strategy in small firms. In the United Kingdom, the Online for Business programme provides small firms with free assistance from e-business advisers in 70 centres. In Finland, the eASKEL programme covers 85% of direct consultant fees for SME participants in a management training course in which they receive assistance in developing an e-business action plan.

Reliable data that capture SME use of ICT and e-commerce would help to inform policy discussions. Governments need to pay special attention to data collection on e-commerce, and in view of the rapid evolution of ICT and e-commerce, this represents a major challenge to statistical and SME-related agencies.

Government policies are promoting SME management enhancement and training

Competent management skills are a prerequisite for the success of SMEs, and a large number fail because of management shortcomings. Rapid technological change in a globalised market and shortened product life cycles have enormous impacts on firm organisation and management. Therefore, promoting the acquisition of knowledge and competencies by SMEs is a goal of many government programmes.

Japan has made enhancing management capability a primary goal of its SME policies. Japan's SME Support System of 1999 has as one of its principal aims to assist SMEs in solving the various management issues they face. The United States government, through almost 1 000 small business development centres, provides management assistance (often jointly with local tertiary educational establishments) to current and prospective small business owners. Services provided by these centres include counselling, training and technical assistance and over 620 000 clients are helped annually. Canada's Internet-based Human Resources Management and Steps to Competitiveness programmes, and New Zealand's BIZ programme, also have as their goal the enhancement of SME management capability.

Canada's Steps to Competitiveness is an educational tool in that it assists entrepreneurs to assess their marketing, strategic planning and other areas. Italy's training programme SKILLPASS provides on-line professional training modules for occupations experiencing labour shortages, especially relating to new-economy activities. In 2001, Japan's Institute for Small Business Management and Technology began pilot on-line distance learning to make its educational programmes more accessible to enterprises in outlying areas.

Other support instruments are also used to assist training activities. Austria's 2000 tax reform introduced a training allowance of up to 9% of the costs of staff training and intends to raise the allowance to 20%. Poland's Agency for Enterprise Development co-finances training costs for small enterprises. In the United Kingdom, the Business Volunteer Mentoring Association provides free mentoring advice by volunteers from the business world to pre- and early start-up businesses .

In the United States, the Pro-Net facility, an electronic gateway to government procurement for small business, serves as a "virtual" one-stop-procurement shop. It is a search engine for contracting officers, a marketing tool for small firms and a link to procurement opportunities and information.

Helping SMEs to identify and realise sustainable and profitable trade opportunities

In their efforts to capture export markets or internationalise their activities, SMEs benefit from a variety of public support measures. This support can take the form of information, advice, funding, export insurance, various business-matching facilities and sponsorships. The support is crucial for SMEs in all OECD countries and especially for SMEs operating in small domestic markets, as in Denmark, Finland, Ireland and New Zealand. In small domestic markets, SMEs need to be ready to expand internationally earlier than in larger markets. Support offered by agencies such as New Zealand's Trade NZ is critical for local SMEs.

OECD governments use their global networks to help identify and realise sustainable and profitable trade opportunities. For example, Trade Partners UK is a trade support service using the services of teams in over 200 embassies overseas along with 45 domestic business links and at least nine government departments as well as representatives in chambers of commerce and in the devolved administrations. A major function of Trade Partners UK is to seek out and help exporters (with particular attention to SMEs) who wish to develop new opportunities in overseas markets. Small businesses of other OECD economies also benefit from the efforts of overseas networks. Among the services provided by these networks are market reconnaissance, preparation of market studies, advisory services for structuring joint ventures and the placing of investments. Australian SMEs benefit from the services of Austrade, which provides information and advice gleaned from a network of 1 000 staff in 61 countries. The Export Assistance Centres (USEACs) of the United States provide counselling, information on markets abroad, international contacts and advocacy services in over 100 offices in the United States and in over 70 countries worldwide and have recently added seminars on electronic commerce to the list of services provided. The Norwegian Trade Council operates 40 offices in key markets around the world, while Germany's new Internet portal iXPOS, created in 2001, gives an overview of important services offered for doing business abroad.

Governments seek to identify enterprises with export potential, and support services may be provided to improve a firm's preparedness for exporting when they seek to enter overseas markets or to expand their export operations. Spain's Self-Diagnosis for SMEs: Access to New Markets, on the Internet, was started in December 2001 to make an instrument for examining their internationalisation potential available to SMEs. A simple interactive tool allows entrepreneurs to ascertain whether their business structure, management and attitudes correspond to those of enterprises that already have an international scope. The system includes a number of action recommendations to assist firms in their planned dealings abroad.

ICT has a role to play in the diffusion of information and advice. ExportSource is Team Canada Inc.'s on-line resource for export information and provides a single access point to all trade-related government departments and agencies on export-related subjects. In addition to giving advice and information to SMEs to facilitate expanding their businesses beyond national borders, Japan's SME Agency also provides a corporate matchmaking service for Japanese and overseas SMEs using a common Internet database, thereby facilitating a wide range of business linkages for strategic collaboration.

Export credit insurance remains a widely used instrument for promoting exports. Spain's 100 Policy for SMEs is an export-credit insurance policy specifically designed for SMEs, offering low-cost coverage of exports worldwide, examination of customers for solvency and advice. Such services are provided in Australia by the Export Finance and Insurance Corporation, most of whose clients are small businesses, many of them new to exporting, while Turkey's Eximbank operates the Export Credit Programme for SMEs. Austria launched an export initiative to assist firms in entering new markets which includes a measure that improves export insurance.

The Business Development Bank of Canada offers a product called Working Capital for Exporters, designed to help small businesses finance exports and export-related activities, which offers loans with flexible repayment terms to cover the high costs of initiating and developing international markets. The Export-Import Bank of the United States is launching a pilot programme to assist small businesses that have been unable to obtain financing; small businesses meeting certain criteria may be able to obtain coverage for 100% of their export working capital needs.

Realising local strengths for SMEs through the promotion of networking, clusters and spatial development

A wide variety of institutional arrangements exist at the regional and local levels to develop and deliver policy and programmes. Recently, many OECD countries have undertaken reforms of their institutional arrangements to better integrate local and regional levels into policy networks. At present, increased emphasis is being placed on promoting the competitiveness of regions, and in terms of resources, there is less support in the form of direct subsidies. Current policies stress the importance of human capital investment, innovation and technology diffusion and entrepreneurial culture.

Partnerships, joint efforts and networking arrangements characterise many regional and local development policies. Along with local and regional governments, representatives of trade associations, unions and entrepreneurs are more closely involved in efforts to improve the local business environment. The development of horizontal partnerships between public and private actors is currently seen as one of the most effective means to promote regional development and yield greater coherence among policies, ensuring that they effectively contribute to overall economic goals. Australia's Regional Assistance Programme encourages businesses and communities to work in partnership with government, to build business growth and stimulate sustainable employment. Sweden's regional growth agreements are based on regional partnerships that involve representatives of municipalities, local business associations, universities and colleges, and Sweden's Technology Bridge Foundation makes mentors available to knowledge-intensive SMEs in the regions to increase the exchange of knowledge and co-operation between universities and industry.

Business incubators are an instrument widely used to support local and regional development in OECD economies. Business incubators usually comprise an actual physical workspace combined with advisory services. Their numbers have grown rapidly in OECD countries, and number approximately 550 in the United States, over 200 in France and more than 100 in the United Kingdom (OECD, 2001b). Incubator schemes are established by public, private and non-profit actors and are funded by different government levels, research institutes, trade associations and the private sector. In addition to the valuable services they provide to local firms, by way of information, advice, training, marketing and financial support services, incubators can also have an important demonstration effect. The limited available evidence suggests that incubators have a positive impact in terms of improving rates of enterprise survival, although they do not tend to generate much employment. Nevertheless, Italy's Sviluppo Italia expects to create around 2 500 jobs annually with a network of 30 incubators, and around 2 000 persons in Australia are estimated to be currently working in firms located in incubators. Available assessments suggest that the cost of public support per job created in an incubator can compare favourably with other public job creation programmes. The rationale for the public provision of incubators needs to be constantly reviewed to confirm the existence of a market failure in the supply of business services to firms.

Firms in related lines of business have tended to cluster historically, and evidence of this phenomenon abounds for various industries. Policy makers promote clusters and networks because of their perceived positive effects on firms' competitiveness. The advantages to firms (especially SMEs) participating in a cluster are many: concentration and specialisation of local labour markets, specialisation and division of labour yielding scale economies; outsourcing possibilities, presence of specialised suppliers, ease of technology transfer, information and knowledge sharing, lower transaction costs (OECD, 2001b). Italy's industrial districts, composed mainly of SMEs, figure among the better-known and more successful clusters in OECD economies.

Many countries operate programmes to improve access of SMEs to financing at the regional level, such as the loan and loan guarantee programmes developed by the Czech government to promote the development of small enterprises in specified territories; the Norrland Fund operated by Sweden to provide risk capital and loans for enterprise development and expansion in the five northernmost counties; and the six business innovation centres established in Canadian regions in 2000 to provide, *inter alia*, additional seed capital for new innovative and technology firms. Regional development agencies provide business development tools to potential entrepreneurs, such as the Atlantic Canada Opportunities Agency and the Canada Economic Development for Quebec Regions, both of which provide on-line information and self-assessment services, skills acquisition, training, market access services and funding.

A number of OECD countries have quite well-developed institutional arrangements for the design and delivery of regional policies. For example, an important part of SME policy in Spain, which complements the regional policies of central government, originates at the level of the regional governments of the seventeen autonomous communities. Since UK devolution legislation in 1999, substantial responsibility for economic development has devolved to Scottish and Welsh institutions and more regional-specific programmes are being implemented.

Acquiring an evaluation culture

In spite of the implementation of many SME policies and programmes, market failure continues to be evoked as a programme rationale and many measures are prolonged with a view to improving market outcomes for SMEs. An ongoing challenge to governments is to improve the relevance, effectiveness and efficiency of the vast numbers of SME programmes and schemes currently implemented across OECD countries. Through programme evaluation, policymakers can seek to identify best practice policies in order to better guide resource allocation decisions.

It is policy in an increasing number of OECD countries to undertake evaluations of government programmes. Canada systematically commissions programme evaluations, which are frequently undertaken by external evaluators. Industry Canada's Audit and Evaluation Branch has started to

Box 1.2. OECD Working Party on SMEs and Entrepreneurship: SME Programme Evaluation Assessment Framework in brief

OECD countries currently implement a vast array of SME programmes and schemes. Improving their relevance, effectiveness and efficacy is an ongoing challenge to governments. Programme evaluation is imperative for identifying best practice policies in order to better guide resource allocation decisions.

The rationale for government intervention to assist SMEs invokes market failures relating to a lack of financing, services or information. It is important for policy makers that evaluations examine the justification for the policy or programme, analyse its economic effects through its incentives on firms, and yield information that can inform resource allocation as well as the choice of policy instruments. For those involved in the management or administration of government programmes, the evaluation should seek to determine internal programme efficiencies and aim to improve the quality, responsiveness and delivery of these schemes.

Countries' institutions and specificities are important factors in helping to explain the evolution and state of evaluation practices across countries, and the design of evaluations needs to be adapted to the prevailing institutional reality and to the different needs of programme participants. There may not be a single "best practice" for a given policy objective when allowance is made for country-specific differences in structure, performance and framework conditions. Countries are not always in a position to draw the lessons from recognised best policy practice. OECD recommendations regarding evaluation are that: the evaluation methodology be determined when the policy or programme is designed; evaluation results should be taken up at the highest level of policy making and be discussed publicly; evaluations should be more user-oriented and should use a combination of methods to satisfy different information needs (OECD, 1997).

The OECD framework for SME programme assessment recommends evaluating SME programmes with respect to a number of areas: their appropriateness in addressing identified market failures; their superiority to other instruments in achieving goals; their systemic efficiency in the context of overall government programmes and budgets; their own efficiency or cost effectiveness; and their adaptive efficiency in feeding evaluation results back into programme design and implementation. More SME programme evaluations are being reviewed according to the OECD evaluation framework to assess both their private returns to firms and their efficiency from a societal standpoint. The OECD Working Party on SMEs and Entrepreneurship regularly examines and compares the findings of evaluation studies conducted by member country governments, using the OECD analytical framework for SME programme assessment.

publish evaluation results on the Internet. The United Kingdom's Business Links system has, throughout its existence, been the subject of a series of evaluations that have contributed to the programme's development. Likewise, certain other countries have demonstrated a commitment to appraising their policies and their programme implementation. However, many OECD countries have yet some way to go before they possess a genuine evaluation culture.

Countries' institutions and specificities are important factors in helping to explain the evolution and state of evaluation practices across countries, and the design of evaluations needs to be adapted to the prevailing institutional reality and to the different needs of programme participants. A unique "best practice" for a given policy objective may not emerge, when allowance is made for country-specific differences in structure, performance and framework conditions. Some countries may not be in a position to draw the lessons from recognised best policy practice.

The evaluation process should ideally be independent and should include *ex ante* and *ex post* features. Evaluations should examine the justification for the policy or programme, analyse its economic effects through its incentives on firms and yield information that will inform resource allocation as well as the choice of instruments. Particular attention needs to be paid to policy design and delivery stages, and evaluation should aim to improve the quality, responsiveness and delivery of programmes and schemes. In response to the need for a common framework and the need for mutual learning through the international comparison of policy practices, the OECD Working Party on SMEs and Entrepreneurship developed guidelines for programme evaluation assessment (Box 1.2). Today, an increasing number of countries assess programme evaluations according to the OECD framework (see Box 1.3).

It is important that the examination of a programme's effectiveness be conducted within the framework of overall government objectives, *i.e.* economic growth, job creation, enhanced competitiveness, export promotion, regional development policies, etc., and also with regard to the objectives of the SME programme being evaluated. SME policy objectives should be compatible with overall government objectives and address market failures. A programme's effectiveness should also be examined with regard to framework conditions, *i.e.* the tax system, the regulatory environment. Finally, it is indispensable for evaluation results to be taken up at the highest level of policy making and be used for the redesign or elimination of the programme, should the evaluation results warrant it.

Box 1.3. Examples of national programme evaluations assessed according to the framework of the OECD Working Party on SMEs and Entrepreneurship

Among evaluation studies recently reviewed are those relating to the following national programmes dedicated to the improvement of aspects of SME performance. These evaluations apply at least some of the OECD efficiency criteria, and all have reported their findings within the last few years, making their policy lessons and potential for mutual learning highly relevant. The programmes concerned are: The Canada Community Investment Plan (Canada); Business Links (United Kingdom); The Small Business Incubator Programme (Australia); ANVAR Innovation Support Programme (France); Venture Capital for Small Technology Companies – BTU (Germany), and Startech (Italy).

There were significant differences in: the level of complexity or comprehensiveness of the evaluation exercises; the evaluation approaches adopted; the coverage of the different programme stakeholders; the temporal dimension; and the participation by external evaluators. Nevertheless, in practically all cases, tentative lessons may be drawn which can inform policy design and practice.

The evaluation exercises used combinations of methodologies in most cases, addressed the OECD efficiency criteria and frequently involved external evaluators. Market, information and institutional failures are cited as the rationale for all of the programmes under review.

Demonstrating that a programme is more effective than other programmes or instruments in achieving the same goals is a difficult exercise which the reviewed evaluations were unable to carry out in a rigorous way. Most exercises, although confirming the attractiveness of the policy instrument in question and recognising their own methodological limitations, did point to the scope for improvement in current methods.

These evaluations resulted in considerable empirical evidence on the incidence, output and outcomes of programme implementation and on the profiles of beneficiary firms.

Overall, programmes appeared to generate significant additionality. For example, France's ANVAR Innovation programme was characterised by good additionality, as three companies out of four would not have realised their project in the same way or at all without the programme support.

Determining the cost-effectiveness of programmes is rarely done satisfactorily in evaluations because of the difficulties in identifying costs and benefits relative to differing objectives. Nevertheless, the evaluation studies did address this question especially with regard to programme design, administration and delivery.

In the case of the Canadian CCIP programme, the external evaluation found that that for each dollar invested by the government, almost eleven times that amount was generated in small business investment.

The various programmes demonstrated a capacity to adjust their focus and conditions as market changes warranted, thereby ensuring their continuing relevance.

REFERENCES

- Bryson, A. (1999),
The Impact of Employee Involvement in Small Firms' Financial Performance, NIESR, United Kingdom.
- Charney and Libecap (2000),
"Impact of Entrepreneurship Education", The Kauffman Centre for Entrepreneurial Leadership.
- Dun and Bradstreet (2001),
20th Annual Small Business Survey.
- European Commission/Observatory of European SMEs (2002),
The 2001 ENSR Survey on SMEs (provisional draft); and No. 1, *Highlights from the 2001 Survey*; No. 2, *SMEs in Europe, Including a First Glance at EU Candidate Countries*; and No. 4, *European SMEs and Social and Environmental Responsibility*.
- European Commission/Observatory of European SMEs (2001),
Sixth Report, Executive Summary.
- Katz, J. (2001),
Study conducted for the National Federation of Independent Business, United States.
- Murphy, M. (2002),
"Organisational Change and Firm Performance", *STI Working Paper 2002/14*, OECD, Paris.
- OECD (2000),
OECD Small and Medium Enterprise Outlook, OECD, Paris.
- OECD (2001a),
Second OECD Conference on Women Entrepreneurs in SMEs: Realising the Benefits of Globalisation and the Knowledge-based Economy, OECD Proceedings, OECD, Paris.
- OECD (2001b),
OECD Territorial Outlook, "Subnational Authorities and Entrepreneurship: Policy on Business Incubators, Enterprise Clusters and Networks", OECD, Paris.
- OECD (2001c),
OECD Science, Technology and Industry Scoreboard: Towards a Knowledge-based Economy, OECD, Paris.
- OECD (2001d),
Enhancing SME Competitiveness: Proceedings of the OECD Bologna Conference. OECD, Paris.
- OECD (2002a),
High-growth SMEs and Employment, Paris.
- OECD (2002b),
Measuring the Information Economy 2002, OECD, Paris.
- OECD (2002c),
"ICT and Electronic Commerce for SMEs: Progress Report" (Internal OECD document).
- Reynolds, P.D., M. Hay, W.D. Bygrave, S.M. Camp and E. Autio (2000),
Global Entrepreneurship Monitor – 2000, Executive Report, Babson College/Kaufman Center/London Business School.
- Sakai, K. (2002),
"Global Industrial Restructuring: Implications for Smaller Firms", *STI Working Paper 2002/4*, OECD, Paris.
- Schreyer, P. (1996),
"SMEs and Employment Creation: Overview of Selective Qualitative Studies in OECD Member Countries", *STI Working Paper 1996/4*, OECD, Paris.
- Statistics Canada (1998),
The Evolving Workplace: Findings from the Pilot Workplace and Employee Survey. Ottawa.
- United States Department of Commerce (2002),
E-Stats (available at www.census.gov/estats).
- US Small Business Administration, Office Of Advocacy (2001),
Small Business Economic Indicators, 2000, Washington.
- US Small Business Administration, Office Of Advocacy (2000),
The Third Millennium: Small Business and Entrepreneurship in the 21st Century, Washington.
- US Small Business Administration, Office Of Advocacy (2001),
Women in Business, Washington.

THEMATIC REVIEWS

Enterprise Demography: Examining Business Dynamism in OECD Countries¹

Introduction

The creation of new businesses and the decline of unproductive firms are often regarded as key to business dynamism in OECD economies. Firm turnover (*i.e.* entry and exit) is a measure of the ability of economies to expand the boundaries of economic activity, to shift resources towards growing areas and away from declining areas, and to adjust the structure of production to meet consumers' changing needs. The assumption is often that countries that are more dynamic (*i.e.* experience better business performance) also have higher rates of firm creation and turnover. This process of firm turnover, or enterprise demography, is currently of great policy interest. Policy makers involved in the development of SME policies may be particularly interested, since small firms play a key role in firm turnover; new firms are typically only 40% to 60% of the average size of existing firms (Scarpetta *et al.*, 2002).

The growing interest of policy makers has also influenced statistical development; many statistical offices now provide official national statistics on the exit, entry and turnover of firms. Some studies are also available at the international level, sometimes based on official statistics. Cross-country comparisons of entry and exit are still rare, however, partly due to several thorny measurement problems.

This chapter examines recent work on enterprise demography. It first briefly discusses some of the key measurement issues, as these should be taken into consideration when interpreting the findings of the various studies. It then discusses the main findings from recent studies, followed by a brief discussion of other statistics on business dynamism, notably statistics on entrepreneurship. The next section draws some interpretations from the findings, and the final section concludes.

Comparing business dynamism across countries – the key measurement issues

Comparing firm creation and destruction across countries seems straightforward as these can be derived from business registers. These allow firms to be tracked over time; addition or removal of firms from the register (at least in principle) reflects the actual entry and exit of firms. There are a number of important measurement problems with business registers, however (Box 2.1).

If exit and entry can be measured in a reliable and comparative way, other indicators of firm demography, such as survival rates, can be derived fairly easily. But determining exit and entry is not yet straightforward and requires further efforts. Work is currently underway, notably at Eurostat (see Hult, 2001; Luhtio, 2001), but also in statistical offices of other OECD countries, to make progress in measuring exit and entry in a comparable way. The Eurostat work uses a common definition of entry and

1. This chapter draws on recent work by the OECD Economics Department (OECD, 2001a; Scarpetta, *et al.*, 2002), by Eurostat (Hult, 2001; Luhtio, 2001), and on studies presented at a workshop of the OECD Statistical Working Party of the Committee on Industry and Business Environment, held in November 2001.

Box 2.1. Statistical issues in measuring exit and entry

There are four key problems in calculating exit and entry rates. The first relates to the coverage of business registers. Accurate indicators of business demography require that registers cover all (or the bulk of) economic activity. Business registers record information on firms on the basis of certain criteria, *e.g.* whether the firm submits tax payments to the government. Many OECD countries have several alternative sources for the register (Luhtio, 2001). These may be linked to tax declarations (VAT, personal income, corporate, or other), social security records, registrations at chambers of commerce, or other administrative sources. The various sources will not necessarily cover exactly the same firms. The coverage of small and newly created firms, in particular, may differ, as thresholds for the various registrations are not the same across countries. Some OECD countries are currently moving towards a single business register, with the goal to reduce administrative burdens. This has the added advantage that the information from the different sources can be integrated, that the quality and coherence of the information can be improved, and that the coverage of economic activity is likely to be enhanced. In the meantime, however, there are differences in thresholds and the coverage of economic activity across OECD countries, which affect the calculation of indicators related to entrepreneurship. Sensitivity analysis for Canada suggests that the choice of source may have a considerable impact on the entry and exit rates that are calculated (Baldwin *et al.*, 2002).

The second problem is conceptual; what exactly constitutes the creation of a new firm? Not all firms that are newly recorded in the business register are new entrants. Firms can also be created through mergers and restructuring, take-overs, spin-offs or out-sourcing of existing companies, changes in legal forms or names, and reactivations of dormant firms. In principle, such demographic events should be considered separately from real births, *i.e.* the new creation of a combination of production factors without other firms being involved in the creation (Hult, 2001). The measurement of real births depends on whether the information available in the business register can distinguish between real births and these other demographic events (or false births). Evidence for some OECD countries suggests that false births may be quite important. In Canada, for example, about 6% of births in 1993 were due to ownership changes, 2.6% were due to a reorganisation of the firm in new payroll units, and 0.1% was due to a change in location (Baldwin *et al.*, 2000). This ratio of real to false births may be larger in other countries and is probably not constant over time.

Moreover, timing matters (Baldwin *et al.*, 2002): "New firms go through several stages. They may just be an idea in an entrepreneur's mind, or a tentative experiment that may consist only of the founder working in a garage or home office. Usually at a later stage, these new entrepreneurs begin to hire employees. At a still later stage, they are incorporated into official business registers and surveyed either by a statistical agency or by a credit rating agency. It is clear that there is no 'correct' time at which entry should be measured. Even if it were defined as the first economic transaction, a decision would have to be made on the type of transaction that would trigger a birth. Most databases capture firms at an arbitrary point in their birthing experience – when they hire their first worker, or make their first sale, or pay taxes for the first time."

A third issue relates to the *death* of a firm. The death of a firm is typically more difficult to measure than its birth. Parallel to the definition of firm births, the death/exit of a firm can be regarded as the dissolution of a combination of production factors, provided that no other firms are involved in the process. Mergers, take-overs, restructuring and break-ups should therefore be considered as separate demographic events. Whether this is possible depends on whether the business register records these events. Measuring enterprise deaths is confronted with other problems, however. Most business registers do not register deaths in a reliable way and deregistration from the register is not required in many countries. In practice, measuring exit therefore often requires verification of changes in a firm's economic activity from year to year; if production or employment drops to zero or changes very significantly from one year to the other, the firm is likely to have died.

The fourth question concerns the *statistical unit* to measure exit and entry. The different business registers in OECD countries cover a variety of statistical units, such as legal units, enterprise units, local units and establishments. Exit and entry rates can, in principle, be calculated for these different units. Local units and establishments seems the least appropriate (at least for economy-wide analysis), as these refer to a specific geographical location, not necessarily to an independent combination of production factors. Enterprises (or legal units that provide the legal basis for an enterprise) seem the most relevant, as these refer to independent entities that have some responsibility for decision making. Recent OECD work on entry and exit has typically used the enterprise as the key unit for the analysis of exit and entry (OECD, 2001a; Scarpetta, *et al.*, 2002); as has work by Eurostat.

exit and should lead to a first publication of official and harmonised exit and entry rates for European Union countries in the spring of 2003 (Hult, 2001).

The measurement difficulties outlined in Box 2.1 have an important impact on international comparisons; unharmonised results can be quite different from harmonised estimates. For example, a compilation of national estimates of 1998 turnover rates by the European Commission (European Commission, 2000) showed that the United States had the second-highest turnover rate of the 13 OECD countries covered, with only Germany topping the US rates. A recent OECD study presented 1989-94 estimates of turnover, using a harmonised method, and found that the United States was not markedly different from the other nine countries (Scarpetta *et al.*, 2002). The differences between these two studies may partly be due to the timing of the studies, but is mostly due to methodological differences.

Certain comparisons of business dynamism are not based on business registers or enterprise sources. For example, the Global Entrepreneurship Monitor (Reynolds *et al.*, 2001) is based on surveys of individuals involved in the creation of enterprises. This is quite different from tracking the creation and destruction of firms and may lead to other findings as regards business dynamism in OECD countries. For example, the most recent GEM survey finds that the US has a substantially higher rate of entrepreneurial activity than most other OECD countries, such as France, Germany or the United Kingdom. This is quite different from the recent OECD work on firm turnover, as noted above.²

Stylised facts from recent studies

Findings from statistics on enterprise demography

A study by Geroski (1995) raised a large number of stylised facts about entry and exit. These included the following:

1. Entry is common. Large numbers of firms enter most markets every year, but entry rates are far higher than market penetration rates.
2. There is a large variation in entry across industries, but these do not persist for long.
3. Entry and exit rates are positively correlated, and net entry and penetration rates are only a small share of gross rates.

The recent work, notably by OECD, confirms these findings, as shown below.

A large number of firms enter and exit markets every year

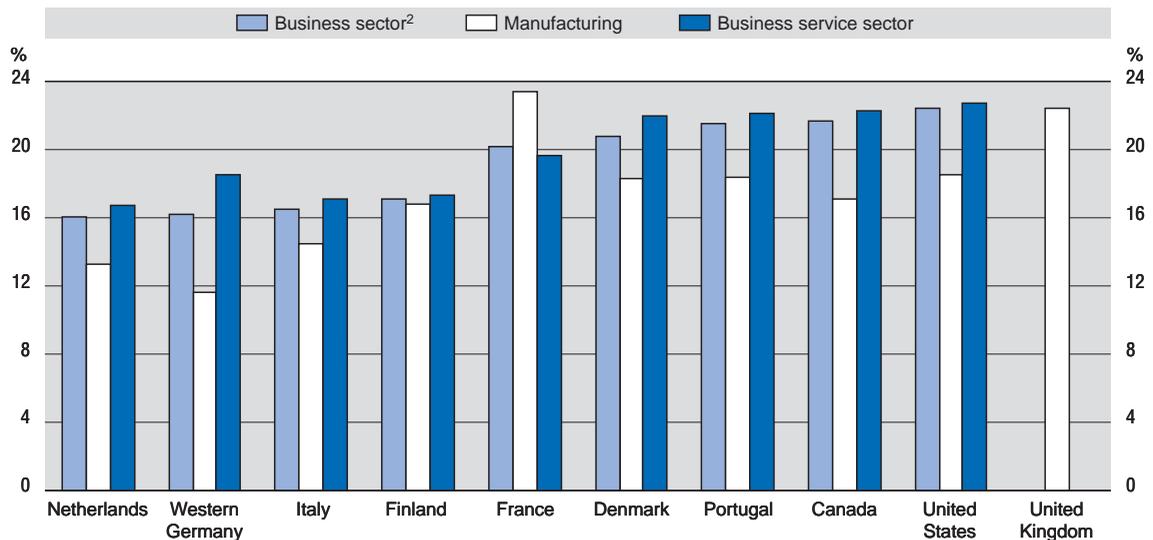
The available studies all show that a large number of firms enter and exit most markets every year (*e.g.* European Commission, 2000; OECD, 2001a; Scarpetta *et al.*, 2002). The recent OECD work with data covering the first part of the 1990s showed that firm turnover rates (entry plus exit rates) are around 20% in the business sector of most countries (Figure 2.1). This implies that a fifth of firms are either recent entrants, or will close down within the year.

Most entrants are small

The OECD work showed that the process of entry and exit of firms involves a proportionally low number of workers. In all but two countries (Finland and Denmark), less than 10% of employment is involved in firm turnover, and in Germany and Canada, employment-based turnover rates are less than 5% (Figure 2.2). The difference between firm turnover rates and employment-based turnover rates

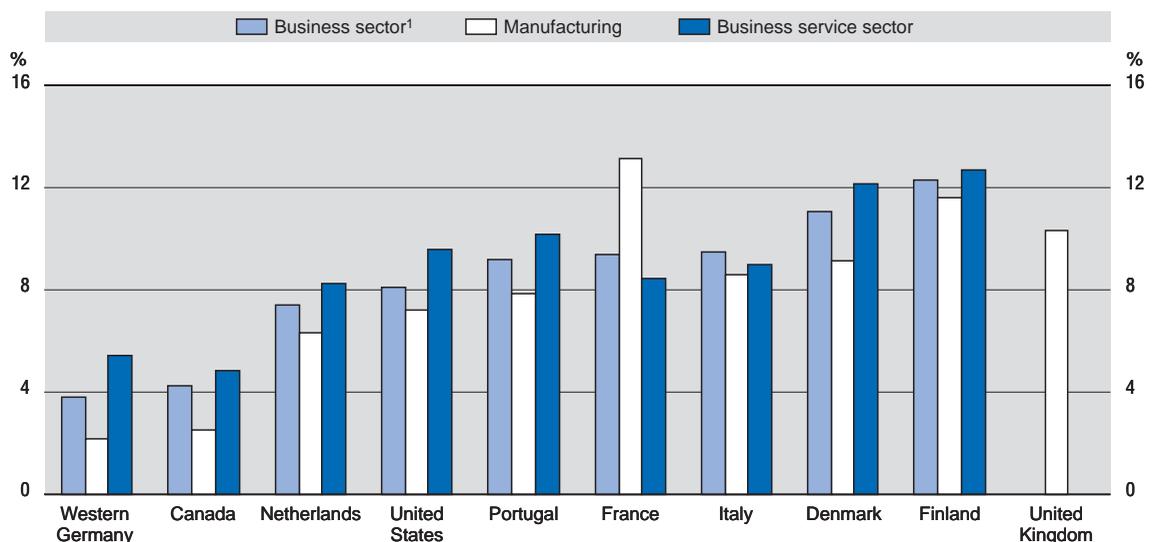
2. The differences between the GEM work and statistics on firm turnover are partly due to methodology. Surveys of individuals are focused on personal experiences, not on those of businesses. Individuals may indicate that they were involved in the creation of a new enterprise that has never (or not yet) showed up in the business register, *e.g.* because it did not pay taxes. Cultural differences may also show up in surveys of individuals, for example as regards the efforts made by individuals to start a company. This is not to say that surveys of individuals are not useful to examine entrepreneurship, only that they provide different answers to enterprise surveys and should not be confused with these.

Figure 2.1. Turnover rates in OECD countries, 1989-94¹
Entry plus exit rates, annual average



1. The entry rate is the ratio of entering firms to the total population. The exit rate is the ratio of exiting firms to the population of origin. Turnover rates are the sum of exit and entry rates.
 2. Total economy minus agriculture and community services.
- Source: Scarpetta, *et al.* (2002).

Figure 2.2. Employment turnover due to exit and entry in OECD countries, 1989-94



1. Total economy minus agriculture and community services.
- Source: Scarpetta, *et al.* (2002).

arises from the fact that entrants (as well as exiting firms) are generally smaller than incumbents. For most countries, new firms are only 40% to 60% of the average size of existing firms, and in the United States, Germany and Canada their average size is less than 30% of that of existing firms (Scarpetta *et al.*, 2002).

Entry and exit are closely related

Entry and exit rates are generally highly correlated across industries in OECD countries. If entry was driven by relatively high profits in a given industry and exit occurred primarily in sectors with relatively low profits, there would be a negative cross-sectoral correlation between entry and exit rates. This is not the case, which suggests that in every period, a large number of new firms displace a large number of obsolete firms, without affecting significantly the total number of firms or employment in the market at each point in time.

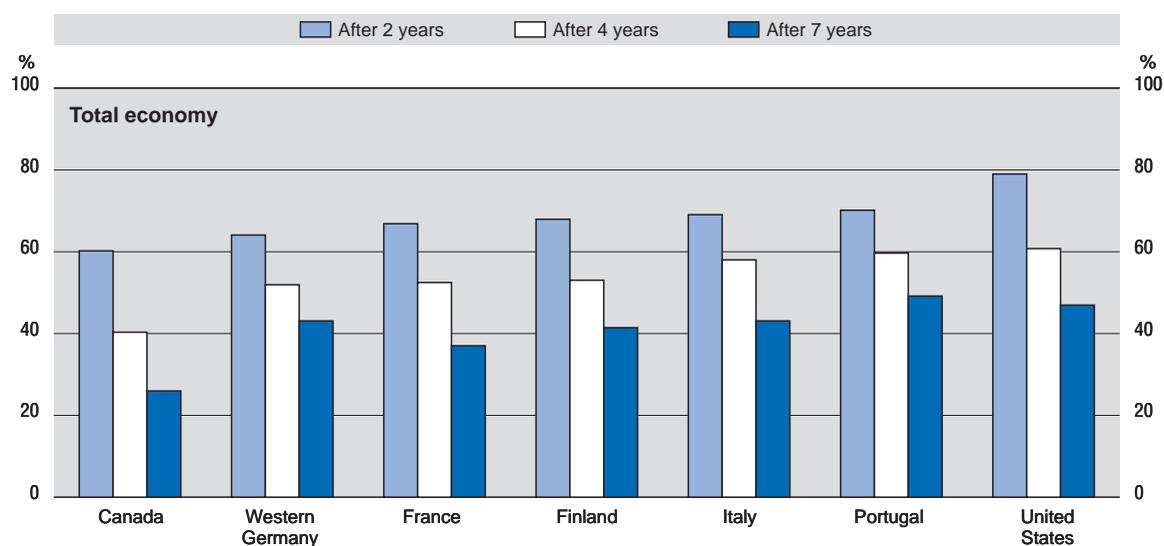
Turnover rates differ between countries and industries

The available studies also suggest that there are indeed differences in firm turnover across OECD countries, although countries that perform better do not always appear to have the highest rate of firm turnover.³ Turnover rates vary significantly across industries in each OECD country, however, implying that differences in the industry composition influence international comparisons of average turnover. These inter-industry differences also appear linked to product cycles; mature industries tend to have low rates of entry and exit, whereas emerging industries tend to have high entry and exit rates (Scarpetta *et al.*, 2002).

A large proportion of new entrants does not survive

The high correlation between entry and exit across industries may be the result of new firms displacing old obsolete units, as well as high failure rates amongst newcomers in the first years of their life. This can be examined by looking at survival rates, *i.e.* the probability that new firms will live beyond a given age (Figure 2.3). The survival probability for cohorts of firms that entered their respective

Figure 2.3. Firm survival rates at different lifetimes,¹ 1990s



Note: The results refer to firms that entered the market between the late 1980s and the mid-or late 1990s. The periods considered differ slightly between countries. See Scarpetta, *et al.* (2002) for details.

1. The survival rate is the probability that an entering firm will survive at least (j) years. Figures refer to average survival rates estimated for different cohorts of firms that entered the market from the late 1980s to the 1990s.

Sources: Scarpetta, *et al.* (2002), and Baldwin *et al.* (2000) for Canada.

3. The OECD study covered ten OECD countries, but work on enterprise demography is carried out by statistical offices in many other OECD countries (*e.g.* Australia, Belgium, Czech Republic, New Zealand, Poland, Spain, Sweden and Switzerland; see OECD, 2001b).

market in the late 1980s declines sharply in the initial phases of their life: about 20 to 40% of entering firms fail within the first two years. Once they have overcome the initial years, the prospects of firms improve; firms that remain in the business after the first two years have a 60 to 70% chance of surviving for five more years. Nevertheless, only about 30-50% of total entering firms in a given year survive beyond the seventh year. A low survival rate is not necessarily a cause of concern. Entry by new firms constitutes a process of experimentation and it is in the nature of this process that the failure rate will be high. This is particularly so if new entry leads incumbent firms to increase their efficiency and profitability.

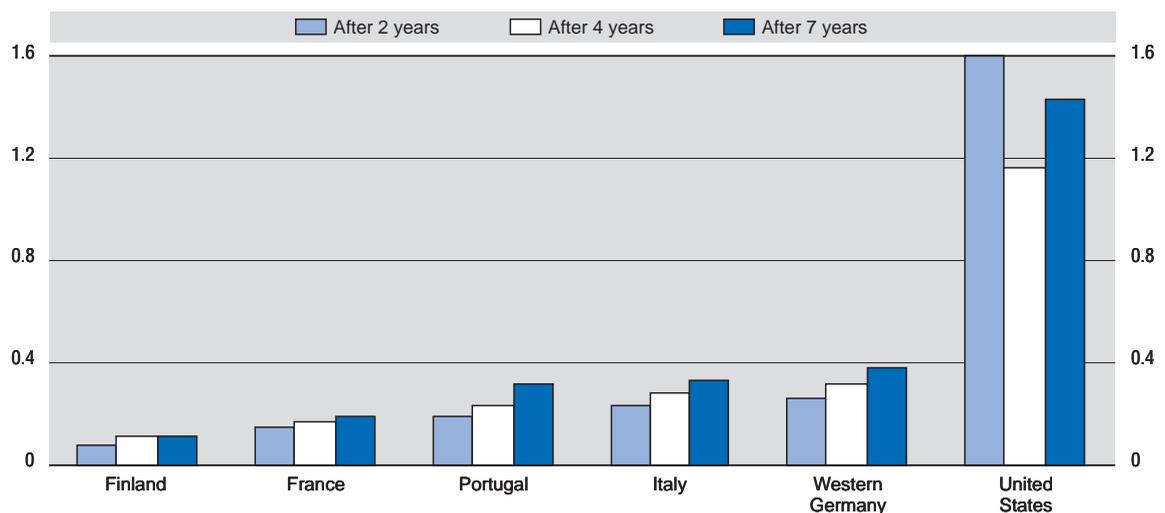
Surviving firms in the United States grow more rapidly than European survivors

Among the most interesting and surprising findings of the recent OECD work on enterprise demography concerns the growth of surviving firms. As indicated above, US firms tend to start off at a smaller size relative to existing firms than firms in Europe. However, those US firms that survive experience much more rapid employment growth than European firms (Figure 2.4). This difference is partly due to the fact that the smaller initial size of US firms provides more scope for expansion. However, the difference in employment growth is substantial and is therefore also likely due to other factors, such as the greater scope in US markets for experimentation (Scarpetta *et al.*, 2002). US firms may start small, but if they prove to be successful, they will expand quickly.

Findings from statistics on entrepreneurship and new enterprises

Statistics on the entry of new firms, the exit of unproductive firms and the survival of new firms only partially describe business dynamism. This is why several OECD countries, including Canada, Denmark, France, Sweden and the United States, also publish statistics and empirical studies on other aspects of business dynamism. Two of these aspects are entrepreneurship and the factors explaining firm survival or failure.

Figure 2.4. **Net average employment gains of surviving firms at different lifetimes, 1990s**
 Net gains as a ratio of initial employment



Note: The results refer to firms that entered the market between the late 1980s and the mid- or late 1990s. The periods considered differ slightly between countries. See Scarpetta, *et al.* (2002) for details.
 Source: Scarpetta, *et al.*, 2002.

Statistics on entrepreneurship

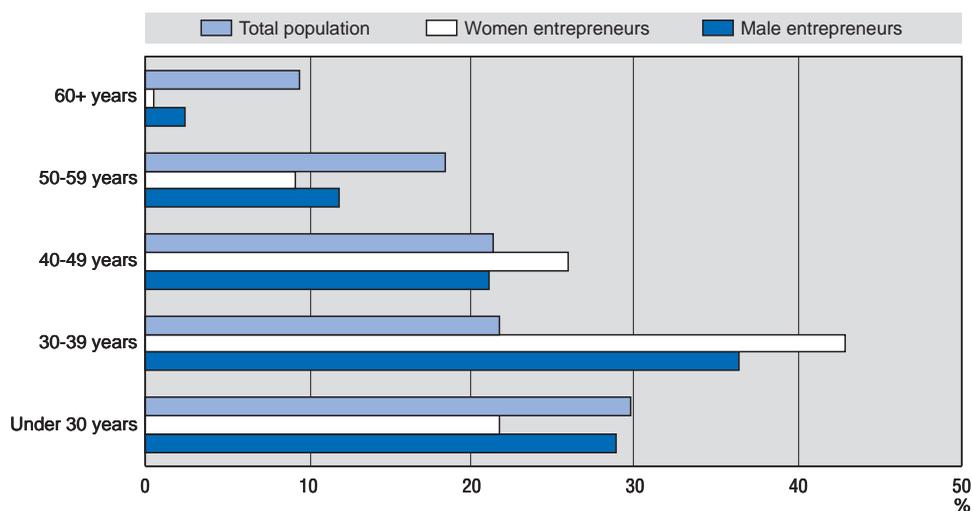
One of the important aspects of business dynamism concerns the entrepreneur responsible for the creation of a new firm. Typically, there is a strong link between a new enterprise and its owner – the entrepreneur – especially as the vast majority of new enterprises start up without any employees. To ensure that policies to create better framework conditions for new entrepreneurs have a sound basis, questions on the gender and age of the new entrepreneurs, their education and other competencies need to be informed by statistics.

An example of statistics on entrepreneurship can be found in recent work by Statistics Denmark (Boegh-Nielsen, 2002). By using and matching enterprise and personal data, Statistics Denmark has been able to develop a database containing information on individual entrepreneurs, including their competencies and qualifications. The database focuses on a number of indicators considered important for the performance of new enterprises, including the age of the entrepreneur; nationality; family status; number of children under seven years; highest level of education; total work experience; previous branch experience; entrepreneur's relation to the labour market the year before enterprise start-up; and gross income the year before enterprise start-up. An example of the type of indicators that can be derived from this work is shown in Figure 2.5.

Figure 2.5 compares the age profile of male and female entrepreneurs in Denmark to that of the population between 16 and 66 years old. It shows that more than 60% of the new entrepreneurs in Denmark are aged between 30 and 49. Many male entrepreneurs are under 30 years old, whereas a relatively large share of women entrepreneurs is between 30 and 39 years old. Relatively few women entrepreneurs are under 30, possibly due to reasons related to fertility. Women entrepreneurs are also relatively scarce among the oldest age classes, probably because the participation of these age classes in the labour market has been more limited.

The indicators developed by Statistics Denmark provide useful insights into the entrepreneurial process, which can be helpful for policy development. For example, the indicators suggest that in Denmark, relatively more women entrepreneurs start their business from unemployment or coming from outside the labour force. Male entrepreneurs, on the other hand, mainly start up from existing jobs. The Danish statistics also suggest that previous experience in a particular economic activity

Figure 2.5. **New entrepreneurs and the working-age population (16-66 years) in Denmark, broken down by age group**



Source: Boegh-Nielsen (2002).

(i.e. branch experience) is a crucial factor for raising the possibility of survival. New entrepreneurs starting up in the branch in which they were employed the year prior to start-up have a survival rate of 69%, compared with 51% for entrepreneurs with no previous branch experience. The Danish data also suggest that the age and education of entrepreneurs have an important impact on the likelihood of survival.

Statistics examining firm survival and failure

A second aspect of business dynamism relates to the factors influencing firm survival. Work in France on this topic is based on a special database of new firms (SINE: *Système d'Information sur les Nouvelles Entreprises*) that provides information on firms just after start-up, and then three and five years after start-up. This database provides several interesting details on the factors influencing survival. The French statistics show that the amount of initial capital invested in a new enterprise, as well as its size at start-up, are two of the key factors influencing success; large start-up firms are more likely to survive than small start-up firms. Moreover, the experience of the entrepreneur is an important factor in determining survival, confirming the Danish results discussed above. The French statistics also find evidence that assistance to unemployed starting a firm can help increase their chances of success (INSEE, 2000).

In Canada, analysis of the factors determining firm failure is based on a longitudinal database, that tracks both existing and newly created firms over time (Baldwin *et al.*, 2000). The Canadian results show, for example, that relatively large entrants have a higher likelihood of survival than small entrants. Moreover, entrants in industries with a relatively large firm size are more likely to survive than entrants in industries with predominantly small firms.

Analysis of firm survival for the United States also relies on longitudinal data (Headd, 2000). Major factors that influence the chances of success are having sufficient capital, having employees, having a good level of education, and starting for personal reasons (*e.g.* wanting to become one's own boss). Gender, race and age played only a small role in the likelihood of survival. New entrants in the retail trade sector were less likely to survive than in other sectors.

Analysis of firm survival in different countries has considered various factors such as firm size, firm age, capital intensity, innovation, productivity, and corporate governance structure (Ahn, 2001). Firm size and firm age are consistently important in explaining survival and growth of entrants. Smaller firms tend to have a lower likelihood of survival but higher rates of post-entry growth, while older firms showed lower failure rates and lower growth rates in most regression analyses. Hence, small new firms have both a low probability of survival in the early stages and a high probability of fast growth if they do survive.

The findings on survival suggest that a heterogeneous group of new entrants learn about their ability to survive and explore and adjust to the competitive environment. Each entrant starts business with a different initial size reflecting differences in their own perceived ability and expectation. Those that cannot compete are forced to exit, while successful survivors grow and try to adjust to the changing environment. The accumulation of experience and assets, in turn, strengthens survivors and lowers the likelihood of failure.

The available studies also show that the technological environment and the degree of market competition influence firm dynamics (Ahn, 2001). The pattern of firm dynamics evolves along the product life cycle reflecting different stages in market growth, scale economies, and the degree of competition. Major factors affecting firm dynamics include:

- *The innovative environment*: Regression analyses show that entrants are exposed to higher risks of failure in industries where small firms tend to have the innovative advantage. This is consistent with the prediction of the product life cycle model. Industries at the early stage of the product life cycle tend to show more turbulent firm dynamics with higher turnover rates.
- *Economies of scale*: In industries characterised by economies of scale, successful entrants would have to grow fast to reach a minimum efficient scale (MES). Regression analysis from several studies suggests that an industry-wide measure of MES is positively correlated to both the probability of exit and survivors' growth.

- *The competitive environment*: The observation that turnover rates are higher in more innovative environments seems consistent with more general findings that industries with higher entry rates also tend to have higher rates of failure. Firms in industries with higher capital intensity or higher innovative efforts (measured by R&D intensity or use of new technologies) tend to show higher failure rates, while an individual firm's capital intensity or innovative efforts appeared to be positively related with the firm's survival or growth.

The policy relevance of statistics on enterprise dynamism

Much of the interest in enterprise demography is linked to the assumption that countries that are more dynamic (*i.e.* experience better economic performance) have higher rates of firm turnover. Cross-country studies of firm creation provide evidence that there are indeed large differences in turnover, but do not demonstrate that countries that perform better, in terms of economic growth or productivity, also have the highest rate of firm turnover. Enterprise demography is relevant to policies to enhance business dynamism, however. Four findings are key:

1. First, enterprise demography demonstrates that business turnover is important and that entry and exit merit attention from policy makers. Even though many new firms will not survive or will stagnate at a small size, some new entrants (*i.e.* small firms) may turn into high-growth firms and contribute to greater economic dynamism. Moreover, the timely death of unproductive firms or of firms in markets that face declining consumer demand is fundamental to economic restructuring in market economies.
2. Second, enterprise demography points to a large variety in business dynamism in OECD countries, both across countries and across industries within a single country. Explaining this variety remains a task for further analysis, as this will contribute to understanding the policy factors that drive these differences.
3. Third, the findings suggest that differences in entry and exit rates across countries do not *by themselves* explain differences in business performance and growth. While attention for entry and exit is important, a better understanding of the growth of firms appears of even greater relevance for policies to enhance business performance.
4. Fourth, the findings show that the largest difference between Europe and the United States is not in the rate of firm creation, but in the growth of surviving firms (Scarpetta *et al.*, 2002). US firms start at a smaller scale than firms in Europe, but tend to grow faster if they survive. The US market thus appears to offer more scope for experimentation; many firms fail but some new entrants experience very high growth, providing a major contribution to overall growth and employment creation.

The last two findings suggest that a better understanding of the growth of firms is essential. Statistical development in this area mainly relies on longitudinal databases, which allow firms to be tracked over time. Factors explaining firm survival or failure can be integrated into these databases, enabling detailed examination of the links between such factors through econometric methods. The work on factors explaining survival in Canada, France and the United States are examples of such work, as is the work in Denmark focusing on the characteristics of entrepreneurs.

Analysis with longitudinal databases has also examined factors to enhance productivity growth, as a key driver of business dynamism (*e.g.* Bartelsman and Doms, 2000; Scarpetta *et al.*, 2002). While most productivity growth is due to productivity changes within existing firms, the analysis also shows that competitive effects, such as entry and exit of firms and changes in market shares, make an important contribution to overall productivity growth. Strategies to enhance productivity growth within firms must therefore be embedded in a competitive framework, where a process of “creative destruction” enables entry and exit, growth of successful firms, and failure of unsuccessful ones. Policies that unduly restrict this process risk lowering productivity growth. The firm-level analysis of productivity growth also suggests positive effects from ownership changes and the growth of firms, suggesting that policies should not unduly restrict the expansion and restructuring of firms.

Work with these longitudinal databases also raises new issues. The most important of these is the diversity in firm behaviour. Empirical studies suggest that most productivity growth is the result of growth within existing firms. The use of advanced technologies and investment in skills are often associated with productivity growth within firms, but firm-level studies also suggest that firms that adopt these technologies and invest in skills often already performed better than the average firm before they made these investments. This suggests the need for a better understanding of why some firms do well and why others fail. “Soft” factors, such as management and organisation, appear to play an important role and remain to be explored more fully by researchers.

While work with longitudinal databases is expanding rapidly, much of this work still primarily covers the manufacturing sector. Although some databases now include parts of the services sector, less work has been done on these data, partly because of measurement problems. Further work with firm-level data on services would be very important, however, as it would extend the analysis of microeconomic data to the largest part of the economy, thus improving the understanding of productivity growth at the macroeconomic level. As productivity growth in parts of the services sector has been more sluggish than in manufacturing, better understanding of the drivers of productivity in services would be very important.

Concluding remarks

To inform the policy debate on business dynamism and growth, there has been a growing demand from policy makers and researchers in OECD countries for better statistics on exit and entry, entrepreneurship, and the growth and decline of firms. This demand is currently being followed up by statistical offices and international organisations in several areas:

- *Statistics on enterprise demography.* Work is currently underway, at both Eurostat and the OECD, to make statistics on exit and entry more comparable across countries. OECD is working with Eurostat to help spread the methods developed by Eurostat to other OECD countries, which may lead to future internationally comparable statistics on enterprise demography.
- *Statistics on factors of success.* There is also growing interest in statistics on the factors of success, which would examine the determinants of firm survival and failure in more detail. Several approaches are possible in this area, as discussed above, and OECD is working with Eurostat to examine whether any of these would be feasible at the international level.
- *Analysis with longitudinal databases.* A substantial number of OECD countries currently maintain large-scale longitudinal databases that include information for a large number of firms over time. These databases are typically being used for research at the national level. OECD is currently working with several OECD countries that have such databases on a project on ICT and business performance, that will examine the impact of information and communications technology (ICT) in some detail. Since OECD does not have access to these databases – the data are typically confidential – its main role is to act as a forum for discussion and synthesis. In principle, this type of analysis can be carried out in other areas relevant to understanding business dynamism, *e.g.* the role of foreign enterprises.

The above suggests that several steps have been taken by statistical offices and international organisations to meet the demands of policy makers for better statistics and indicators on business dynamism. As a consequence, the available information on business dynamism is increasing rapidly. However, the development of internationally comparable statistics takes time and a substantial amount of work remains to be completed.

REFERENCES

- Ahn, S. (2001),
 “Firm Dynamics and Productivity Growth: A Review of Micro Evidence from OECD Countries”, *OECD Economics Department Working Paper*, No. 297, Paris.
- Baldwin, J., L. Bian, R. Dupuy and G. Gellatly (2000),
Failure Rates for New Canadian Firms: New Perspectives on Entry and Exit, Statistics Canada, Catalogue No. 61-526-XPE, Ottawa.
- Baldwin, J.R., D. Beckstead and A. Girard (2002),
 “The Importance of Entry to Canadian Manufacturing”, *STI Working Paper 2002/3*, OECD, Paris.
- Bartelsman, E.J. and M.G. Doms (2000),
 “Understanding Productivity: Lessons from Longitudinal Micro Data Sets”, *Journal of Economic Literature*, Vol. 38, September.
- Bartelsman, E.J., S. Scarpetta and F. Schivardi (2002),
 “Comparative Analysis of Firm Demographics and Survival: Micro-level Evidence for the OECD Countries”, *OECD Economics Department Working Papers*, forthcoming.
- Boegh Nielsen, P. (2002),
 “Statistics on New Enterprises, Entrepreneurs and Survival of Start-Ups: The Danish Experience”, *STI Working Paper 2002/7*, OECD, Paris.
- European Commission (2000),
 “Benchmarking Enterprise Policy”, SEC(2000)1842, Commission Staff Working Document.
- Geroski, P. (1995),
 “What Do We Know About Entry?”, *International Journal of Industrial Organization*, Vol. 13, No. 4, pp. 421-440.
- Headd, B. (2000),
 “Business Success: Factors Leading to Surviving and Closing Successfully”, *CES Discussion Paper 00-01*, Center for Economic Studies, Bureau of the Census, Washington, D.C.
- Hult, M. (2001),
 “Development of Statistics on Business Demography in the European Union”, Luxembourg, *mimeo*.
- INSEE (2000),
 “Création d’entreprises: les facteurs de survie”, *INSEE Première*, No. 703, March 2000.
- Luhtio, A. (2001),
 “Eurostat Work on Business Registers”, Luxembourg, *mimeo*.
- OECD (2001a),
 “Productivity and Firm Dynamics: Evidence from Microdata”, *OECD Economic Outlook*, No. 69, Paris.
- Reynolds, P.D., S.M. Camp, W.D. Bygrave, E. Autio and M. Hay (2001),
Global Entrepreneurship Monitor – 2001 Executive Report, Babson College/IBM/London Business School/Kauffman Center for Entrepreneurial Leadership.
- Scarpetta, S., P. Hemmings, T. Tressel and J. Woo (2002),
 “The Role of Policy and Institutions for Productivity and Firm Dynamics: Evidence from Micro and Industry Data”, *OECD Economics Department Working Paper*, No. 329, OECD, Paris.

Taxation, SMEs and Entrepreneurship

Introduction

Tax policy is one of the most potent policy instruments for governments to achieve dual objectives of equity and efficiency. Taxes are raised to finance public goods and services that are needed to support economic growth and provide economic opportunities to everyone. However, the burden of taxes can adversely affect economic growth by discouraging new investment, work effort, skill acquisitions and entrepreneurial incentives (Engen and Skinner, 1996). Thus, one of the key challenges facing governments is to design an efficient, fair and simple tax system that is conducive to economic growth.

As a general principle, tax systems should be as neutral as possible to minimise their distortionary effects on the economy. However, virtually all OECD governments use some form of tax measures to achieve certain economic and social objectives including fiscal incentives and tax breaks to the self-employed and SMEs to raise the level of entrepreneurship. This type of government support is based on the perception that the supply of entrepreneurship is insufficient, and that the self-employed and SMEs are important sources of entrepreneurship and innovation. While the market failures may justify the favourable tax treatment of entrepreneurs and SMEs, their benefits need to be carefully weighed against the costs of introducing tax distortions.

Taxes on self-employment

Taxation of individuals who are self-employed can affect levels of entrepreneurship in a number of ways. For instance, self-employed individuals who are involved in starting businesses are subject to personal income tax while their reinvested earnings in the firm could be subject to capital gains tax at the disposition of their assets. Moreover, if these individuals decide to incorporate their firms, then their retained earnings are taxed according to corporate tax rates and their distributed earnings are taxed according to personal tax rates in most countries. Generally speaking, small firms are owner-operated and subject to personal income tax while the earnings of incorporated SMEs are subject to corporate tax.

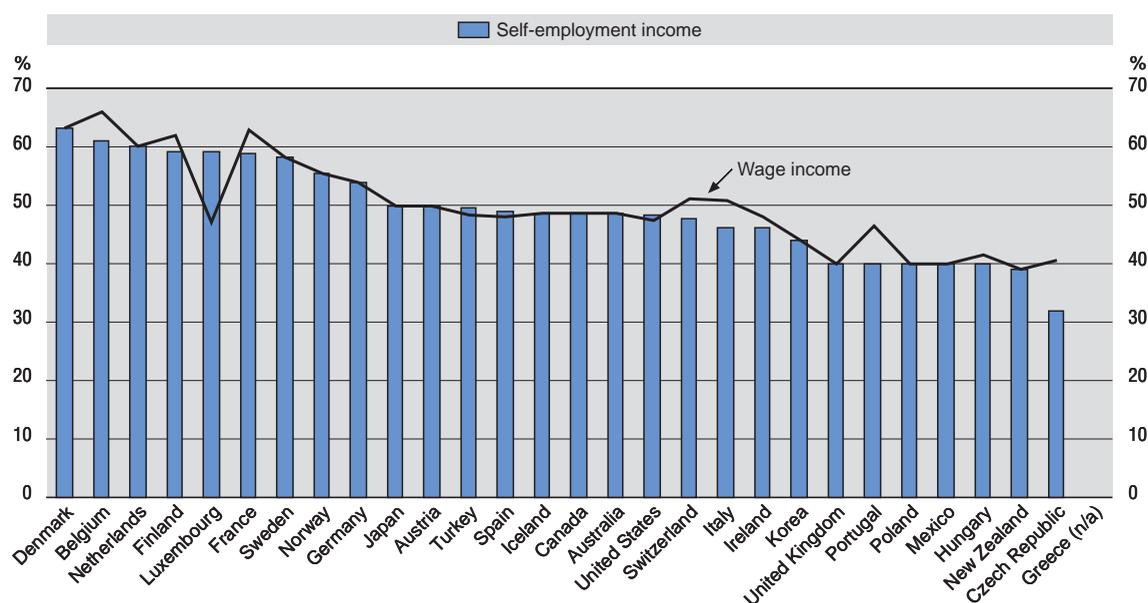
In most OECD countries, income from self-employment is taxed as ordinary income at a progressive personal income tax rate after deductions for business expenses. On the other hand, Denmark, Finland, Norway and Sweden operate dual income tax systems (DIT) where self-employment income is split into capital and labour components. Capital income is taxed at the single fixed capital income tax rate and labour income is subject to the progressive structure of the personal income tax system. This reflects a view in these small open economies that capital income is a more mobile tax base and thus needs to be taxed at a lower rate.

Studies generally find that lower personal income taxes can increase self-employment. Fairlie and Meyer (1999) observe that self-employment rose with decreasing tax rates in the United States in the 1980s. Several studies (Carroll *et al.*, 2001, 2000; Holtz-Eakin and Rosen, 2001) conclude that entrepreneurs responded positively to tax incentives in the United States in the 1980s. After controlling for firm survival, they found that lower marginal personal tax rates induced small enterprises to grow faster, hire more workers and make more investments in equipment and structures.

It is not only the level of tax rates, but tax structure may also influence the behaviour of potential entrepreneurs. Flatter structures may induce higher self-employment. There is a greater variability in the returns to self-employed than the returns to working for someone else, indicating that entrepreneurs may face a greater mobility in income distribution. Consequently, entrepreneurs are more sensitive to tax schedule and progressive income tax structure (Gentry and Hubbard, 2000). Increasing the progressivity of the tax system allows government to take a larger share of the pie as entrepreneurs become more successful thereby discouraging entrepreneurial entry.

Figure 2.6 compares top combined tax rates between employees and the self-employed where both are subject to taxes on labour income imposed by central governments and sub-central governments, surcharges as well as social security charges. A comparison of marginal combined tax rates between employees and the self-employed shows that there is no substantial difference between the two different categories of workers for most OECD countries. However, self-employed are effectively taxed at a lower rate in countries such as Nordic countries where business income of the self-employed is taxed at the capital income tax rate. Moreover, in some OECD countries, such as the Czech Republic, Greece, and Portugal, the self-employed face lower combined tax rates compared to employees due to the existing social security system favouring the self-employed and thereby providing a strong incentive to become self-employed. In fact, the contributions made by self-employed to the social security system amount to very little across OECD countries either due to the tax advantage inherent in the social security system or lower reported income by the self-employed. For instance, the self-employed in the OECD contribute roughly 7% of the social security system whereas they account for 15% of civilian employment.⁴

Figure 2.6. Marginal combined tax rates of top income earners, 2000



Note: Combined rates include taxes imposed by central and sub-central governments, surcharges and social security contributions. The rate for the capital component of income is 56.6% and 18% for Germany and Hungary respectively.
Source: OECD (2001).

4. Based on a sample of 22 OECD countries.

Certain features of taxation of the self-employed are believed to create loopholes which could lead to tax avoidance or evasion. First, the taxation of self-employment income is based on voluntary compliance whereas taxes on wages and salaries are withheld, leading to greater room for the self-employed to avoid or evade taxes. Second, personal expenses could be misreported as business expenses by the self-employed. Consequently, there is a greater scope for the self-employed to reduce their taxable income and receive personal benefits from these deductions.

These features of the tax system can encourage the self-employed to underreport their taxable income. However, the extent of underreporting varies across countries depending on the specific tax rules and the strength of the tax audit. Japanese evidence suggests that underreporting of income is more severe among the self-employed than wage earners (Dalsgaard and Kawagoe, 2000). Higher marginal tax rates are positively associated with tax evasion among the self-employed in the United States (Joulfaian and Rider, 1998). For some countries, the difference between income reported and actual income is estimated to be substantial, *e.g.* the actual income of the self-employed can be 50% higher than reported income in Korea (Dalsgaard, 2000a). In Mexico, the self-employed end up paying almost no tax, whereas 26% of the self-employed declared taxable income below the minimum wage in Portugal (Bronchi and Gomes-Santos, 2001; Dalsgaard, 2000b). These greater tax avoidance opportunities could induce individuals to become self-employed with increases in income tax rates (Bruce, 2000; Blau, 1987). Governments, therefore, need to take into account loopholes and possibilities for tax avoidance and evasion in designing tax policies to encourage entrepreneurship.

Corporate tax provisions for small firms

Corporate tax rates can influence investment decisions, financing decisions, as well as the choice of organisational form. Corporate tax rates which are below top marginal personal income tax rates – along with provisions for deferral of personal taxation through reinvestment of profits – can provide incentives for the self-employed to incorporate their businesses. A decrease in the rate of corporate tax increases the incentives for incorporation, *ceteris paribus*, and results in a lower level of self-employment than what it might otherwise be. This type of tax-induced changes in the form of organisation may trigger income shifting in the form of compensation without affecting the real activity. Ignoring the presence of market failures and externalities, such a tax system distorts the allocation of resources and ends up reducing economic efficiency. But at the same time, there are advantages associated with reduced tax rates for SMEs. They include increased after-tax earnings and thus a lower cost of equity funds, increased equity investment, reduced tax distortion in favour of debt.

Many OECD countries have lower tax rates for SMEs to foster their competitiveness (Table 2.1). These countries include Belgium, Canada, France, Germany, Ireland, Japan, Korea, Luxembourg, Mexico, the Netherlands, Portugal, Spain, the United Kingdom and the United States.⁵ These measures are often motivated by both efficiency and equity objectives. The efficiency objectives are based on the notion that small businesses are prone to market failure, for example, due to higher compliance costs with regulations associated with diseconomies of scale and reduced access to financing, necessitating government policy. The equity objectives are in part motivated by lower profits earned by SMEs.

Favourable corporate tax treatment of SMEs may encourage underreporting of income or lead entrepreneurs to divide businesses into separate corporations for tax purposes. Lower corporate tax rates which can help address market failures in the availability of SME finance, should perhaps be accompanied by anti-fragmentation rules to prevent larger firms from artificial tax-induced divisions. For example, the United Kingdom has special rules to prevent businesses from establishing very small companies in order to benefit from the 10% corporate tax rate. Canada also has “associated corporation” rules to address this issue.

Many OECD countries have special corporate tax provisions to help SMEs overcome impediments to start-up and growth, but these provisions do not necessarily counter the biases mentioned above.

5. The US allows profits and losses of S-type corporations to pass through to shareholders (*i.e.* taxes only at the personal level), thereby avoiding double taxation of corporate profits (Carroll and Joulfaian, 1997).

Table 2.1. Taxation of corporate income, 2000

	Central government corporate taxes			Combined tax rate ¹	Combined tax rate for SMEs ¹
	Basic	SMEs	Definition of SMEs		
Countries with lower tax rates for SMEs					
Belgium	40.2	28.84	Income below EUR 24 789	40.2	28.84
Canada ²	29.12	13.12	Income below CAD 200 000 ³	43.2	20.7
France	33.3	25	Profits below FRF 250 000	41.7	30
Greece	40	25	For limited partnerships	40	25
Ireland	24	12.5	Trading income below IEP 200 000	24	12.5
Japan	30	22	Income below JPY 8 million	40.9	33.3
Korea	28	16	Income below KRW 100 million	30.8	n.a.
Luxembourg	30	20	For low income	39.6	n.a.
Mexico	35	0-2.5 ⁴	Gross income below MXN 2.2 million ⁵	35	0-2.5
Netherlands	35	30	First NLG 50 000 of taxable income	35	30
Portugal	32	20	Turnover below PTE 30 million	35.2	n.a.
Spain	35	30	Turnover below ESP 250 million	35	30
United Kingdom	30	10-20	Profits up to GBP 10 000 and GBP 50 000 to GBP 300 000 ⁶	30	10-20
United States	35	15	Taxable income below USD 335 000 ⁷	39.5	n.a.
Countries with no special tax rates for SMEs					
Australia	34	..		34	..
Austria	34	..		34	..
Czech Republic	31	..		31	..
Denmark	32	..		32	..
Finland	29	..		29	..
Germany	40 ⁸	..		54	..
Hungary	18	..		18	..
Iceland	30	..		30	..
Italy	37	..		41.3-45.5 ⁹	..
New Zealand	33	..		33	..
Norway	28	..		28	..
Poland	30	..		30	..
Sweden	28	..		28	..
Switzerland	8.5	..		29.4	..
Turkey	33	..		44.1	..

1. Combined rates include surcharges and sub-central rates where applicable.

2. Canadian corporate tax rate reductions will see the federal basic tax rate fall to 22.12% by 2004 and the average combined tax rate decrease to about 32% by 2005.

3. For Canadian-controlled.

4. On gross income.

5. After a deduction of three times the minimum wage.

6. Graduated rates rising from 10% at GBP 10 000 to 20% at GBP 50 000. This rate rises further from 20% at GBP 300 000 to reach 30% basic rate at GBP 1.5 million.

7. Receive partial benefit from the graduated rates of 15% and 25% that apply to the first USD 75 000 of taxable income.

8. On retained profits. 30% on distributed profits. They are reduced to 25% in 2001.

9. Companies are subject to a regional tax on production activities (IRAP) at a rate of 4.25% for manufacturing firms and 8.5% for non-manufacturing firms.

Source: Ernst and Young (2001b); OECD (2001), National sources.

For example, in a recent tax package for small firms for 1999-2003, newly created SMEs in Korea receive 50% reductions in income and property tax payments for up to five years and are exempt from registration and transaction taxes for two years. A special 20% tax credit to small firms in the manufacturing sector is also available. Some countries have special tax provisions available for investments undertaken by small firms. For instance, SMEs in the Czech Republic can take advantage of a corporate income tax holiday for up to ten years in qualified investments in high-technology manufacturing. Japanese SMEs may take advantage of either an investment tax credit of 7% or an additional depreciation allowance of 30% for acquisition of qualifying machinery or equipment. Belgium allows more generous investment deductions for small businesses. Finland, Spain and the United Kingdom allow more generous depreciation allowances for investments made by small firms. Similarly, the United States permits additional expensing allowances to qualified property owned by small businesses under the section 179 expensing. Additional provisions include more generous or targeted tax credits for research and development (R&D) conducted by SMEs in Canada, Italy, Japan, Korea, the

Netherlands, Norway and the United Kingdom. Italy and the United Kingdom have R&D tax credits in place only for SMEs and are regarded as the most generous in this regard.

A number of countries have special provisions to increase the supply of equity financing to small firms. Australia, for instance, has special tax rates (15%-25%) for investment companies that provide equity to SMEs. Similarly, Turkey provides corporate tax exemptions to profits derived by risk capital investment funds or companies from transactions involving their operating portfolio. Capital gains realised by individuals in Canada on the disposition of qualified small business corporation shares qualify for a lifetime CAD 500 000 capital gains exemption. Moreover, individuals who acquire shares in Labour-Sponsored Venture Capital Corporations (LSVCCS), which provide capital to SMEs, receive a 15% federal tax credit on the first CAD 5 000 invested per year as well as provincial tax credits. The United States allows lower capital gains taxes on shares of small businesses purchased in an initial public offering (IPO) if those shares are held longer than five years (Mintz and Wilson, 2000). Canada and the United States also allow rollover of capital gains on eligible small business investments.

Some OECD countries have either value-added tax (VAT) exemptions or special VAT provisions for small businesses to lower their compliance costs and administrative burdens. Small businesses are exempt from VAT in most OECD countries including Canada, the Czech Republic, France, Germany, Greece, Ireland, Italy, Japan, New Zealand, Poland, Portugal and the United Kingdom. Other countries have introduced simplified VAT regimes. These provisions have lowered effective VAT rates below standard rates, particularly in Italy, Mexico and Sweden.

Despite special corporate tax provisions for SMEs in many countries, there are several features of the corporate tax system which discriminate against smaller firms. A particular problem for entrepreneurs is double taxation of dividends. Such double taxation occurs when income subject to corporate tax may also eventually be subject to additional personal taxes, either when profits are distributed in the form of dividends or when shares are sold (capital gains). Thus, taxes on both dividends and shares are relevant in the context of decisions concerning firm organisation.

In about half of OECD countries, top personal income tax rates are lower than effective taxes on dividends from SMEs as a result of incomplete integration of corporate and personal tax systems. The *classical system* in some OECD countries effectively imposes double taxation on dividends which discriminates against the corporate form of organisation (Box 2.2). Luxembourg, the Netherlands, Switzerland and the United States operate a pure classical system. Austria, Belgium, Hungary, Iceland,

Box 2.2. Corporate tax systems

Corporate tax systems in OECD countries can be characterised on the basis of their tax treatment of distributed profits (dividends) *vis-à-vis* retained profits.

Classical system: The company is subject to corporate tax while the shareholders are liable to personal income tax (or a withholding tax) on dividends. There is no attempt to relieve the shareholders for tax paid by the company. Thus, dividends are taxed twice under this system (*e.g.* Luxembourg, the Netherlands, Switzerland, the United States). But dividends are subject to a lower tax rate in some countries (*e.g.* Austria, Belgium, Iceland, Japan, Poland).

Imputation system: Part of the corporate tax paid on distributed profits is imputed to the shareholders and regarded as pre-payment of their personal income tax on dividends. Thus, shareholders are liable for the difference between their personal marginal rates of income tax and the rate of imputation (*e.g.* Australia, Finland, France, Mexico, New Zealand).

Partial credit system: The shareholder receives a partial credit for corporate tax paid on dividends against personal tax liability (*e.g.* Canada, Denmark, Korea, Portugal).

Partial deduction system: The company deducts from its corporate tax liability a fixed share of the withholding tax on dividends (*e.g.* Czech Republic).

Exemption system: Under this system, dividends are exempt from personal income tax (*e.g.* Greece).

Japan, Poland and Sweden also rely on a classical system, but apply a lower tax rate on dividends. Here, the self-employed may have greater scope to reduce their taxes by deducting their business expenses and underreporting their earnings through self-assessment thereby creating stronger incentives to remain self-employed. More neutral tax systems – such that an entrepreneur pays equivalent tax whether monetary rewards are drawn as wages/salaries or dividends – may be able to reduce this distortion, but this may be difficult to achieve without compromising other goals of the corporate tax system.

By the nature of their business, entrepreneurial firms undertake risks and sometimes incur losses. In a system that adheres to taxing economic income, profits and losses should be treated symmetrically so as not to discriminate against risk-taking, *i.e.* tax profits and provide tax refunds for losses. Moreover, the asymmetric treatment of operating losses in the corporate tax system may put start-ups and SMEs at a disadvantage since it may take years before they become profitable. However, it can also be argued that full loss offsets or rebates may prolong the life of less efficient and economically obsolete firms and tie up valuable capital. In practice, operating losses are carried backward and forward for a limited number of years in most OECD countries, whereas profits are always taxed without exception. Australia, Austria, Belgium, Germany, Italy, Luxembourg, New Zealand, Sweden, the United Kingdom allow losses to be carried forward indefinitely to be applied on future profits (Table 2.2). Some countries (Hungary, Italy, Korea and Spain) which do not have unlimited carrying forward provisions have more generous provisions for start-ups or SMEs. Provisions for carrying backward losses also exist in Canada, France, Germany, Ireland, Japan, the Netherlands, the United Kingdom and the United States.

Table 2.2. Treatment of operating losses

	Loss carry forward, years	Loss carry backward, years	Special provisions for start-ups and SMEs
Countries with unlimited loss carry forward			
Australia	Unlimited	0	
Austria	Unlimited	0	
Belgium	Unlimited	0	
Germany	Unlimited	1	
Ireland	Unlimited	1	
Luxembourg	Unlimited	0	
Netherlands	Unlimited	3	
New Zealand	Unlimited	0	
Sweden	Unlimited	0	
United Kingdom	Unlimited	1	
Countries with limited years of loss carry forward			
Canada	7	3	
Czech Republic	7	0	
Denmark	5	0	
Finland	10	0	
France	5	3	
Greece	5	0	
Hungary	5	0	Losses in the first four years of a start-up may be carried forward indefinitely.
Iceland	8	0	
Italy	5	0	Losses in the first three years of a start-up may be carried forward indefinitely.
Japan	5	1	
Korea	5	0	SMEs are allowed to carry back losses for one year.
Mexico	10	0	
Norway	10	0	Losses can be carried back two years if a business is terminated.
Poland	5	0	
Portugal	6	0	
Spain	10	0	For new start-ups, the ten-year period begins in their first profitable year for tax purposes.
Switzerland	7	0	
Turkey	5	0	
United States	20	2	

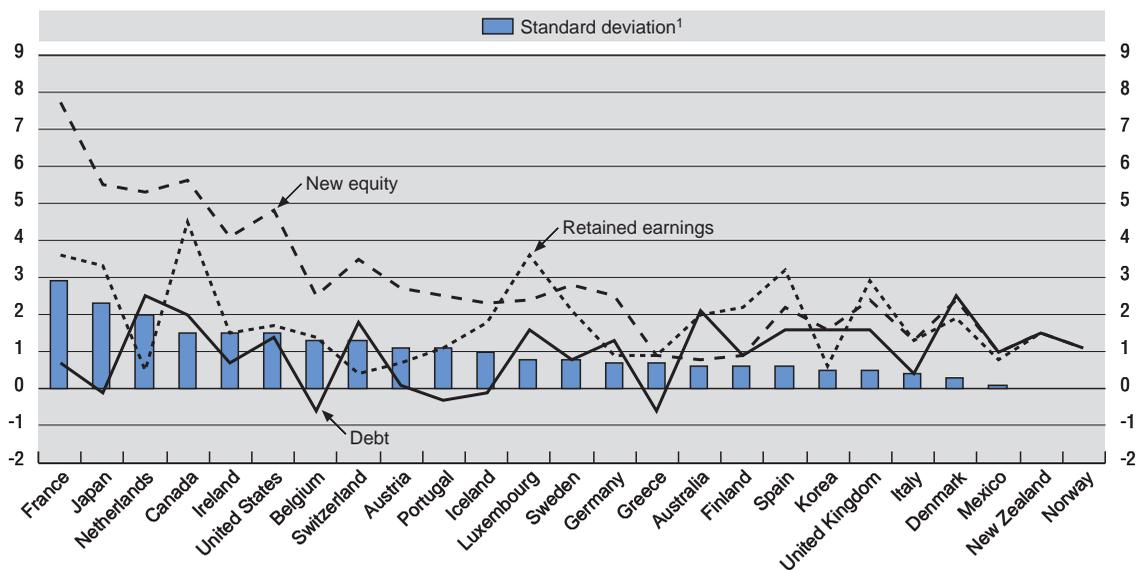
Source: Ernst and Young (2001b).

Tax systems may encourage debt-financing, which can discriminate against small firms that depend largely on equity financing. In the absence of taxes and transaction costs, the firm will be indifferent to the method by which it finances investment, since the value of the firm is independent of its financing choice – through retained profits, the issuance of new shares or borrowing (Modigliani and Miller, 1958). However, because of taxes, the value of a firm is generally *not* independent of the choice of financing method. Present tax systems in OECD countries tend to not be neutral towards corporate financing decisions. The standard deviation of the marginal effective tax rates across financing sources – a rough measure of the extent of non-neutrality in corporate financing decision – is above zero in all OECD countries, and particularly high in France, Japan and the Netherlands (Figure 2.7).

In most OECD countries, debt financing is typically preferred over equity financing based on the tax system for two reasons. First, corporate interest payments are tax deductible. Second, double taxation on distributed profits (first at corporate level and then at shareholder level) in some countries depresses the price of shares and discourages the issuance of shares (Lenain and Bartoszek, 2000). As a result, the cost of debt capital is generally lower than the cost of equity capital, encouraging corporations to finance their investments through debt. This form of non-neutrality may favour large and established firms, which have easier access to bank loans, and may discriminate against small firms, which have limited access to bank loans (Van den Noord and Heady, 2001). However, equity financing accounted for a larger share of corporate finance structure than debt, suggesting that there are other considerations than tax rules. These may include commitment of future cash flows associated with debt; information asymmetry between lenders and borrowers; and disincentives for managers to undertake a high debt load (Auerbach, 2001).

Furthermore, a higher tax burden on distributed profits (subject to both corporate and personal tax) than on retained profits in some OECD tax systems encourages firms to retain their earnings in lieu of distributing them as dividends. This tax preference for retention over distribution can make it more difficult for small firms and start-ups to finance their investments as they have limited supply of retained earnings.

Figure 2.7. Marginal effective tax wedges in manufacturing by sources of financing
Percentage, 1999



Note: See OECD (1991) for discussion on the methodology.
1. The standard deviation across financing instruments.
Source: Van den Noord and Heady (2001).

Capital gains taxes

Capital gains tax may affect the supply of entrepreneurial talent and of capital to start-ups. A substantial part of self-employed income may be reinvested in the firm and subject to capital gains tax (when the business is sold) rather than personal income tax at a later date. Moreover, the demand for entrepreneurs or alternatively the supply of capital to start-ups is potentially determined by the relative tax treatment of capital gains that investors (in particular, angel investors) might be able to receive, compared to after-tax returns they might expect from alternative investments such as receiving dividends by investing in larger firms. In general, start-ups are more likely to finance their growth with equity than with retained earnings.

Three general features of capital gains tax can discourage risk-taking activities. First, the absence of deductibility of losses from other sources of income imposes higher effective tax rates on risky investments in most countries. Second, most tax systems allow capital losses to be applied against future capital gains at zero implicit interest rates, *i.e.* the gains are fully shared by governments but not the losses. This asymmetric treatment of capital gains and losses may discourage risk-taking. Moreover, capital gains taxes may also result in double taxation of retained profits as there may be deferred dividends that are reflected in share values. Lastly, taxes on realised capital gains may create an incentive for asset holders to delay the sale of appreciated assets (referred to as the “*lock-in effect*”). This may tie up valuable assets which could have been used in a more productive manner by small firms.

The tax treatment of capital gains differs widely across OECD countries (Table 2.3). Some countries such as Belgium and New Zealand do not impose taxes on capital gains at either corporate or individual levels. A number of countries including Greece, Korea, Mexico, the Netherlands, Poland and Iceland do not have capital gains tax on shares held by individuals.

About one-third of OECD countries have capital gains tax rates which decline with the holding period. Spain, the United States, Australia, the United Kingdom, Austria, the Czech Republic, Denmark and Luxembourg have higher short-term rates for assets held by individuals. At the same time, short-term rates are higher for corporate assets in Italy, Luxembourg and Switzerland. The bias favouring longer-term assets is aimed at encouraging managers to make long-term investment decisions, but it can reinforce “*lock-in effects*” which may hinder the reallocation of capital towards start-ups and entrepreneurs. A tax-free rollover of capital gains can reduce the lock-in effect. For instance, Canada recently introduced a tax-free rollover of capital gains on qualified small business investments when they are reinvested in another small business. Similarly, the United States allows rollover of capital gains from the sale or exchange of small business stock if the proceeds are used to purchase other qualified small business stock within 60 days of the sale of the original stock. Capital gains and dividends are taxed differently in many OECD countries, thereby creating strong incentives for businesses to structure their organisations to minimise tax payments.

Combined taxes on entrepreneurial capital

A number of capital-related tax features in addition to capital gains taxes affect entrepreneurs and these differ widely by country. The marginal effective tax rates (METRs) on “*entrepreneurial capital*” are used here to summarise the impact of taxes on the return to investment. Taxes here include those on capital income at both corporate and personal levels as well as tax provisions such as investment tax credits and tax depreciation allowances. Using this measure, the effective tax rates on capital for small firms have declined in most countries since 1995 except France and Sweden (Figure 2.8).⁶ Ireland now

6. The reader should be cautioned that METRs are sensitive to various assumptions in their calculations such as economic depreciation, the real interest rate, the inflation rate and the share of different financing sources. This study assumes that investment in each country used the same financing structure. Moreover, some financing instruments receive a special tax treatment in some countries. For instance, equity funds financed by pension funds are not taxable at the individual level in some countries. These special features are not considered in this study. These various points imply that the METRs presented in this study could have been either overestimated or underestimated in some cases.

Table 2.3. Taxation of capital gains on shares, resident taxpayers, 2000

	Corporate		Individual	
	Short-term	Long-term	Short-term	Long-term
Countries with same capital gains tax rates on corporations and individuals				
Belgium	0	0	0	0
New Zealand	0	0	0	0
Ireland	20	20	20	20
Norway	28	28	28	28
Finland	29	29	29	29
Countries with lower tax rates on capital gains by corporations				
Hungary	18	18	20	20
Canada ^{1, 2}	27.9	27.9	31.3	31.3
Sweden	28	28	30	30
Turkey	30	30	50	50
Countries with lower tax rates on capital gains by individuals				
Greece	40	40	0	0
Korea	28	28	0	0
Mexico	35	35	0	0
Netherlands	35	35	0	0
Poland	30	30	0	0
Iceland	30	30	10	10
France	33.3	33.3	26	26
Japan	41	41	26	26
Countries with lower tax rates on longer-term investments				
Spain	35	35	40	18
United States ³	35	35	39.6	20
Australia	34	34	48.5	23.5
United Kingdom	30	30	40	10
Austria	34	34	50	0
Czech Republic	31	31	32	0
Portugal	32	32	10	0
Germany ⁴	25	25	53.8	0
Italy	37	27	12.5	12.5
Denmark	32	32	40	0
Luxembourg	30	0	25	0
Switzerland ¹	29.4	0	0	0

Note: Typical capital gains tax rate, but it may vary across different asset types. Holding periods for long-term assets differ across countries as do other conditions.

1. Includes both central and sub-central tax rates.

2. The inclusion rate was reduced from three-quarters to two-thirds after 27 February 2000 and was further reduced to one-half, effective 18 October 2000. The weighted average inclusion rate of 0.6458 was used. In 2002, the effective combined tax rate on capital gains realised by corporations and individuals would be 19.15% and 22.7%, respectively.

3. The long term rate on capital gains realised by individuals drops to 18% in 2001.

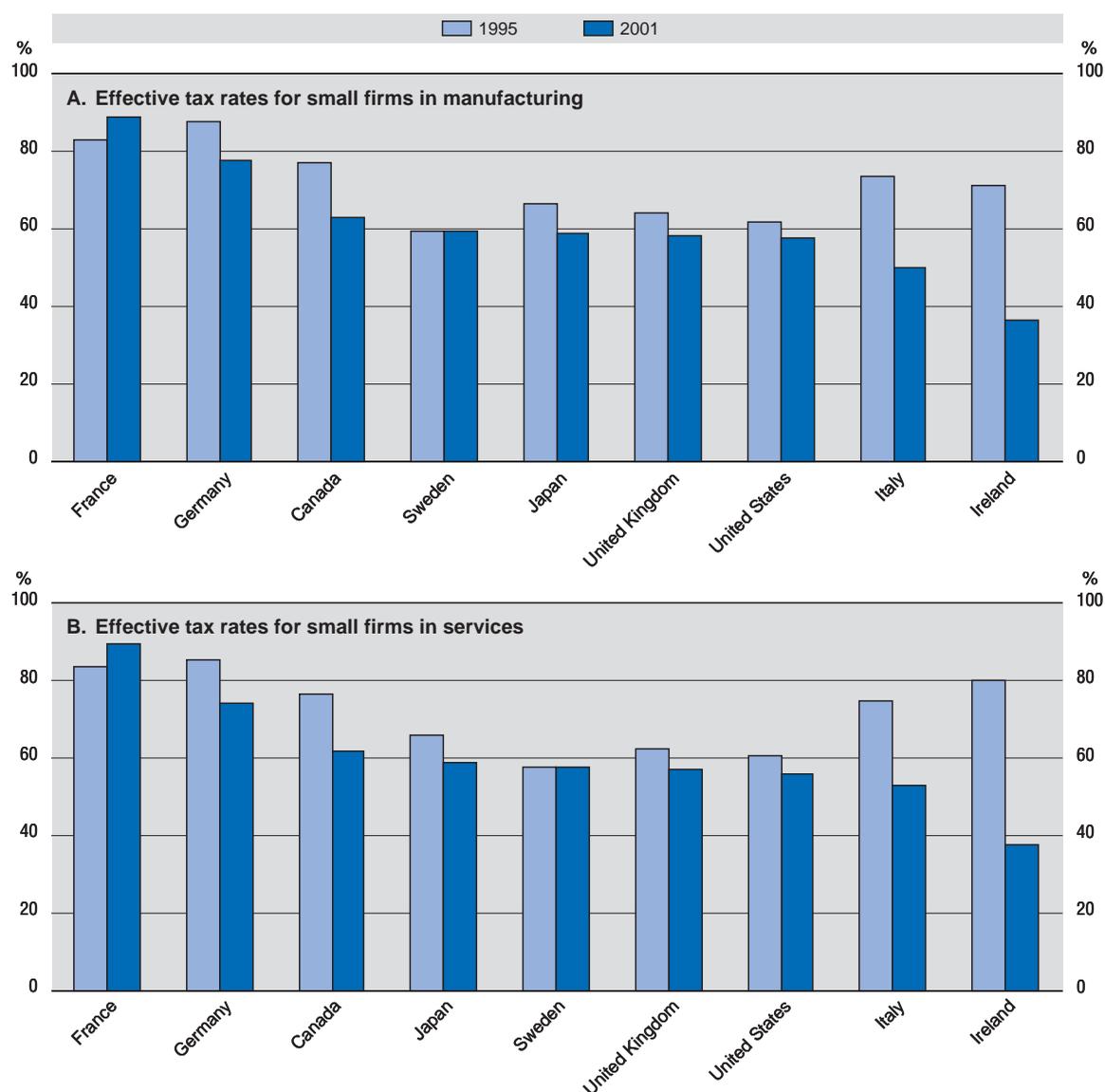
4. Starting 2002, corporate capital gains are exempt from tax if shares have been held for at least one year.

Source: Dalsgaard (2001), Ernst and Young (2001a; 2001b).

has the most favourable tax regime for entrepreneurial capital followed by Italy, the United States and the United Kingdom in both manufacturing and services. Small manufacturing and services firms face a lower METR than larger counterparts in Canada, Italy, Japan, the United Kingdom and the United States.

Policy issues

Fostering entrepreneurship and encouraging growth of SMEs are policy goals of many OECD governments. Streamlining tax-related administrative requirements and lowering compliance costs would encourage SME growth. In fact, a number of OECD countries have undertaken steps to reduce administrative and compliance costs. Australia, for instance, introduced a simplified tax system for small businesses to reduce paperwork and compliance burdens. Italy simplified and speeded up the refund procedure through the introduction of the *versamento unificato*. Hungary, Mexico, Portugal and Spain also have a simplified tax regime for small businesses.

Figure 2.8. Marginal effective capital tax rates for domestic investors: the small firm case^{1,2}

1. The marginal effective tax rate is the ratio of the tax wedge (sum of corporate and personal tax wedges) to the before-tax rate of return, where the tax wedge is the difference between before-tax and after-tax rate of return on capital. The tax rate here integrates the marginal effective corporate tax rate and marginal effective personal tax rate. The rates are calculated based on the assumption that all countries have the same financing structure, *i.e.* 100% equity financed in this case. See Chen, Lee and Mintz (2002) for methodology, data sources and estimates based on alternative financing structures.
2. Definition of small firms is not comparable across countries since it is based on the tax treatment in each country.

In general, many OECD countries have a more favourable tax treatment of small firms compared to large firms. This mainly stems from lower corporate tax rates for small businesses and special tax reliefs for them. However, these favourable tax treatments need to be accompanied by provisions to prevent artificial division of firms to take advantage of the tax situation. In addition, the governments need to enhance small firm financing by: *i)* examining ways to reduce tax biases against equity financing possibly by improving the integration of personal and corporate income tax systems; *ii)* enhancing loss carry-forward provision in corporate taxes to unprofitable start-ups; and *iii)* considering the merits of any capital gains tax bias favouring longer-term assets. However, any tax modifications should be considered in the context of their overall impacts on tax neutrality and effects on firms of all sizes.

REFERENCES

- Auerbach, A.J. (2001),
 "Taxation and Corporate Financial Policy", forthcoming in Auerbach, Alan J. and Martin Feldstein (eds.),
Handbook of Public Economics, Vol. III, North Holland, Amsterdam, the Netherlands.
- Blau, D.M. (1987),
 "A Time-Series Analysis of Self-Employment in the United States", *Journal of Political Economy*, Vol. 95, No. 3,
 pp. 445-467.
- Bronchi, C. and J.C. Gomes-Santos (2001),
 "Reforming the Tax System in Portugal", *Economics Department Working Papers* No. 302, OECD, Paris.
- Bruce, D. (2000),
 "Effects of the United States Tax System on Transitions into Self-Employment", *Labour Economics*, Vol. 7., No. 5,
 pp. 545-574.
- Carroll, R., D. Holtz-Eakin, M. Rider and H.S. Rosen (2000),
 "Entrepreneurs, Income Taxes, and Investment", in J.B. Slemrod, ed., *Does Atlas Shrug?*, Harvard University
 Press, Cambridge, MA, pp. 427-455.
- Carroll, R., D. Holtz-Eakin, M. Rider and H.S. Rosen (2001),
 "Personal Income Taxes and the Growth of Small Firms", in J. Poterba, ed., *Tax Policy and the Economy*, Vol. 15,
 MIT Press, Cambridge, M.A.
- Carroll, R. and D. Joulfaian (1997),
 "Taxes and Corporate Choice of Organizational Form", *Office of Tax Analysis Paper 73*, US Treasury Department,
 Washington, D.C.
- Chen, D., F.C. Lee and J. Mintz (2002),
 "Taxation, SMEs and Entrepreneurship", *STI Working Paper* No. 2002/9, OECD, Paris.
- Dalgaard, T. (2000a),
 "The Tax System in Korea: More Fairness and Less Complexity Required", *Economics Department Working Papers*
 No. 271, OECD, Paris.
- Dalgaard, T. (2000b),
 "The Tax System in Mexico: A Need for Strengthening the Revenue-Raising Capacity", *Economics Department*
Working Papers No. 233, OECD, Paris.
- Dalgaard, T. (2001),
 "The Tax System in New Zealand: An Appraisal and Options for Change", *Economics Department Working Papers*
 No. 281, OECD, Paris.
- Dalgaard, T. and M. Kawagoe (2000),
 "The Tax System in Japan: A Need for Comprehensive Reform", *Economics Department Working Papers* No. 231,
 OECD, Paris.
- Engen, E. and J. Skinner (1996),
 "Taxation and Economic Growth", *National Tax Journal*, Vol. 49, No. 4, pp. 617-642.
- Ernst and Young (2001a),
The Global Executive, New York.
- Ernst and Young (2001b),
Worldwide Corporate Tax Guide, New York.
- Fairlie, R.W. and B.D. Meyer (1999),
 "Trends in Self-Employment Among White and Black Men", *NBER Working Paper* No. 7182, Cambridge, MA.
- Gentry, W.M. and R.G. Hubbard (2000),
 "Tax Policy and Entrepreneurial Entry", *American Economic Review*, Vol. 90, No. 2, pp. 283-287.

- Holtz-Eakin, D. and H.S. Rosen (2001),
“Economic Policy and the Start-up, Survival, and Growth of Entrepreneurial Ventures”, *Office of Advocacy Contract Research* No. 206, US Small Business Administration, Washington, DC.
- Joulfaian, D. and M. Rider (1998),
“Differential Taxation and Tax Evasion by Small Business”, *National Tax Journal*, Vol. 51, No. 4, pp. 675-687.
- Lenain, P. and L. Bartoszek, 2000,
“The Polish Tax Reform”, *Economics Department Working Papers* No. 234, OECD, Paris.
- Mintz, J.M. and T.A. Wilson (2000),
“Capitalizing on Cuts to Capital Gains Taxes”, *C.D. Howe Institute Commentary*, No. 137, Toronto, Canada.
- Modigliani, F. and M.H. Miller (1958),
“The Cost of Capital, Corporation Finance, and the Theory of Investment”, *American Economic Review*, Vol. 48, pp. 261-297.
- OECD (2001),
The OECD Tax Database, OECD, Paris.
- Van Den Noord, P. and C. Heady (2001),
“Surveillance of Tax Policies: A Synthesis of Findings in Economic Surveys”, *Economics Department Working Papers* No. 303, OECD, Paris.

SMEs and Environmental Management

Introduction

Small and medium-sized enterprises (SMEs) comprise a vast and diverse set of firms in both manufacturing and service sectors. In manufacturing, SMEs can be found in pollution – and resource – intensive sectors as well as in relatively environmentally-benign sectors. Some small firms are environmental innovators, building on market niches in environment-related products and services. However, the majority of small enterprises are believed to have little environmental awareness. One study assessed various characteristics of SMEs which act as barriers to consideration of the environment as an important business issue (Hillary, 1999). These internal barriers to improved environmental performance are categorised as: *i*) awareness, *ii*) resources, and *iii*) attitudes (Table 2.4).

Environmental impacts of SMEs

Comprehensive pollution or resource consumption statistics for SMEs do not exist, making it difficult to determine their contribution to environmental degradation. In most OECD countries, statistics on SMEs do not tally with data collected on emissions, waste generation and effluents from firms so there is little hard data to determine the small firm contribution to pollution load or to make cross-country comparisons. However, studies which have been conducted at national level indicate that small firms do contribute significantly to both consumption of resources such as energy and to polluting emissions, depending on their branch of activity.

For example, in the Netherlands in 1995, small firms (fewer than 100 employees) were estimated to contribute 30% of total carbon dioxide (CO₂) emissions, 39% of chlorofluorocarbons (CFCs), 44% of nitrogen oxides (NO_x), 17% of sulphur dioxide (SO₂), 43% of waste and 53% of wastewater discharges (Hoevenagel and Wolters, 2000). In Canada, it was estimated in 1996 that establishments with fewer than 499 employees accounted for 53% of the manufacturing sector's purchased energy use. Principal

Table 2.4. **Internal barriers to environmental management in SMEs**

Awareness	Resources	Attitudes
Low awareness of environmental legislation.	Lack of time to investigate issues or locate support or tools.	Belief that SMEs have low environmental impacts.
Low awareness of environmental management systems.	Cost constraints on investment.	Environment given no status as a business issue.
Low awareness of support organisations and information sources.	Budget not allocated to address environmental issues.	Perception that environmental management has no relevance to the business.
	Lack of technical expertise to implement environmental management.	Inertia of top management and the desire to maintain status quo.
	No employee allocated responsibility for environmental issues.	Short-termism.
	Lack of investment in training.	Scepticism about the potential cost savings and market benefits of environmental management.

Source: Hillary (1999).

energy sources were natural gas and electricity and, to a lesser extent, coal. Among firms with fewer than 200 employees, the highest energy consumers were in the chemicals, non-metallic minerals and food industries (Peck and Associates, 1998).

A data set based on the United States was developed for this study to gain a better idea of the contribution of small firms to different pollution streams (Newman, 2001). Based on these data, small firms were estimated to account for 13% to 25% of the manufacturing sector's pollution emissions in the United States in 1997 (Table 2.5). Overall, SMEs contribute most (24%) to biological oxygen demand (BOD) in water and suspended particulates (22%) in air. Small firms account for 19% of the toxic chemicals released to air and 15% of those released to water and land. They account for 19% of the bio-accumulative metals released to air, 17% of those released to water and 18% of those released to land.

Table 2.5. **SME contribution to manufacturing pollution (United States)**

Air		Water	
Carbon Monoxide (CO)	13%	Biological Oxygen Demand (BOD)	24%
Sulphur Dioxide (SO ₂)	13%	Total Suspended Solids (TSS)	12%
Nitrogen Dioxide (NO ₂)	14%		
Volatile Organic Compounds (VOCs)	18%		
Total Suspended Particulates (PT)	22%		
Fine Particulates (PM10)	19%		
Toxic chemicals, released to:		Bio-accumulative metals, released to:	
Air	19%	Air	19%
Water	15%	Water	17%
Land	15%	Land	18%

Note: SMEs classified as firms with fewer than 500 employees.

Source: Newman (2001).

The contribution of particular manufacturing branches to the SME environmental impact varies by pollution stream. However, small firms in three branches are clearly the largest polluters: chemicals, primary metals and building materials (*e.g.* stone, clay and glass). The chemicals branch contributes the greatest share of nitrogen dioxide (NO₂), volatile organic compounds (VOCs), BOD, toxic chemicals and water-releases of bio-accumulative metals. Primary metals emit the most carbon monoxide (CO), total suspended particulates (TSS), and air- and land-releases of bio-accumulative metals. Building materials (principally cement manufacture) release the most sulphur dioxide (SO₂) and particulates to air.

SMEs and environmental policy

Among the environmental policy approaches now being implemented for small firms are: *i*) regulatory streamlining, *ii*) special regulatory provisions, *iii*) flexibility in compliance, *iv*) financial assistance, *v*) technical assistance, *vi*) aid in adopting environmental management systems, and *vii*) networking and mentoring.

Regulatory streamlining – Governments have undertaken efforts to make environmental regulations and compliance requirements easier to access and understand for smaller enterprises. In several OECD countries, environmental agencies must issue compliance rules and regulations written in plain language to help business understand how to comply with regulations that may have an effect on them. In the United States, agencies must also develop a programme for providing smaller firms with informed guidance on complying with applicable laws and regulations. In Belgium, SME *Centres* offer advice and simplified administrative procedures for regulatory compliance. In Denmark, a major effort has been made through the programme on *Simplifying the Administrative and Regulatory Business Environment* to ease the regulatory burden on small firms. Many OECD countries have set up “one-stop shops” to simplify and centralise the provision of government information to SMEs, including that pertaining to environmental regulations.

Governments have also established mechanisms for taking account of small firm abilities and characteristics when environmental regulations and directives are formulated. For example, in the United Kingdom, new regulations are subject to a Regulatory Impact Assessment which includes a *Small Business Litmus Test* to ensure that the burden on smaller enterprises will not be disproportionate. In the United States, the Environmental Protection Agency (EPA), as well as other federal agencies, are required by the *Regulatory Flexibility Act* and the *Small Business Regulatory Enforcement Fairness Act* to consider the impact on small businesses when promulgating rules and regulations. The US EPA has a *Small Business Ombudsman* among whose duties are: *i*) advocating for small business' needs, interests and concerns related to regulatory issues and relief inside the US EPA; *ii*) co-ordinating small business issues with programme offices, regions and states; and *iii*) participating in regulatory development work groups representing small business interests (US EPA 2000b).

Special regulatory provisions – Many OECD countries make specific allowances for small firms when developing environmental legislation, regulations and directives. These include explicit exemptions and special provisions for SMEs. The most common means of alleviating the regulatory burden on small firms is through: *i*) threshold limits, *e.g.* pollution emissions and waste generation amounts set at levels that limit the extent to which SMEs are subject to the regulation; *ii*) longer time periods for compliance for SMEs and reduced reporting requirements; and *iii*) rules that concentrate specific requirements in industry branches where large firms predominate or on industrial processes used mostly by larger firms. There are also cases where regulatory jurisdictions contain so many small firms that environmental legislation generally takes account of SME issues without the need for special provisions.

For example, the EU *Integrated Pollution Prevention and Control (IPPC) Directive* requires various industrial installations to have an operating permit, but specifies minimum capacities and processing throughputs, which in effect exempt smaller facilities. In the case of the production and processing of metals, facilities needing permits include hot-rolling mills with a capacity exceeding 20 tonnes of crude steel per hour, ferrous metal foundries with a production capacity exceeding 20 tonnes per day, and smelters with a melting capacity exceeding four tonnes per day for lead and cadmium or 20 tonnes per day for all other metals. In the United Kingdom, such provisions were estimated to apply to less than 5% of smaller operations nation-wide (Whalley, 2000). The UK *Integrated Pollution Control (IPC)* programme is based on the *Best Available Technique Not Entailing Excessive Cost (BATNEEC)* principle, which allows the economic situation of individual firms and especially smaller firms to be taken into account.

Threshold values which implicitly exempt SMEs from regulations can also be found in various sub-national entities. In Austria, for example, the state of Styria's heating installation regulation applies only to installations with an energy generating capacity greater than 25 kW, thereby excusing most smaller enterprises. In the United States, state regulations governing hazardous waste generation and transport are often enumerated according to the amount of hazardous waste generated which greatly alleviates the regulatory burden on smaller polluters, which are exempt from training, reporting, storage and other requirements (Table 2.6). Smaller firms may also have longer time periods for phasing in processes or procedures to comply with environmental regulations.

Compliance flexibility – Many OECD governments give a certain amount of flexibility and leniency to smaller firms in order to bring them into some degree of compliance with environmental regulations. One aim is to promote environmental compliance among small businesses by providing incentives for them to make use of compliance assistance programmes or compliance management systems or to participate in any activities that may increase their understanding of the environmental requirements with which they must comply. Thus, the government may waive or reduce penalties to which a small business might otherwise be subject if they participate in various compliance activities.

For example, the US EPA has a *Small Business Compliance Policy* intended to promote environmental compliance among small firms by providing incentives for voluntary discovery, prompt disclosure and correction of violations. Under this policy, EPA will eliminate or reduce civil penalties provided the small business satisfies certain criteria. It will waive or reduce the gravity component of civil penalties whenever a small business makes a good faith effort to comply with environmental requirements by: *i*) voluntarily discovering a violation, *ii*) promptly disclosing the violation within the required time

Table 2.6. **Hazardous waste regulation by waste levels (Nebraska, United States)**

Regulatory requirements	Conditionally Exempt Small Quantity Generator (CESQG)	Small Quantity Generator (SQG)	Large Quantity Generator (LQG)
Identify hazardous waste	Yes	Yes	Yes
Facility receiving waste	State approved or RCRA permitted	RCRA-permitted facility	RCRA-permitted facility
USEPA ID Number	Not required	Required	Required
RCRA personnel training	Not required	Familiarisation required	Required
DOT training	Required	Required	Required
Exception report	Not required	Required > 60 days	Required > 45 days
Biennial report	Not required	Not required	Required
On-site accumulation limits (without permit)	≤ 1 000 kg	≤ 6 000 kg	Any quantity
Accumulation time limits (without permit)	None	≤ 180 days or ≤ 270 days if 200 miles to disposal area	< 90 days + 30 days granted by USEPA
Storage requirements	None	Basic requirements with technical standards for containers or tanks	Full compliance with management of containers or tanks
Arrangements with local authorities	None	Required	Required
Emergency equipment and communications	None	Required	Required
Contingency plan	None	None	Required
Emergency coordinator	None	Required	Required
Telephone information	None	Post information by phone	In contingency plan
Use manifests	No	Yes	Yes

Source: Nebraska Department of Environmental Quality (2001).

period, and *iii*) expeditiously correcting the violation within the proper timeframe. To obtain the benefits, the facility must also meet criteria on violation history, lack of harm and criminal conduct. (USEPA, 2000a). Other SME programmes cover attorney fees and court costs under some circumstances to assist small firms when challenging environmental compliance (USEPA, 2000b).

Financial assistance – Governments have developed financing schemes to assist small firms in undertaking environmental improvement projects. These include grants, loans and loan guarantees. For example, through the *EU Growth and Environment Scheme*, the European Investment Fund offers a guarantee to financial institutions that grant loans to small firms for financing environmentally-friendly investments. The Scheme is directed to SMEs with up to 100 employees, with a special emphasis on companies with up to 50 employees. The guarantee is free of charge for the financial institution and the company. The Scheme was set up at the initiative of the European Parliament in order to facilitate access to debt finance for small businesses, to make SMEs sensitive to environmental issues when making investment decisions, to build a network of banks committed to environmental projects and to increase the general awareness of loan officers and financial institutions on environmental issues. To be eligible, a small firm investment must be: *i*) carried out by a company that produces environmental equipment or services (eco-industry), *ii*) generate significant environmental benefits, or *iii*) have a significant environmental impact, although not undertaken solely or primarily for environmental reasons.

Local governments also use financing to help small firms enhance environmental management. The Berlin Ministry of Urban Development and Environmental Protection has an *Environmental Improvement Programme for SMEs*, which offers companies grants of up to 50% of the total costs of implementing integrated environmental technologies that exceed statutory minimum standards. The South Coast Air Quality Management District (California) offers loan guarantees of between USD 15 000 and USD 250 000

to help SMEs achieve compliance with the District's emission reduction and clean air standards, particularly through compliance planning and implementation services. Another programme in California offers loan guarantees of between USD 20 000 and USD 150 000 to help SMEs finance hazardous waste reduction equipment and processes including source reduction methods, recycling measures or treatment measures. Sometimes financial assistance takes the form of support for new environment-related product or process development in SMEs. An example is the US EPA *Small Business Innovation Research* (SBIR) programme to fund development and commercialisation of new environmental technologies by small firms.

Technical assistance – Small firms rarely have a research department, an environmental staff or even an employee dedicated to environmental management. They generally depend on other firms, suppliers, and private or government research institutes for information about cleaner technologies and environmental issues. To address this gap, governments offer several varieties of technical assistance to help small firms comply with environmental regulations. These range from general how-to manuals and Web sites to local technical assistance centres and demonstration programmes.

SMEs are generally difficult to reach, mobilise and engage in environmental improvements, making information and communication programmes critical. Most national, state/provincial, and sometimes local, governments have hotlines and/or Web sites to lead SMEs to the resources they need to improve their environmental performance. One such clearinghouse of information is the US *Energy Star Small Business Program*. Its Web site contains information on generic areas for energy savings in manufacturing plants (such as motors and drives, steam systems and compressed air systems), energy-saving calculators, success stories, directories of energy services and products and financing providers, and links to industrial auditing self-training manuals.

Another scheme is the *Euro Info Centre (EIC) Network* in the European Union, which is composed of over 270 contact points providing information and assistance to SMEs throughout the 15 member states, Norway, Iceland, Switzerland, the countries of Central and Eastern Europe and the Mediterranean region. EICs can be located in Chambers of Commerce, banks or professional organisations, and offer information on EU legislation, programmes and initiatives, including in environmental areas. They develop information and training tools (e.g. *Eco-Management Guide*, *Integrated Management Guide*, *Packaging and Packaging Waste Guide*); enhance environmental awareness; organise training sessions and events to promote EU environmental policies, and disseminate best practices to smaller enterprises (ECOTEC, 2000).

Many OECD countries offer free or subsidised auditing and consulting services to SMEs to help them identify and implement opportunities for cleaner and more energy efficient processes and products. The US Department on Energy funds *Industrial Assessment Centers* (IAC) at 30 engineering schools across the United States. Teams of engineering faculty and students from these centres carry out free energy audits or industrial assessments and provide recommendations to nearby SMEs. There is a similar programme in Denmark which assists SMEs to employ energy/environment managers to perform audits, prepare investment projects and train staff. Several OECD countries also have programmes which offer guidance, workshops and training on specific environment-related technical issues for SMEs (Box 2.3).

Environmental management systems – Governments have initiated schemes to encourage small firm interest in and compliance with voluntary environmental standards and management systems. The International Organisation for Standardisation (ISO) 14000 series standards and the EU *Eco Management and Audit Scheme* (EMAS) set out common frameworks for companies to use in managing their environmental performance. ISO 14001 specifies the elements to be included in environmental management systems including: i) *environmental policy*, whereby firms are required to commit to pollution prevention, regulatory compliance and continual improvement, to provide a framework for setting (and reviewing) objectives, and to communicate the policy to employees; ii) a *planning* mechanism that addresses commitments, legal requirements, technological and financial options and the views of stakeholders; iii) *implementation and operational* procedures and work instructions to carry out plans; iv) procedures for *checking and corrective action*; and v) a system ensuring *management review*.

Box 2.3. Environmental technical assistance for SMEs

Australia – *Cleaner Production Demonstration Project*. This project aims to promote implementation of cleaner production technologies and processes in SMEs through hands-on demonstration of innovative techniques.

France – *Agence de l'Environnement et de la Maîtrise de l'Énergie (ADEME)*. A specialised agency which assists smaller enterprises to reduce usage of energy and raw materials, to limit waste production and maximise recovery and re-use of waste, to reduce noise pollution and to prevent and/or treat soil pollution.

Ireland – *Clean Technology Centre*. An independent, non-profit corporation supported by a combination of public and private sources to advise and assist industry and public authorities on the adoption of waste minimisation techniques, clean technologies and cleaner production methods.

Netherlands – *Cleaner Production Programme*. A programme to disseminate information and stimulate the utilisation of clean technology in smaller firms, focusing on foods, wood and furniture, printing, chemicals, rubber and plastics, building materials, metal products and motor vehicle sectors.

Norway – *GRIP Centre for Sustainable Production and Consumption*. A GRIP (Green Management in Practice) centre to stimulate adoption of innovative environmental management practices in the public and private sectors, particularly smaller firms, through information dissemination and demonstration.

United Kingdom – *Environmental Technology Best Practice Programme*. A scheme focusing on waste minimisation and the use of cleaner technologies through the dissemination of “good practice” guides in the foundry, textiles, paper and board, volatile organic compounds, glass, food and drink, chemicals, printing, metals finishing, ceramics, and plastics and packaging industries.

The ISO 14001 standard is voluntary and aimed at supporting management of environmental issues within companies. It does not, however, attest to companies' actual environmental performance and compliance with environmental regulations, nor does it mean that companies have been inspected to determine their environmental performance. EMAS has similar features plus additional requirements that firms: *i*) produce environmental statements and *ii*) have their systems and statements verified by independent accredited organisations (EEA, 1998).

Implementation of ISO 14001 and EMAS has been varied, with extensive use in some countries and industrial branches and little in others. Countries such as Japan, Germany, the United States and the United Kingdom lead in ISO 14001 certification, while EMAS is confined to European countries, again led by Germany. In Europe, chemicals, food, rubber and plastics and fabricated metals are the leading sectors in terms of EMAS certified firms. Few statistics exist on the number of small firms certified under these systems. However, a 1997 survey found that 9% of EMAS registered organisations were firms with fewer than 250 employees (Hillary *et al.*, 1998). About a quarter of EMAS registrations and a third of ISO 14 001 certifications in the United Kingdom are granted to SMEs (Hillary, 2000).

Environmental management certification and registration systems are difficult for many small firms to understand, adopt and use. They may be too complex and bureaucratic for typical SME managers. However, it has been suggested that this complexity is due more to inappropriate implementation by consultants rather than the actual requirements of the standards and regulations (Starkey, 2000). Moreover, environmental certification can be expensive (comprising personnel time, consultant costs and follow-up activities) and their benefits are not always apparent in terms of helping with environmental compliance, attracting and retaining customers, reducing costs or leading to improved products. As a result, many small firms do not see environmental management systems as a cost-effective way of enhancing their business (INEM, 1998; Starkey, 2000).

Governments use a range of programmes to encourage SME participation in ISO 14001 and EMAS. The EMAS programme itself encourages such support to smaller enterprises, and in some European countries (*e.g.* Germany) SMEs are the focus for EMAS support efforts. EMAS rules state that local

authorities, chambers of commerce and interested parties may provide assistance to SMEs in the identification of significant environmental impacts, which the SMEs may then use to define their environmental programme and management system. Six European countries promote SME participation in EMAS via grants. Other assistance measures include: pilot projects (five countries), general information (two countries), courses/seminars (two countries), training/education (two countries), implementation tools (two countries), low interest rate loans (one country) and a telephone help line (one country). Only three countries report not offering any EMAS assistance to small firms (Hillary *et al.*, 1998).

Networking and mentoring – The need of small firms for unbiased information concerning environmental issues, highly tailored to their specific situations, as well as government difficulties in reaching SMEs has spawned great interest in the use of industrial support networks. These networks involve intermediate organisations – such as trade associations, professional organisations, utilities, municipalities – and larger companies which act as sounding boards and advisers for smaller firms in the environmental realm. They are often in a better position than governments to build environmental awareness in SMEs, help with environmental management training, and advise on technical and financial matters (Hoevenagel and Wolters, 2000).

A recent EU research project on environmental innovations by SMEs showed that network involvement is a significant element in enabling small firms to make environmental progress. The study investigated the adoption of best-practice technologies in four sectors (offset printing, electroplating, textile finishing and industrial painting) in five countries: Denmark, Italy, the Netherlands, Portugal and the UK. It surveyed 500 SMEs with regard to their general business competence, environmental orientation and network involvement. In general, the more competent, environmentally-oriented and innovative firms tended to have a stronger involvement in networks. However, the study also found that networks cannot fully compensate for the weakness of individual SMEs and that policy-makers should attempt to increase the involvement of weaker firms in network schemes (Van Dijken *et al.*, 1999).

Mentoring relationships between large firms and smaller enterprises is another approach to environmental management capacity building. Corporate environmental leaders can transfer their expertise to those small and medium-sized businesses, either within their supply chain, customer base, industry sector, or community, who are interested in improved environmental performance through business-to-business mentoring. Mentoring can take a variety of formats: one-to-one, one-to-many, networking, within an industry, across several industries, within a supply chain, or on a particular environmental issue. The services can take many forms, including: site visits, telephone consulting, Web-based resources, resource library, workshops, networking events, printed guides, checklists and handbooks.

From a policy viewpoint, it is important to know which kinds of networks are useful in which situations. Intermediate organisations have differing roles depending on the environmental issue (*e.g.* energy savings vs. waste prevention) and the industrial sector. One example of an environment-specific mentoring programme is that of the US Institute for Corporate Environmental Mentoring (ICEM), which operates *The Mentor Center*, funded in part through an EPA co-operative agreement with the National Environmental Education and Training Foundation. The Australian government has signed 21 *Eco-Efficiency Agreements* with industry associations to encourage both large and small firms in specific sectors to implement environmental management systems.

Conclusions

There are many different types of small firms that vary widely in their degree of environmental awareness. Similarly, there are a number of policy approaches which governments can adopt to enhance environmental management in SMEs. Attempts have been made to match different types of policy instruments to different types of companies (Hennicke, 1998). Firms can be characterised by their particular strengths and weaknesses, and case studies suggest that environmental policy approaches should be targeted to these strengths. Policy-makers should develop strategies with distinct profiles and priorities in mind for target groups of small firms. This requires a variety of programmes and instruments as well as actors on different levels in order to enlarge the perceived incentives.

Table 2.7. Matching environmental policy instruments to SME types

	Environmentally High-Profile SMEs	Environmentally-aware SMEs	Environmentally-capable SMEs	Environmentally-constrained SMEs
Information programmes	L	L	H	M
Compliance flexibility	H	M	M	L
Financial assistance	L	L	M	H
Technical assistance	L	H	L	H
EMAS/ISO 14001	L	M	H	L
Networking/Mentoring	M	M	H	M

Note: H (high impact), M (medium impact), L (low impact).

Source: OECD.

Four types of small firms with different environmental profiles have been identified and an attempt has been made to match these firms to the most effective policy approaches (Table 2.7). A main barrier to overcome is that most SMEs do not believe environmental investments or environmental management is in their best interest. Information programmes and networking/mentoring to increase awareness and support among small firms for environmental causes is therefore a priority. Selling the idea that environmental management can save money, reduce costs and increase efficiency can be a useful approach to firms which are concerned with the financial bottom line. The four SME environmental profiles are:

- **Environmentally high-profile SMEs** – These are small companies which give environmental goals and energy efficiency a high priority. They focus on environmental management as a business strategy, largely to improve their image with customers or to serve environmental market niches. They are often active in networks, searching for new ideas. These companies are likely to implement environmental management systems on their own, but would appreciate greater flexibility in complying with environmental regulations as a reward for their efforts. They would also benefit from programmes to expand networks and mentoring systems.
- **Environmentally-aware SMEs** – These are small companies where managers value environmental goals but have difficulties devising and implementing technical solutions. Decisions to implement environmental management may be new or the company has difficulties building up technical capabilities. These companies benefit most from technical assistance programmes such as environmental audits, best practice programmes and practical demonstrations. They would also profit from assistance in implementing certification systems such as EMAS and ISO as well as from mentoring by more technically-competent firms.
- **Environmentally-capable SMEs** – These are small companies where management commitment to the environment is limited, but which nevertheless have technical capabilities and staff resources to implement environmental solutions. Managers tend to be passive with regard to environmental goals. The best approach here is general pressure on management to foster the idea that environmental issues will become increasingly more important. This could be accomplished through information dissemination, encouragement to become environmentally certified, and especially through networking and mentoring with other companies.
- **Environmentally-constrained SMEs** – These are small companies which lack both the organisational and technical know-how to adopt environmental management approaches. They may be the most predominant type of small firm. Information on environmental issues and their importance is useful. However, financial and technical assistance may be the most direct drivers to enhance their environmental performance.

REFERENCES

- ECOTEC (2000),
Report on SMEs and the Environment, for the European Commission, Directorate General Environment.
- European Environment Agency (EEA) (1998),
Environmental Management Tools for SMEs – A Handbook: Environmental Issues, Series No. 10.
- Hennicke, P. et al. (1998),
Interdisciplinary Analysis of Successful Implementation of Energy Efficiency in the Industrial, Commercial and Service Sector, research project for the European Commission.
- Hillary, R., M. Gelber, V. Biondi and M. Tamborra (1998),
An Assessment of the Implementation Status of Council Regulation (No. 1836/93) Eco-Management and Audit Scheme in the Member States (AIMS-EMAS), for European Commission DG XI.
- Hillary, R. (1999),
Evaluation of Study Reports on the Barriers, Opportunities and Drivers for Small and Medium Sized Enterprises in the Adoption of Environmental Management Systems for UK Department of Trade and Industry.
- Hillary, R., ed. (2000),
Small and Medium-Sized Enterprises and the Environment: Business Imperatives, Greenleaf Publishing, Sheffield, UK.
- Hoevenagel, R. and T. Wolters (2000),
“Small and Medium-Sized Enterprises, Environmental Policies and the Supporting Role of Intermediate Organisations in the Netherlands”, *Greener Management International*, Issue 30.
- International Network for Environmental Management (INEM) (1998),
“Environmental Management Experts Identify Obstacles to ISO 14001 Implementation in SMEs and Suggest Ways to Overcome Them”.
- Newman, J. (2001),
“Small and Medium-Sized Manufacturers and Environmental Management”, study prepared for the OECD Directorate for Science, Technology and Industry.
- OECD (2001),
Encouraging Environmental Management in Industry, STI Business and Industry Policy Forum Series.
- Peck and Associates (1998),
Manufacturing Small to Medium-Sized Enterprises and Climate Change: A Review of Status, Barriers and Opportunities.
- Starkey, R. (2000),
“Environmental Management Tools: Some Options for Small and Medium-sized Industries,” *Small and Medium-Sized Enterprises and the Environment: Business Imperatives*, R. Hillary, ed., Greenleaf Publishing, Sheffield, UK.
- US EPA (2000),
Environmental Assistance Services for Small Businesses: A Resource Guide, EAP 231B-00-001.
- Van Dijken et al. (1999),
Adoption of Environmental Innovations, Dordrecht, Netherlands/Boston, MA/London: Kluwer Academic Publishers.
- Whalley, S. (2000),
“What are the ‘Appropriate’ Systems for Assessing Environmental Risks and Performance in Small Businesses?,” *Small and Medium-Sized Enterprises and the Environment: Business Imperatives*, R. Hillary, ed., Greenleaf Publishing, Sheffield, UK.

Global Industrial Restructuring: Implications for SMEs⁷

Industrial restructuring is characterised by the increasing specialisation of firms and their extensive outsourcing strategies (OECD, 2001a). Facing global competition, rapid changes in technologies, evolving market conditions, and rising research and development (R&D) costs, firms are pursuing specialisation, focusing on their core competencies and outsourcing their non-core businesses. Although specialisation and the pursuit of niche markets have been a key strategy for high-growth small and medium-sized enterprises (SMEs), the fiercer competitive environment since the 1990s has pushed firms of all sizes towards organisational restructuring. For example, Nokia (Finland), the top mobile telephone manufacturer which supplies one-third of the world market, transformed itself from a conglomerate producing paper and other materials into a telecommunications company in the early 1990s. Many multinational enterprises (MNEs) are reorganising into group-type structures consisting of highly specialised business units.

As firms pursue specialisation and seek external complementary resources to compete in global markets, more small firms have become involved in international business networks. The global restructuring trend can have negative impacts on (less competitive) small firms, including greater exposure to fierce international competition and substantial adjustment costs. Industrial restructuring through various types of business linkages, especially cross-border alliances and mergers and acquisitions (M&As), may accelerate concentration and consolidation of products and services suppliers at a global level. On the other hand, it has also opened up international business opportunities for SMEs with quality tangible and intangible assets, such as niche products and services, advanced technologies and market knowledge.

Driving forces

Commercial consideration

Intensified global competition in many manufacturing and service sectors has been a major factor in industrial restructuring. Many cross-border alliances and mergers are aimed at opening up markets and pooling resources to confront competitors. Large multinationals entering foreign markets have sought access to intangible assets, such as in-depth knowledge of local markets and customers, through partnering or acquiring small firms. Since many services require substantial investments to establish a critical mass in targeted markets, forming alliances with local SMEs to exploit their customer base and market knowledge is a viable option for new entrants. Thus, many smaller firms with strengths in local markets have become globalised through joining forces with MNEs in sectors ranging from telecommunications to financial services including real estate management.

Local sourcing by multinationals is also pulling SMEs into cross-border business arrangements. Large manufacturing firms in automobiles, electronics and other sectors are pushing their domestic suppliers to establish international supply networks. They are also seeking localised supply sources. Firms may choose national sourcing owing to local content requirements, but also because geographical

7. This chapter is based on "Global Industrial Restructuring: Implications for Small Firms" (STI Working Paper 2002/4, available at www.oecd.org/sti/working-papers) in which more detailed discussion on strategic alliances by sector (software, pharmaceuticals, telecommunications, computer-related services, wholesale trade and finance) can be found.

proximity with suppliers facilitates just-in-time delivery of components. In order to maximise the overall efficiency of production, MNEs may purchase parts, inputs and services from indigenous small firms through long-term agreements. Most business services, particularly those based on information and communications technologies (ICT), require a local presence and this has provided business opportunities for SMEs.

Alliances with large international distributors, such as trading companies and cargo delivery services, have united some smaller firms in global distribution networks (Box 2.4). Small developers and manufacturers of unique products can exploit the strong brand names and large sales forces of MNEs by providing them with exclusive marketing rights. This has often been the case in the software and pharmaceuticals sectors. Being a major supplier for highly globalised sectors, such as automobiles and telecommunications, assures small manufacturers a larger scale of marketing and distribution.

SMEs also benefit from their cross-border alliances in terms of financing. SMEs involved in costly research activities, such as biotechnology part-ups and software companies, can trade their technological expertise to larger firms in return for investments in current R&D projects as well as for future breakthroughs. In the pharmaceuticals sector, large multinational drug companies have provided substantial sums to smaller firms through minority equity purchase of these promising ventures or through one-off payments for a particular research activity. In the United States, smaller firms in telecommunications, energy/environmental systems, computer software and hardware, and biotechnology/biomedical fields are receiving seed capital through strategic partnering with international firms (Carayannis *et al.*, 2000). Corporate venturing is becoming a major source of funds for small, high-technology firms and an entry point to global alliances and markets.

Box 2.4. Export through alliance with a trading company

Oo-oka corporation (Japan) is a small gears manufacturer with 200 employees specialised in those for automobile manual transmissions. While operating two factories in Japan, the company has no overseas sales force. The company exports through a long-term sales/marketing alliance with *Kanematsu*, a Japanese trading company with 700 employees. *Kanematsu*, trading in more than 40 countries, has aggressively promoted small firms' high-quality products worldwide for years, and the *Oo-oka-Kanematsu* alliance started more than 15 years ago. The strength of *Oo-oka* products (*i.e.* gears) includes durability, small size and smooth shift feel. The alliance has won supply contracts with major automobile producers, including General Motors (United States), DaimlerChrysler and Volkswagen (both Germany).

The two allied companies have a shared goal: JPY 5 billion (USD 40 million) world-wide sales by 2005. A major supply order was received from Peugeot Citroen Automobiles SA (France) in August 2001, for the purchase of 400 000 six-speed gears (valued at USD 2.5 million) per year. The alliance continues to seek export opportunities in the global market and expand sales of this small company manufacturing high-quality products.

Technology factors

Technology is driving the internationalisation of small and large firms in different ways, owing to the growing ease of communications and the high cost of research and development. New communication tools such as the Internet have reduced the costs of establishing co-operative linkages with other firms and enable companies to reach potential business partners beyond their national borders. It can also provide a powerful means to increase visibility and promote unique products and technologies in global on-line markets. These tools allow cross-border joint R&D projects to be managed in a feasible and efficient way. Firms in different locations can share know-how, information, distribution networks and other assets simultaneously. They can adopt and adapt without delay another firm's knowledge assets, such as new product designs and ideas. Rapid ICT advances have created a more favourable business environment for partnerships and spurred growth in international strategic alliances.

At the same time, the soaring costs of research and development, coupled with the uncertainties of technological change, force firms to co-operate in global markets in order to share resources and risks for developing new products (Duysters *et al.*, 1998). For example, high R&D costs for developing new generations of drugs are a major driving force behind recent alliances in the pharmaceuticals sector. Technology-related alliances among firms are generally aimed at gaining economies of scale and scope in R&D. Many smaller companies and laboratories need capital to maintain their technological advantage in specific fields. This has prompted alliances between well-capitalised larger companies and smaller firms with unique skills or technologies, as in the biotechnology sector.

The growing complexity of technology commonly requires firms to co-operate with others in different sectors (OECD, 2000a). Even the large leading firms in an industry cannot have expertise in all fields, so that successful innovation requires mutual learning through co-operative networks, often involving small technology-based firms. Technological change also tends to shorten product life cycles, and small innovative firms with niche products, which can better respond to rapid change in technology and customer needs, are involved in cross-border alliances. In the software sector, the dominance of small software developers will be accelerated by the move to component-based software and higher specialisation; this, in turn, will foster more strategic alliances and further globalisation of software supply (Nowak and Grantham, 2000). Pharmaceutical companies use alliances to outsource a major share of R&D and clinical testing of new drugs in order to accelerate needed product breakthroughs.

Technological change creates new markets and business opportunities. The recent surge of alliances in the telecommunications, media and information industries reflects efforts to capture new markets created by the growth of the Internet and mobile telephony and to provide more integrated global services. An increasing number of firms have entered into on-line businesses, including business-to-business (B2B) and business-to-consumer (B2C) electronic commerce. Small firms specialised in Internet support services, such as Web page design and system development for electronic transactions, have joined international alliances as technological partners. Growing Internet services have also raised new technological challenges, such as on-line copyright protection, allowing small firms to become leaders in this specialised field (Box 2.5).

Cross-border R&D alliances are also effective for developing global product and system standards with potential competitors. In high-technology sectors, such as electronics and information technology,

Box 2.5. **New technology and SME globalisation**

InterTrust Technologies (United States) is a leading small developer (190 employees) of a general purpose digital rights management (DRM) platform. This platform serves as a technological foundation for providers of digital information, including music, video, software, games and publications. Competing with large software companies in the segment, the company holds numerous patents in the area of trusted systems technology and peer-to-peer rights management, and it licences its DRM technologies in the form of software and hardware. The company and its partners offer on-line digital information services and applications, and collectively form a global commerce system, the MetaTrust Utility, through which InterTrust receives licensing fees from its partners.

The company maintains more than 40 domestic (United States) and cross-border alliance partners, including AmericaOnline (AOL), Universal Music Group, Compaq, Texas Instruments (all US firms), Sony, Mitsubishi (both Japanese), Nokia (Finland), Philips (Netherlands) and Samsung (Korea). As on-line free file-swapping services, such as music downloading offered through Napster (United States), have faced legal complaints from intellectual property owners, *e.g.* big record labels, software firms see on-line copyright protection as a business opportunity. For example, in April 2001, RealNetworks (United States), a software company with 1 000 employees, established a joint venture to create a platform for on-line music subscription services with AOL, EMI (United States) and Bertelsmann AG (Germany). Other computer giants, such as Microsoft and IBM, have incorporated copyright protection schemes into their products, and smaller firms, like InterTrust, have also tried to get ahead in copyright protection technologies.

the formation of alliances tends to be cyclical. The early stages of new technological systems, during which time no dominant design or standards exist, are characterised by uncertainty and large numbers of strategic alliances. Later, as a dominant design emerges and economies of scale and standardisation become more evident, the number of co-operative ventures diminishes (Pyka, 2000). Creating a new global product standard and holding a patent increases the long-term prosperity of firms in high-technology sectors, regardless of their size. Once a breakthrough product or system (and a possible candidate for a new global standard) is developed, an allied company, including small firms, can exploit its partners' assets, including its sales and marketing networks.

Policy framework

Market liberalisation and deregulation across the OECD area are accelerating the process of industrial globalisation. As globalisation heightens the interdependency and inter-linkage of economies, cross-border business collaboration and partial foreign ownership of national enterprises are becoming the norm (OECD, 2001a). Regulatory reform in regulated industries, such as telecommunications and finance, plays an important role in the increase in global alliances by creating new markets and business opportunities.

Integration of regional markets in Europe and North America has encouraged firms to expand their operations geographically, leading to new sales and marketing alliances. Joining a winning network or alliance at global level is becoming crucial to the survival of large and small firms in a number of sectors. In particular, the introduction of the euro may accelerate alliance formation throughout the euro area. The euro has reduced exchange rate risk and transaction costs across the European Union, supporting trade and business expansion. It has increased price transparency in the euro area, thereby enhancing competition and promoting industrial restructuring. It may also promote more co-operative research and development activities among European partners.

Globalisation and liberalisation are prompting changes in corporate governance that facilitate cross-border alliances in a broader range of countries. Some countries (*e.g.* Japan, Korea, France, Germany) previously had more tightly knit corporate governance regimes based on close relations with other firms, suppliers and banks, and were characterised by higher levels of cross shareholdings. There is now a trend towards more widely dispersed ownership and greater transparency. While changes in corporate governance are increasing the responsiveness and flexibility of large firms, they also raise the level of competition in product markets with effects on smaller suppliers. Restructuring of MNEs and their established supply chains has led small suppliers to diversify their business partners, both at national and international levels. For example, Nissan, the third carmaker in Japan has sold all cross-held shares of all but four affiliated suppliers and demanded price reductions of 20% by 2002. While some smaller suppliers closed, most medium-sized and larger suppliers (with 1 000 employees on average) formed alliances or merged with their equivalents to improve production efficiency and enter foreign markets.

SMEs and global restructuring

Many SMEs are becoming increasingly globalised, although some continue to focus on local markets. About one-fifth of manufacturing SMEs in OECD countries draw between 10% and 40% of their turnover from cross-border activities. SMEs contribute between 25% and 35% of world manufactured exports and account for a smaller share of foreign direct investment (FDI) (OECD, 1996, 2000b). As large MNEs outsource various business activities both in manufacturing and in business services, small firms gain growing business opportunities. In addition, networking among themselves and with larger firms allows SMEs to overcome size constraints and go global.

While some small firms seek larger business partners to exploit the latter's international market reach, services coverage and brand names, other SMEs, especially those knowledge-based in ICT and biochemical sectors, have increasingly been approached by large MNEs. Many large firms are now willing to pay for small firms' intellectual properties, such as leading-edge technologies, market knowledge and expertise as well as for their high-quality niche products and services. As a result, small firms with such assets have received substantial financing through alliances (including licensing),

acquisitions and long-term supply agreements, which sustain their (sales) growth and further R&D activities for future breakthroughs. The traditional vertical relationship with large firms is also changing to a more bilateral partnership with mutual learning among networked firms.

Small firms are involved in global industrial restructuring in several ways, including as: i) partners in international strategic alliances; ii) participants or targets in cross-border mergers and acquisitions; iii) specialised suppliers to multinational enterprises; iv) members of globalised informal networks; and/or v) participants in electronic networks.

Strategic alliances

In recent years, SMEs have become more active participants in cross-border strategic alliances across a range of sectors, manufacturing as well as services. Strategic alliances are co-operative arrangements between independent firms based on business contracts to enhance the competitive strategies of the participating enterprises. The allied firms trade mutually beneficial resources such as technologies and skills. Alliances can be for joint research and development, manufacturing, marketing, sourcing of inputs, and/or shared distribution. A major advantage of alliances is their flexibility – they can be limited to certain functional areas of the allied firms and can be modified or even dissolved as the business environment changes (Kang and Sakai, 2000).

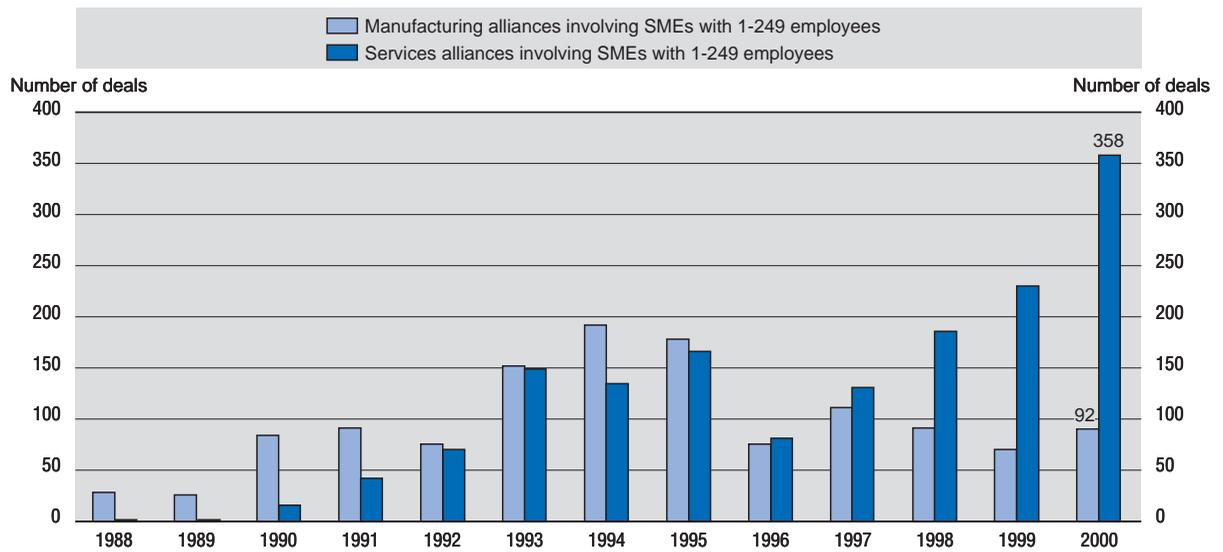
Strategic alliances can involve minority equity purchase or transfers between allied firms, including minority cross-shareholding. Technology transfer and provision of manufacturing and/or marketing rights often involve licensing agreements. Joint ventures are a type of strategic alliance by which a third company is established, usually mutually owned by the allied firms.

Through international alliances with larger firms, SMEs may obtain access to financial resources or complementary assets such as broader distribution channels, sales forces and well-known brand names, which they might otherwise have difficulty establishing. On the other hand, large firms, facing rapid changes in technologies and customer needs and shorter product life cycles, cannot cover all product development and service activities, and have sought alliances with SMEs to fulfil specific needs. For example, in the software and pharmaceutical sectors, small firms with leading-edge technologies and expertise have been called into joint research and product development with large firms. In many cases, small firms have granted a technology licence or exclusive marketing rights for their advanced technologies or new products to large computer and drug companies. In services such as telecommunications and finance, large firms have expanded their geographic coverage and number of customers through alliances with local small firms. By partnering with SMEs, large firms can economise on R&D, minimise the lead time for new products and serve emerging markets. They also gain new niche business and product lines and other assets such as technologies.

Technology-based small firms have gained substantial capital (*e.g.* licensing fees) through international alliances, and selling their intellectual property rights to foreign partners. Technology transfer and provision of exclusive and non-exclusive marketing and manufacturing rights of their product are an effective strategy for small firms to secure funding for further innovation and research activities. Many small biochemical companies and software developers have raised a large portion of financing for R&D activities through such arrangements with large partners. In services such as telecommunications and finance, local small firms have attracted foreign MNEs wishing to exploit their customer base and knowledge of the market.

Cross-border alliances involving SMEs (1-249 employees) have increased in the last decade, particularly in service sectors (Figure 2.9). Total alliances including smaller firms numbered 2 400 in the 1990s. This accounts for 5% of the total 42 000 international alliances in the decade and may under-report small-firm involvement. More than 1 300 of these alliances took place in the latter half of the decade, with 450 deals in 2000. From 1995 to 2000, the 1 160 alliances in services outpaced the 630 in manufacturing, which contrasts with the predominance of manufacturing alliances in the first half of the decade. During the period 1995-2000, small firms with 1-49 employees joined 440 deals (140 in manufacturing; 300 in services); medium-sized firms with 50-249 employees participated in 1 360 deals (490 in manufacturing and 870 in services).

Figure 2.9. Cross-border alliances involving SMEs, 1988-2000



Source: OECD, based on Thomson Financial.

Mergers and acquisitions

Smaller firms are also becoming more frequent participants and targets of cross-border mergers and acquisitions. Many cross-border mergers have taken place between SMEs and larger companies wishing to gain specialised units, new technologies or niche products/services. Data for the 1990s show that there were at least 340 cross-border mergers and acquisitions completed worldwide in which SMEs with capitalisation of USD 2.5 million or less were acquired (the figure accounts for 0.8% of the total 42 500 cross-border M&As captured by the database in the decade).

For small-firm owners or entrepreneurs, an objective may be to seek new management (*i.e.* an acquirer) in order to ensure their company's survival after their retirement. Many SMEs start as family businesses and some have difficulty finding new management or outside investors to maintain the business and employ current workers. Some entrepreneurs may sell their start-up company after several years of success to secure funding for new ventures. Acquisition by well-capitalised firms is a viable strategic option for fast-growing SMEs such as small Internet companies and biotechnology firms, enabling them to finance future R&D activities and survive global competition. Sourcing capital through traditional financial markets may be difficult for SMEs, especially start-ups lacking recognition and/or collateral.

While a major motive for the acquisition of large firms is to strengthen market presence in a particular product or service segment, many M&As involving SMEs aim to gain access to knowledge and technologies (*i.e.* intangible assets). In the pharmaceutical sector, for example, small biochemical firms have been acquired by large drug companies seeking the target company's leading-edge technologies or particular molecular compounds. Similarly, talented programmers and niche products of small software developers and Internet service providers have been sought out as larger ICT firms need to strengthen their R&D capability and speed up new product development. And, as various on-line services grow, banks and other institutions have acquired small ICT companies to develop system platforms for B2B and B2C electronic commerce.

Specialised suppliers

As large multinational enterprises outsource and subcontract their non-core activities and product lines, smaller enterprises with unique technologies, niche products and particular expertise are

Box 2.6. Small suppliers of niche markets

Harada Industry is a Japanese company with 128 employees, specialised in radio antenna and related (small) electronic components for automobiles and mobile communication tools, including mobile phones. The company has grown through continuous new niche product development, quality control and aggressive sales activity world-wide. Since 1957, when a Japanese carmaker adopted the company's radio antenna, it has expanded its range of products to include an automatic folding antenna and an antenna for personal radio communications and for mobile phones. Harada now produces more than one-quarter of all car antennas in the world (more than 50% in Japan, 25% in the United States and 10% in Europe). The company's dominant position in the market has been established by winning (long-term) supply agreements with all major carmakers and other electronic firms, including all top five car companies in Japan (Toyota, Honda, Nissan, Mazda and Mitsubishi), the big three in the United States (General Motors, Ford and Chrysler), Jaguar and Volvo in Europe (both are in the Ford group), Motorola (United States), and Sony, Fujitsu and Matsushita (all Japanese firms).

Established in 1947, the company's first step into the global market was an export/sales unit in Chinese Taipei started in 1968. While operating two factories in Japan, the first foreign production site was built in China in 1988, followed by Mexico (1988) and Vietnam (1997). For the sales and marketing operation, the company has two foreign affiliates: Harada Industry of America (Detroit) and Harada Industries Europe (Birmingham, United Kingdom, which also has a production facility). The latest development was the establishment of the Harada European Technology Centre (HETC) in 1997 as a division of Harada Industries Europe to undertake research and development based at the University of Kent in the United Kingdom.

realising growing opportunities as specialised suppliers on a global scale. Some small and medium-sized suppliers to global industries such as the automotive and electronics sectors, have established foreign production facilities and distribution networks (Box 2.6). Small specialised firms are often spun off from large MNEs (*e.g.* large telecommunications firms are spinning off Internet services) or formed through management buy-outs which lead to more focused business operations. As a result, global industrial restructuring is creating large numbers of specialised firms, both large and small (Table 2.8).

Through arrangements as suppliers or subcontractors to larger firms, SMEs are upgrading their products and processes. Although many supply arrangements are still cost-driven, compliance with

Table 2.8. Examples of small and large international specialists

Small specialist	Industry	Large specialist	Industry
Sorbee International	Sugar-free candy	Campbell Soup Co.	Food processing
CFM Technologies	Computer chip etching equipment	Coca-Cola Co.	Beverages
Lionville Systems	Drug delivery cabinets	Checkpoint Systems	Electronic point of sales (POS) systems
Empire Abrasives Equipment	Industrial abrasive equipment	Tupperware	Plastic houseware
Trans/Air manufacturing	Bus air conditioners	McDonald's	Fast food
Moore Push-Pin	Special fasteners and hangers	Service Corporation International	Funeral services
Somat	Waste disposal systems	Crown, Cork, and Seal	Packaging
Delmont Labs	Canine vaccines	Viking Office Products	Office product sales by catalogue
Laser Communications	Laser beam data transmission	Intel	Computer chips
Pringle Manufacturing Company	High-current switches	Merck	Pharmaceuticals

Source: Mascarenhas (1999).

quality standards is becoming more important. Large MNEs are seeking small suppliers who can meet rigid guidelines concerning quality, cost and delivery (UNCTAD, 2000). Since failure of a single supplier may threaten the buyer's competitiveness and reputation [*e.g.* the Ford (United States) and Firestone, a subsidiary of Bridgestone (Japan), case cost both companies millions of dollars to replace all the tyres concerned and severely affected their sales], many firms require their suppliers to implement continuous quality improvement. Moreover, as suppliers develop specific expertise which buyers (*e.g.* large MNEs) cannot easily replace with their internal resources or with other suppliers, the buyer-supplier relationship has changed from unilateral subcontracting to bilateral partnership with mutual learning among participating firms.

Some MNEs have supplier programmes targeting small firms with high potential. TRW, an automotive and aerospace parts and systems company in the United States with 100 000 employees worldwide, has a small business programme aimed at achieving total quality and a lean supply chain as well as world-class performance for its customers (*e.g.* carmakers). These goals are achieved by setting agreed targets, co-managing costs and sharing product development between the company and small suppliers. The programme not only covers current suppliers but is also open to new small suppliers; the latter can register for the company's vendor network, accessible via its Internet site.

Informal networks

Many SMEs are going global by combining strengths through networks, both at national and international level. Through networking, SMEs can overcome their size constraints and improve their competitive position (UNIDO, 1999). Horizontal co-operation with equivalent firms allows partnering SMEs to achieve scale economies in production, obtain bulk purchase inputs and pool their production capacities to satisfy large-scale orders. Co-operation with other small firms allows participating SMEs to specialise in their core businesses. One of the benefits of networking is mutual learning among linked firms. These business linkages and networks have deepened and become more horizontal and interdependent in recent years.

Local networks have played a significant role in making participating SMEs globally competitive and attractive. Networking is an increasingly common feature in successful regional economies (Perry, 1999). Well-functioning business networks emphasise information sharing, including on technologies and product breakthroughs, and focus on longer-term mutual gains for linked firms. Firm-to-firm networks or business linkages can take various forms, ranging from informal business contacts, such as personal relationship with specific entrepreneurs, to more formal business arrangements based on contracts. In addition to bilateral firm-to-firm networks, there are horizontal, membership-based business organisations, such as trade associations, chambers of commerce and associations of small firms in a particular sector. In short, business networks can be created through trade ties, personal connections, ties to collective institutions or some combination of these.

Different types of networks may overlap; for example, community-based networks, industrial districts and clusters, may comprise family businesses that interact according to kinship ties and subcontracting linkages. They are not mutually exclusive, but rather complementary, fostering further networking among SMEs or between small and larger firms. For example, informal business contacts can develop into formal business collaboration.

"Clusters" refer to geographic concentrations of interconnected companies and institutions in a particular field (OECD, 2001b). They are informal linkages among firms and institutions, including suppliers of specialised inputs, machinery and services, universities, standards-setting agencies, think-tanks, vocational training providers and trade associations. A major characteristic of clusters is the geographical proximity of interdependent firms, which produces synergy effects (Rosenfeld, 1997). Close proximity allows firms in the cluster to transact more cheaply and easily, resolve their inter-firm problems more quickly and efficiently, and learn earlier and more directly about new innovations and business practices.

Some successful clusters are strongly export-oriented, allowing small firms collectively to improve the quality of their products and achieve a significant share in foreign markets. In Castel Goffredo in

northern Italy, for example, more than 200 production companies and suppliers have captured about 30% of the European market for women's stockings and hosiery (Rosenfeld, 1997). Another example is Bangalore in India, where the concentration of electronics and aeronautics firms and the pool of talented programmers have attracted many MNEs since the middle of the 1980s, including Texas Instruments, IBM, Oracle (all US firms) and Fujitsu (Japan). The region has become a centre for software development in India (Lateef, 1997).

Electronic networks

New Internet communication tools, such as electronic data interchange (EDI) and electronic commerce, make cross-border networking easier and more practical for SMEs. They can reduce search costs for potential foreign business partners and improve a firm's visibility in global markets. Many business organisations, such as chambers of commerce, are starting on-line business matching services. For example, the World Association for Small and Medium Enterprises (WASME), one of the largest global non-governmental organisations for micro and small firms, with members in more than 100 countries, facilitates SME networking through its Technology and Trade Promotion Exchange Centre (TPX). This provides partner-matching services through which firms can register their profiles and search for suitable business partners via international networks of focal points.

The development of industry-wide business-to-business (B2B) on-line exchanges and business-to-consumer (B2C) Web sites in several industries, such as automobiles, steel, airlines and finance, allows SMEs to reach potential buyers for their products and services throughout the world (OECD, 2001a). Moreover, the technological complexities of new on-line businesses, such as the development of a platform for on-line transactions, require partnering with firms specialised in ICT support services, a sector where small companies play a major role. Small Internet service providers and other computer service firms have gained increasing opportunities to establish computer systems and create on-line shops for their allied (large) firms.

However, if they are exclusive arrangements, B2B marketplaces may have an anti-competitive impact on firm procurement practices (OECD, 2000c). If the major buyers in a certain industry set up a B2B exchange and agree to buy only in that market, they could effectively force suppliers to participate or exclude them. This is a serious concern among small suppliers because joining on-line exchanges can be quite costly for them. Using a particular platform for each B2B market can represent an additional burden for SMEs, which may have to adjust or even replace their computer systems to meet the system requirements. When Covisint, a B2B exchange for the automobile industry, was initiated by five carmakers (DaimlerChrysler, Ford, General Motors, Renault and Nissan) in April 2000, only a handful of giant suppliers, such as Delphi (United States) with 210 000 employees and Denso (Japan) with 36 000 employees, immediately announced plans to join it. This partly reflects the fact that small suppliers take a cautious attitude towards industry-wide B2B exchanges which may or may not have substantial benefits for them.

While the Internet has the potential of helping small firms to globalise their business by allowing them to expand their customer base beyond their national borders, it may not reduce overall marketing costs. Establishing an easy-to-use, user-friendly Web page or on-line shop is not easy and may be expensive. In order to attract new customers, the company's Web page must be continuously upgraded and may need to be supplemented by advertisements through traditional media such as newspapers, magazines and broadcasting. The bankruptcies of some large on-line retailers, such as eToys (United States), indicate that although the Internet can dramatically expand firms' customer base, it may not change the overall cost structure, whether for large firms or small.

Policy implications

Cross-border business restructuring can provide private (firm-level) as well as social (economy-wide and consumer) benefits through resource reallocation and raising overall efficiency, while it may also entail anti-competitive effects through market concentration and short-term adjustment costs during industrial transitions (OECD, 2001a). Greater mobility of resources and increases in competition

can free up unproductive resources for more effective use elsewhere. Cross-border networking can generate jobs and wealth by integrating firms into global value-added chains and knowledge networks. It can help revitalise ailing firms and local economies through technology exchange, economies of scale and related productivity growth.

In order to realise the benefits of global industrial restructuring for smaller firms, it is essential that governments maintain an open policy towards international trade, investment, alliances and other channels for new business opportunities. Government policies should also aim to improve the business environment for SMEs through regulatory reform and the removal of administrative burdens. On the other hand, they can strengthen social safety nets to allow smooth industrial restructuring and minimise adjustment and transaction costs. As business networking can allow SMEs to overcome their size constraints and obtain complementary assets which they may not be able to develop internally, governments should be a facilitator of business networks involving SMEs.

Ensuring favourable framework conditions

Growing cross-border business linkages have raised similar regulatory concerns in several countries and require greater co-operation among countries so that industry and business-related policies take into account the increasingly international nature of firms. Better framework conditions and infrastructure benefit the host country as well as other countries by creating a better business environment for cross-border business activities of firms of all countries, leading to economic growth and job creation.

To maximise the positive spillovers of global industrial restructuring for SMEs, framework conditions are needed which favour foreign direct investment and new foreign entrants. Governments should encourage both MNEs and globalised SMEs to enter national markets and contribute to economic growth by promoting inter-linkages between local and foreign firms. Adequate protection and enforcement of intellectual property rights are particularly important to ensure a favourable business environment for knowledge-based small firms, both national and foreign, encouraging them to carry out research activity in the host country. National technology programmes should be open to foreign participants.

Governments should minimise the negative impacts of cross-border co-operation among firms, such as anti-competitive effects, although international alliances do not necessarily mean less competition (OECD, 2001a). Co-operation in one alliance may be paralleled by intense competition in other product or technology areas. However, the risk of anti-competitive conduct arises when the international alliance supplies a critical input, such as the application of a broadly accepted standard (*e.g.* computer operating system software), distorts the price of such an input and/or stifles innovation. Alliances for marketing and sales-co-ordination, in which many small firms are participating, may bring together actual and potential competitors. The anti-competitive effects of international business networks are less likely where barriers to entry and expansion are low, since in such markets one alliance may lead to another competing alliance composed of different firms. To the extent that SMEs participate in international business networks in order to remain competitive and innovative, co-operative agreements can preserve the number of competitors and levels of competition.

Fostering business networking

Governments should be a facilitator of business networks among SMEs and between small and large firms. They can act as an information hub for both local small firms and foreign firms (*i.e.* potential business partners) by connecting support organisations and services for small firms. The dissemination of best practices, *i.e.* information on successful business linkages and networking, can improve small-firm awareness of the potential for cross-border business partnerships. Most OECD countries have Internet homepages for SMEs and other means to improve access to information on business opportunities in foreign markets. More countries are now establishing one-stop shops for small businesses as a part of their efforts to disseminate information more efficiently and with less administrative burden. Other types of government support – including helping SMEs participate in foreign exhibitions and trade fairs, prepare marketing materials in foreign languages and circulate advertisements abroad – are also effective and should be further developed.

On-line business-matching services have been initiated by government agencies and business organisations, such as chambers of commerce and trade associations (Table 2.9), although their effectiveness varies. For example, DG Enterprise maintained the BC-Net and BRE projects to promote cross-border co-operation involving SMEs by helping them to identify potential business partners. Small firms accessed the two networks via intermediaries such as business organisations and private consultants. Many small firms sought not only information on possible business partners, but also guidance and support services for business decisions on co-operation, which some intermediaries could not provide satisfactorily. Overall, only 2% of participating firms reached a formal business linkage using the networks (Technopolis, 2000).

Table 2.9. **Examples of on-line business matching services**

	WTCA Trade Opportunities (United States)	BC-Net/BRE (discontinued in 2000) (European Union)	TradeUK (United Kingdom)
Responsible organisation	World Trade Centers Association	European Commission (DG Enterprise)	British Trade International (BTI)
Number of registered firms	Thousands	1) BC-Net: 6 100 2) BRE: 20 000	50 000
Direct on-line partner search function for firms	Yes (Free)	No	Yes (Free)
Uploading firm's profile into the database	Subscriber or WTC member only (Fee below applied)	Free (Intermediaries input firm's profile)	Free
Language used in the service (i.e. firms database)	English	English, French	Nine languages (English, French, German, Italian, Portuguese, Spanish, Russian, Chinese, Japanese)
Country coverage	More than 100 countries	77 countries	200 countries
Consulting services	Various data and information available (Not free)	Euro Info Centres (EICs) provides business environment information in EU	Links to various service bodies from the "Tradepartners UK" site
Fees	USD 1995 per month	BC-Net cost EUR 1 000 (flat rate)	Free
Address	http://iserve.wtca.org/tradeops/index.html	http://bre.cec.eu.int	www.tradeuk.com

Note: BC-Net/BRE's number of registered firms is the total number of firm profiles created from 1997-99.
Source: Service profiles available at each Web site and Technopolis (2000).

The BC-Net/BRE case suggests that effective business-matching services are not easy to establish. Intermediaries may be needed even for on-line services since not all small firms have access to the Internet. Flexibility is required in such services, so that capable SMEs with Internet access can seek business opportunities on their own (e.g. direct access to the database of business partners) while others can seek support services as necessary. Since many business organisations and private consulting firms have introduced business-matching and related support services, governments should foster the private services market to complement public networks.

The successful development of business networks involving SMEs will rely on the strengthening of public-private partnerships and political and social dialogue (OECD, 2001b). While fostering business networking initiatives by private actors, NGOs and various business organisations, the public sector can play a catalytic role in stimulating successful networking of SMEs by promoting the benefits and potential of international networking. Some SME networks and clusters collectively pursue improvements in production processes, design, quality and international marketing to make their products more competitive in global markets. Governments can directly or indirectly support such small firm initiatives for export promotion.

Enhancing SME capabilities

Another policy priority is to enhance the globalisation of SMEs by preparing them for competition in foreign markets. Although cost is still a key factor in selecting suppliers, production and supply agreements with MNEs are increasingly becoming quality-driven. Consequently, small specialised firms with high quality standards are realising new global opportunities. Those with leading-edge technologies and expertise are participating in international R&D projects as a major technology partner.

Small firms going global need management skills and well-trained human resources, prepared to deal with foreign markets and business partners. Management needs to be experienced and communicative both within firms and outside. Successful firms are flexible and therefore able to change to meet customer needs and seek out new business opportunities and partners on an international scale. Training and support programmes may be needed to improve the quality and skills of both employees and management. Moreover, some SMEs may need practical assistance, such as legal consulting services, to negotiate better terms in international business arrangements. Some countries have set up public legal services for small firms, designed to familiarise small-business managers with contracts, essential elements of alliance or acquisition agreements, legal language and negotiation strategies. Some business organisations provide professional consulting services for small firms, partly supported by government.

Access to strategic information, *e.g.* on potential foreign business partners, regulations and business environment issues in foreign markets, is another challenge for SMEs. These barriers need to be addressed as they can prevent SMEs from participating in international alliances and other global business linkages. In fact, the intensity of strategic partnering tends to rise with the size of companies, indicating that larger firms actively seek and find external opportunities through strategic linkages.

In general, small businesses tend to spend less on ICT because of their budget constraints and of the uncertainty over the immediate returns to the investment. Although ICT, including the Internet, has great potential for allowing SMEs to expand their customer base, enter new product markets, rationalise their businesses, and search globally for potential business partners, many small firms have not fully exploited these opportunities due to a lack of awareness of possible ICT application to their business and of skills for ICT adoption (OECD, 2002). Affordable and reliable telecommunication infrastructure and availability of a wide range of ICT support services, which vary widely across OECD countries, are critical to ensure favourable business environment for globalising SMEs. Governments have made special efforts to enhance small-firm awareness and skills for use of ICT. Moreover, it is essential that countries continue to liberalise telecommunications markets and ensure competitive ICT infrastructure, prices and services.

REFERENCES

- Carayannis, E.G., S.K. Kassiech and R. Radosevich (2000),
 “Strategic Alliances as a Source of Early-Stage Seed Capital in New Technology-Based Firms”, *Technovation* 20, pp. 603-615.
- Duysters, G. *et al.* (1998),
 “Creating Win-Win Situations: Partner Selection in Strategic Technology Alliances”, MERIT and KPMG research paper, July.
- Kang, N.H. and K. Sakai (2000),
 “International Strategic Alliances: Their Role in Industrial Globalisation”, *STI Working Paper 2000/5*, OECD, Paris (available at www.oecd.org/sti/working-papers).
- Lateef, A. (1997),
Linking Up With the Global Economy: A Case Study of the Bangalore Software Industry, International Institute for Labour Studies of ILO (available at www.ilo.org).
- Mascarenhas, B. (1999),
 “The Strategies of Small and Large International Specialists”, *Journal of World Business*, Vol. 34, No. 3, pp. 252-266.
- Nowak, M.J. and C.E. Grantham (2000),
 “The Virtual Incubator: Managing Human Capital in the Software Industry”, *Research Policy* 29, pp. 125-134.
- OECD (1996),
Globalisation of Industry: Overview and Sector Reports, OECD, Paris.
- OECD (2000a),
 “Role of Competition and Co-operation in Innovation and Growth”, internal working paper, OECD, Paris.
- OECD (2000b),
OECD Small and Medium Enterprise Outlook 2000, OECD, Paris.
- OECD (2000c),
 “Roundtable on Electronic Commerce: Issues Paper by the Secretariat”, internal working paper, OECD, Paris.
- OECD (2001a),
New Patterns of Industrial Globalisation: Cross-border Mergers and Acquisitions and Strategic Alliances, OECD, Paris.
- OECD (2001b),
Enhancing SME Competitiveness: The OECD Bologna Ministerial Conference, OECD, Paris.
- OECD (2002),
 “ICT and Electronic Commerce for SMEs”, internal working paper, OECD, Paris.
- Perry, M. (1999),
Small Firms and Network Economies, Routledge Studies in Small Business, Routledge, London and New York.
- Pyka, A. (2000),
 “Informal Networking and Industrial Life Cycles”, *Technovation* 20.
- Rosenfeld, S.A. (1997),
 “Bringing Business Clusters into the Mainstream of Economic Development”, *European Planning Studies*, Vol. 5, No. 1.
- Sakai, K. (2002),
 “Global Industrial Restructuring: Implications for Small Firms”, *STI Working Paper 2002/4*, OECD, Paris (available at www.oecd.org/sti/working-papers).

Technopolis, Ltd. (on behalf of DG Enterprise of the European Union) (2000),
Evaluation of the BC-NET and BRE Networks: Final Report (available at http://europa.eu.int/comm/enterprise/networks/bcnet-bre/bc_bre_evaluation.pdf).

UNCTAD (2000),
“Enhancing the Competitiveness of SMEs Through Linkages”, TD/B/COM.3/EM.11/2, September, UNCTAD, Geneva.

UNIDO (1999),
“SME Cluster and Network Development in Developing Countries: The Experience of UNIDO”, Private Sector Development Branch (PSD) Technical Working Paper No. 2, UNIDO, Vienna.

COUNTRY PROFILES

Australia

SMEs in the economy

In 1999-2000, there were approximately 1 075 000 private sector non-agricultural SMEs (fewer than 500 employees) in Australia. Australian SMEs account for approximately 30% of the Australian GDP and 50% of total private sector non-agricultural employment. Around two-thirds of small businesses are family-owned, while about 62% are operated from the owner's home. Almost 85% of small businesses are micro businesses with fewer than five employees, while approximately half of SMEs have no employees at all. Approximately 1% of firms have more than 100 employees while 0.2% employ more than 500. SMEs account for approximately 70% of employment, and those with fewer than ten and 50 employees, account for, respectively, 25% and 47% of total employment. In manufacturing, SMEs employ 66% of the total while firms with fewer than 50 employees account for approximately 35% of employees. The share of SMEs in total employment has been rising since the early 1980s, reflecting structural changes to the Australian economy. The average annual growth in employment in the SME sector was 3.1% from 1983-84 to 1999-2000, higher than the growth rate for larger businesses (2.5%). SMEs are responsible for over half of all new jobs generated.

The share of production, economy-wide, by firm size class was as follows: 11.3% for the size class (0-9); 22.3% for firms having fewer than 50 employees; and 44.6% of the total for firms with fewer than 500 employees. Within manufacturing, firms employing fewer than 500 generated approximately 47% of output, while those with fewer than 50, were responsible for 15.9% of output.

Framework policies

The federal government, and state and territory governments, all play important roles in determining the business environment affecting SMEs, as well as being important in the delivery of programmes and services to assist businesses to grow and prosper. Programmes and policies of only the federal government are the subject of review here. The state and territory governments also deliver small business advisory services, including a range of information and advice to SMEs either through discrete agencies, one-stop shops or through the funding of private organisations.

A key policy objective of the Australian government has been to put in place the fundamental building blocks to improve the economic environment and growth prospects for SMEs. Within this context, the policy priorities have been to:

- Maintain low inflation and low interest rates.
- Create an internationally competitive taxation system.
- Minimise the regulation burden placed on small firms.
- Actively encourage skills development by the owners and managers of small firms.
- Assist with innovation and entry into export markets.
- Increase the opportunities for small firms to gain access to government procurement.

SME policies and programmes

Regulatory reform

In 1996, the government established the Small Business Deregulation Task Force to examine the paperwork and compliance requirements on SMEs and suggest ways of reducing the burden. Nearly all of their recommended measures have now been implemented. Further commitments to reduce the compliance and paperwork cost of government regulation on business include:

- Streamlining business registration systems for new businesses. AUD 3 million will be provided for streamlining the reporting systems of the Australian Securities and Investment Commission (ASIC) and the Australian Taxation Office (ATO). As both agencies collect similar information, their processes will be combined into an integrated registration system, accessible through the government's Business Entry Point (BEP).
- Reducing company regulation. Starting in mid-2002 SMEs will no longer need to provide annual company returns to ASIC unless their circumstances change during the year. ASIC fees will also be capped at AUD 200 for three years and their fee schedule simplified.
- Pursuing regulatory impact assessments and best practice regulatory compliance models. A range of measures to improve the quality of regulation has been introduced, such as the requirement for Australian public service departments to prepare regulatory impact statements in order to assess the impact of new policy proposals on small business.

Other key initiatives introduced to reduce the regulatory burden on SMEs, include:

- A plain English summary of employment definitions and obligations is now available to assist compliance with federal, state and territory employment and tax laws.
- A reduction of 30% in the paperwork required by the Australian Bureau of Statistics – a statistical clearing-house now ensures that duplication is avoided.
- Streamline and reduce duplication of regulations following reviews of the food industry and of laws affecting industrial, agricultural and veterinary chemical sectors.
- An overhaul of the National Building Products Certification Scheme has resulted in a dramatic reduction in the time needed for certification.

New privacy legislation covering the private sector came into force on 21 December 2000, with exemptions for businesses with an annual turnover of less than AUD 3 million – the exemption recognises the need to minimise the regulatory burden on SMEs.

The unfair dismissal laws were amended in August 2001 to reduce the regulatory burden on SMEs to allow them to focus on growth and job creation. Key changes include: a three-month qualifying period when unfair dismissal provisions will not apply, unless otherwise agreed; a requirement that size class be taken into account when assessing whether dismissal procedures are reasonable; greater scope for costs to be awarded against parties who act unreasonably in pursuing or defending claims; and greater accountability measures applicable to all parties, including lawyers and advisers.

Entrepreneurship

“Promoting Young Entrepreneurs” is an initiative to encourage a broader culture of entrepreneurship in the community and aims to help young people build and apply their entrepreneurial talent, and serves as a complement to existing public and private sector initiatives aimed at promoting entrepreneurial activity. The programme has two main themes: promoting the success of Australia's entrepreneurs; and assisting the development of the entrepreneurial capability of tertiary-level students.

The Small Business Enterprise Culture Programme (SBECP), announced in the May 1999 budget and with funding of AUD 6.4 million over three years, supports initiatives that are designed to enhance small businesses' access to skills development, mentoring and information services. A specific focus of the programme is on developing the business skills of women small business

managers. The SBCEP takes into account the recommendations of the Micro Business Consultative Committee (*Under the Microscope, Micro Businesses in Australia*, 1998) on the need for skills development activities for SMEs that are relevant, accessible, affordable and contribute to the bottom line. Approximately 125 projects have been funded since the SBCEP commenced, with 60% of them located in regional areas.

The government currently provides annual funding of AUD 5 million to assist with the establishment and maintenance of small business incubators, which aim to assist new and growing businesses to become established and profitable by providing premises, advice, services and support. The government does not own or directly operate small business incubators, but contributes financially to incubator projects along with local and state governments, community organisations, educational institutions and the private sector. To date, the government has contributed to approximately 90 small business incubators throughout Australia.

The Indigenous Small Business Fund, launched in October 1999 to encourage indigenous businesses and enterprises, has been allocated AUD 11 million for a period of three years. The aim is to assist indigenous people to: develop business management and planning skills; network, start businesses and access further business capital and support services through ATSI. Since the fund's establishment, 69 projects have been approved for a total value of AUD 3.8 million.

The New Enterprise Improvement Scheme (NEIS) assists eligible unemployed people to establish commercially viable new businesses through a comprehensive package of assistance: a) training in small business management, business skills and business plan development; b) NEIS allowance for up to 52 weeks following training, equivalent to the basic adult rate of *Newstart* allowance; and c) business advice and mentor support during the first year of business operation. The scheme is delivered locally by managing agents and is part of the government's Job Network. Three months after assistance finishes, an average of 85% of participants are either in business or in employment.

Self-Employment Development (SED) is closely related to NEIS. If recipients of unemployment allowances, such as *Newstart* allowance have what appears to be a viable business idea, they can be allowed to research the business opportunity for a number of months without the need to seek employment. Income support assistance ceases if a SED participant commences business. Many SED participants subsequently participate in NEIS.

Financing

Taxation

A number of major tax reforms have been implemented since 1998. The introduction of the new tax system on 1 July 2000 involved the reforms: the introduction of a consumption tax, referred to as the Goods and Services Tax (GST); reductions in personal income tax and company tax; capital gains tax exemptions for small businesses; fuel excise reductions; and a new "pay as you go" taxation payment and reporting system.

Since July 2001 small business taxpayers can opt to be part of the simplified tax system if their average annual turnover for the current year and the two previous years is less than AUD 1 million, excluding GST. Key features of the simplified tax system include: over 75% of small businesses are no longer required to do an annual stock taking; businesses can determine their income and expenditure on a cash rather than an accruals basis; simplified depreciation provisions allow assets costing less than AUD 1 000 to be written off immediately. The government provided an AUD 500 million assistance programme to assist small businesses with the transition to the GST.

Attracting investment

In October 2001 several reforms were announced affecting Australia's taxation arrangements with key trade and investment partners in order to help attract overseas investment in Australia. The reforms aim to ensure that Australia's domestic withholding tax arrangements do not create disincentives for

Australian-based companies wishing to return income earned abroad to Australia. Funding of AUD 11 million per annum will be provided to revamp the Invest Australia government agency, responsible for developing a “whole of nation” strategy for promoting and attracting overseas investment into Australia. Investment and promotion activities of other federal agencies will be incorporated into this agency, and states and territories will be invited to become partners.

Venture capital

The Australian government has obtained amendments to the double taxation convention between the United States and Australia, which enables major Australian public companies to bring profits made by US subsidiaries back to Australia without any further tax being payable. Likewise, as part of Australia's new business tax system, an exemption is provided for capital gains on venture capital investments which are made by non-resident pension funds from certain countries. The government plans to extend the venture capital tax concession to boost investment in Australian businesses, and will provide venture capital limited partnerships with flow through taxation treatment. Initially the exemption will apply to investors from the United States, United Kingdom, Japan, Germany, France and Canada.

Non-resident tax-exempt pension funds are exempt from capital gains tax on venture capital investments. Similar exemptions apply to gains on investments made by Australian widely-held superannuation funds through a pooled development fund. Scrip-for-scrip rollover relief now applies, regardless of whether or not entities are widely held. The exemption will be extended to other tax-exempt non-resident investors, including endowment funds and venture capital fund-of-funds vehicles and taxable non-residents holding less than 10% of a venture capital limited partnership. These investors will be able to invest in eligible venture capital investments through an Australian resident venture capital limited partnership or through a non-resident venture capital limited partnership. This initiative should result in increased international investment in Australia and improve access for Australian small businesses to overseas expertise for start-up and expanding businesses. The new arrangements apply from 1 July 2002.

Access to venture capital is also offered through the Innovation Investment Fund, which provides venture capital to assist small companies in the early stage of development, to commercialisation and the Pooled Development Funds.

Technology and innovation

In January 2001, the government announced “Backing Australia's Ability”, a comprehensive and integrated innovation plan amounting to AUD 2.9 billion over five years, which includes assistance for eligible SMEs. Key features of the plan include:

- Providing greater incentives for business to increase their investment in R&D, including:
 - Providing a new premium R&D tax concession rate of 175% for additional, labour-related, R&D expenditure.
 - Providing a tax rebate, equivalent to the R&D Tax Concession, to help the growth of small companies in tax loss.
 - Providing AUD 535 million over five years to continue R&D START grants.
 - Providing an additional AUD 736 million for Australian Research Council competitive grants, doubling funding by 2005-2006.
 - Boosting research infrastructure funding by AUD 583 million.
 - Expanding the Co-operative Research Centres Programme with an additional AUD 227 million and encouraging greater access by SMEs.
 - Increasing funding to universities by AUD 151 million to create 2 000 additional university places each year with priority given to ICT, mathematics and science, supported by adjustments to existing immigration arrangements to attract more migrants with ICT skills.

AusIndustry

AusIndustry, the government's business unit, the aim of which is to help Australian businesses become more innovative and internationally competitive, provides a range of commercial incentives and information services. Through its state, territory and regional offices, AusIndustry delivers around 30 products and services with a total value of about AUD 2 billion to some 8 000 customers annually. Its products and services are grouped under the five broad streams of innovation, venture capital, general industry incentives, industry-specific incentives and information services, in the form of grants, loans, tax concessions, duty concessions, and support for investments by venture capital firms. Programmes administered through AusIndustry include:

- The R&D Start Programme – a competitive merit-based grants and loans programme that supports businesses to undertake R&D and the commercialisation of its results. The programme has five separate elements of funding. The R&D Tax Concession encourages increased R&D investment, allowing eligible Australian companies to claim a tax deduction for the standard 125% R&D Tax Concession. From 30 June 2001, two new elements, the 175% Premium Tax Concession and the R&D Tax Offset (rebate) provide additional benefits.
- The R&D Tax Concession is the principal incentive to increase private sector-funded R&D.
- The Commercialising Emerging Technologies (COMET) Programme is a competitive, merit-based grant programme, which supports businesses and individuals to improve their potential for successful commercialisation. As part of this programme, seven new business advisors were recently appointed, making a total of 17. In 1999-2000 over 250 SMEs received assistance worth a total of AUD 8.5 million to assist in the development of new technology.
- The Pooled Development Fund aims to increase the supply of venture capital for growing Australian SMEs.

IT programmes

The Building on IT Strengths (BITS) Incubator Programme is designed to assist small companies in the information industries sector to grow, and to increase the linkages across all areas of the ICT sector in order to develop innovative solutions for local and overseas markets. Funding of AUD 158 million has been provided for the programme, which commenced in 1999-2000 and will run until 2003-2004. Ten ICT incubators have been established across Australia, with at least one incubator being funded in each mainland state and territory. The incubators will provide financial support, business skills development, marketing and sales advice, and generally act as "mentors" for new small businesses. They will help companies to develop a business plan and business skills, conduct market research, protect intellectual property, establish links with venture capitalists, and provide physical facilities, office services and business advice.

The Information Technology Online Programme (ITOL) is designed to accelerate the national adoption of electronic commerce business-to-business solutions, especially by communities of SMEs. The projects demonstrate new and innovative on-line solutions that improve business competitiveness for identifiable clusters of Australian business for realisable business benefits. The government has invested a total of AUD 5.5 million in ITOL projects to date, attracting a broad range of applications and funding some 70 projects across a range of industries, including social services, tourism, livestock management, e-procurement, health and the automotive industry. Projects are based in regional and metropolitan areas in all states and territories.

As part of the government's Innovation Action Plan, the Backing Australia's Ability Programme has been extended until 2006, with an additional AUD 13 million in funding.

On 24 September 2001, the government announced an AUD 21.8 million package of assistance measures aimed to procure long-term benefits for SMEs. The package includes measures to take SMEs into the 21st century e-commerce trading environment. These key initiatives include:

- Providing funding of AUD 6.5 million over two years to assist small businesses with a range of practical guides and information tools to help them go online and use e-commerce more effectively.

- Developing an electronic resource catalogue for small business on the Business Entry Point, which will provide practical information and services on starting and running a small business.
- Providing funding of AUD 9.2 million over three years to enhance the range of activities, which assist small businesses when tendering for contracts for major firms.

Management

Business Entry Point

The Business Entry Point (BEP) initiative was established as the single entry point for government information and transactions for business by the government's "More Time for Business" small business policy statement. The BEP is also the government-endorsed business portal under the government's portals framework. The BEP, through its Web site (www.business.gov.au), improves access to government information and facilitates electronic interaction between government agencies and the business sector, particularly small business. As a single entry point the BEP diminishes the administrative burden on business.

Through this facility it is possible to: *i*) gain access to information on government assistance programmes and services, and on business information topics; *ii*) gain a better understanding of employer obligations; *iii*) tailor queries to suit the particular business and area of operation; *iv*) privately and securely undertake a number of initial business registrations; and *v*) obtain information about licences and codes of practice. Access is provided to resources from Australian government agencies, state, territory and local government agencies, and industry associations. Various company, payments, tax and other registration facilities are available online and discoverable via the BEP Web site. The BEP is also the access point for the Australian Business Register (ABR) Online, which allows businesses to apply for Australian Business Numbers (ABNs), search the public ABN database, and update their own ABN record. The Business Licence Information Service (BLIS) run by each state and territory are also discoverable via the BEP; the BLIS offers intending and existing businesses a first-stop point of enquiry through which application forms for all business licences can be obtained.

The introduction of an on-line Business Resources Facility (BRF) service for small business to have easier access to government through the expansion of the BEP was announced in September 2001. The new BRF will collect information relevant to starting and running a business, training, networking, mentoring and advisory services, and government assistance and grants. The first phase of the BRF was planned to be available in late 2001. Since November 1999, the BEP has provided on-line registration for businesses wishing to obtain their ABN and to register for GST purposes. Over 17% of all GST registrations were undertaken online through BEP; around 35% of new business registration each week are received online; and over 750 000 people have applied for ABN/GST registrations.

Women in small business

Launched in November 2000, this training programme fulfils the government's commitment to encourage women to take part in small business and to develop the skills they need to improve their business performance. The programme is made up of two certificate qualifications in small business and a suite of learning resources. One qualification is for people who run their business alone or who administer a family business, while the other is for those running their business with staff. Twelve registered training organisations deliver the programme, some via the Internet and others using face-to-face and group techniques. The training is structured to give students a competitive edge in financial management, business planning, customer relations, marketing, legal issues, taxation, technology, and time and people management. While the qualifications are suitable for all small business people, the training and promotional materials are especially designed for women.

Regional development programmes

Through the Regional Tourism Programme (RTP), the government aims to boost the ability of regional Australia to attract and better meet the needs of both international and domestic tourists.

AUD 8 million has been provided over four years for the RTP, including: AUD 2 million over two years to assist regional tourism organisations access and exploit information technologies such as the Internet and e-commerce; AUD 300 000 for the establishment by the tourism industry of a National Accreditation Programme to improve business practices and standards; and funding will also be provided for major strategic tourism infrastructure projects, for product development and to help develop special interest markets such as indigenous tourism and wine tourism.

The Regional Assistance Programme aims to help achieve national employment goals in regional Australia by encouraging business and communities to work in partnership with government, to build business growth and stimulate sustainable employment. Assistance to regions is provided through seed funding aimed at generating employment, creating small business opportunities and building the skill base of regions. Applications for funding are assessed initially through area consultative committees to ensure initiatives are consistent with the Australian government's priorities and with best-practice experience.

Under a pilot project that commenced on 1 July 2001, 47 small business assistance officers have been placed in regional and rural Australia to deliver a referral service for government programmes and initiatives, encourage mentoring and networking by small businesses to help sustain and improve the skills of small business operators. They also have a role in helping to encourage a greater uptake by small business of the opportunities offered via e-commerce activity. Small business assistance officers received over 3 500 inquiries during their first quarter of operation, almost 70% of which related to business set up and operation, funding and GST and tax issues.

Launched in October 2000, "Regional Solutions" is a government initiative designed to assist regional and rural communities build their capacity to identify and implement development opportunities. It helps communities move beyond planning by providing assistance to implement community initiatives, including community infrastructure. Funding of AUD 90 million will be provided over four years to allow communities to undertake projects that will lead to economic diversification and strengthen their social structures by improving access to and filling gaps in services. The Regional Solutions programme offers communities flexibility and recognises that one size does not fit all. Communities will have the opportunity to develop their projects by selecting from a range of activities eligible for funding. These activities include support for community planning, local project implementation, community adjustment initiatives, local industry development, or to resource people to work for a local community or region. The programme can also provide funding for regionally based and community-orientated enterprise or infrastructure projects.

Export promotion

Austrade provides information and advice to intending and existing exporters through its network of 1 000 staff in 109 representative offices in 61 countries. As well as providing export and investment services, Austrade also manages several export assistance programmes that assist businesses in identifying and capturing export markets. Although general information and assistance may be provided free of charge, fees may apply for more tailored services. Among the export programmes administered are:

- The Export Market Development Grants (EMDG), which reimburse part of the promotional expenses of SME exporters. Almost 3 000 businesses received grants in 2000-2001.
- The Export Access Programme, which helps SMEs to become sustainable exporters through a flexible package of training and practical assistance, delivered by a network of private and public sector export advisers. Evaluations of the programme indicate that 55% of participants had not exported previously, and a further 37% had previous export earnings of less than AUD 250 000.
- TradeStart, which is a partnership between Austrade and public and private sector service providers, and designed to improve access for SMEs in regional and rural Australia to the export assistance services of Austrade. TradeStart is delivered through a national network of 24 offices in regional areas.

In addition, the Export Finance and Insurance Corporation (EFIC) assists exporters to manage the payment and finance risks of exporting, through the provision of insurance and financial products and services. EFIC works directly with exporters and also with commercial financiers to support exporters. Most of EFIC's clients are small businesses, many of them new to exporting.

Austria

SMEs in the economy

In 1999, SMEs (firms with fewer than 250 employees) accounted for 99.5% of enterprises and almost two-thirds of employees engaged in production, trade and services¹ in Austria. 83.5% of SMEs had fewer than ten employees. The SME share in total businesses is extremely high in most sectors, and represents over 99% of businesses in several sectors, such as construction, wholesale and retail trade, real estate firms, and between 98% and 99% in manufacturing, and in financial services. The SME share in total employment has been rising in recent years. In 1999 SMEs employed 95.3% in the hotels and restaurants sector, 82.8% in construction, 69.6% in wholesale and retail trade, and 56.7% in manufacturing.

Framework policies

The weight of SMEs in the Austrian economy – in terms of firms, employment and production – means that SMEs are an important influence on growth and competitiveness. The tax reform of 2000 had a considerable impact on SMEs (*e.g.* amendment to the 1955 Inheritance and Gift Tax Act, Law on the Promotion of Start-ups). The reform created incentives to further raise qualification levels and to promote equity capital financing; and it also provided relief for start-ups as well as a greater tax exemption for R&D. The 2002 economic upturn law (*Konjunkturbelebungs-gesetz 2002*) introduced further important improvements for enterprises.

Progress has been made regarding market liberalisation, especially in the telecom, electricity and gas markets. The government is currently working on further facilitating administrative matters and on cross-linking authorities to make it possible for enterprises and individuals to settle bureaucratic matters via electronic correspondence.

SME policies and programmes

Austrian SME policy measures and programmes include a comprehensive set of support programmes employing single or multiple programme financing instruments. Following a change in Austrian criminal law in 2000, “false or negligent insolvency” will no longer be a criminal offence. Also, the Industrial Code was amended in 2000 to simplify the authorisation of facilities. The amendment to the Industrial Code 2002 introduced a set of substantial facilitating measures for start-ups as well as for already existing enterprises (implementation of the one-stop shop principle, honest failure no longer an obstacle to carrying out a trade, union list of regulated trades, simplified admission to the master craftsman’s qualifying examination, etc.).

Entrepreneurship

According to Austrian Federal Economic Chamber statistics, the number of start-ups has been rising continuously since 1995 and amounted to approximately 27 000 in 2001 (compared with 14 100 in 1995). This substantial increase is attributed to several improvements and incentives introduced in recent years. Entrepreneurship policy has become a core concern in Austria, and it is the aim to achieve a sustainable increase in start-ups by sensitising potential entrepreneurs and spreading

a more entrepreneurial spirit throughout society, especially among young people. In this context, particular attention is being paid to the encouragement of entrepreneurship in schools and universities.

Students between 15 and 19 years of age are required to develop a business plan in order to set up a “junior business” in their schools for one year. They produce products and offer services on the (local) market, making all the business decisions themselves. Since the 1996-1997 school year, the number of junior businesses has increased in Austria from 30 businesses involving 375 “Juniors” to 72 businesses involving 900 “Juniors” in 2000-2001. The “virtual firm” is compulsory as a place of learning in all Austrian colleges of commerce and business schools, and is recommended for commercial training purposes in all vocational schools. In Austria there are currently around 1 000 virtual firms, beyond which there is a great number of different activities in the field of entrepreneurship education. Launched in 2001 by the Austrian Federal Ministry for Education, Science and Culture, the *Unternehmen: Bildung* (Enterprises: Education) initiative aims at intensified co-operation between educational institutions and the business sector.

The Chair in Business Creation and Innovation Management at the university of Klagenfurt has been in existence since June 1999. Professorships in enterprise foundation have also been established in the Universities of Linz (2000) and Vienna (2001).

The Law on the Promotion of Start-ups (*Neugründungsförderungsgesetz*, NEUFÖG), initially in force from May 1999 until December 2002 as a pilot period, has been prolonged indefinitely in the framework of the 2002 economic upturn law. Moreover, its scope has been extended to cover the transfer of business. The NEUFÖG exempts start-ups and business transfers from registration fees, administration fees, company tax, etc., in the first year. A relief of payroll fringe costs for the year following the establishment promotes the recruitment of personnel in the start-up phase. This legislation allows an average savings of between EUR 1 450 and EUR 2 200, depending on the legal form of the enterprise. The reform of Economic Chamber legislation at the beginning of 2001 exempts new enterprises from registration fees to the Economic Chamber and thereby allows start-ups additional savings of up to EUR 290.

On behalf of the Federal Ministry of Transport, Innovation and Technology, the *Technologie Impuls Gesellschaft* (TIG) implemented the *AplusB* (Academia Business Spin-off) programme in 2001, which aims at a permanent increase in the number of academic spin-offs, promotes the use of scientific results within enterprises, and enables SMEs and scientists to co-operate within enterprises. The programme focuses on scientists that have the potential to create research and technology intensive enterprises. It also collaborates with existing technology transfer measures. *AplusB* centres are financed by public funds (70%) and by their own resources (30%). Co-financing is possible through the ERDF Fund.

Financing

A number of individual programmes exist, each dedicated to improve access to financing for SMEs. As the enterprise-founder and SME bank of the Austrian Federal Ministry of Economics and Labour, the BÜRGES Promotion Bank (*BÜRGES Förderungsbank*), offers a range of financing instruments, such as guarantees for bank loans, interest rate caps or premiums and subsidies. In 2000, BÜRGES conducted the following six programmes applying to all branches of industry: small trade credits, trade structure improvements/innovation, equity capital guarantees, support/savings programme for young entrepreneurs, business foundation savings, and internationalisation of SMEs. In addition, the bank participated in the implementation of the new patent-loan programme handled by the Innovation Agency. The number of successful programme applications was 4 752. Although below the 1999 figure (6 766 applications) the investment volume of the accepted applications amounted to EUR 756 million (EUR 632 million in 1999), which represents an increase of 19.1%. The highest shares were received by the service sectors (34%) and the tourism sector (26%), followed by production (21%) and trade (17%). In 2000, the total amount of subsidies paid by BÜRGES was EUR 40.3 million.

By 31 December 2000, loans guaranteed by BÜRGES totalled EUR 516 million, while the total for guarantees provided was EUR 392 million. This total liability was based on 11 649 guarantee agreements. The bank is indemnified by the federal government for liability risks and a guarantee by the European Investment Fund exists for part of the risk. In 2000, the bank made payments amounting to EUR 3.73 million in 108 cases, corresponding to 1% of the total sum of guarantees provided. The

maximum interest rate accepted for loans promoted by the bank corresponds to the current secondary market yield for federal bonds plus 0.5 percentage points.

Since 2001, support programmes initiated by the Austrian Federal Ministry of Economics and Labour in favour of enterprises in the tourism sector are exclusively conducted by the Austrian Hotel and Tourism Bank (*Österreichische Hotel- und Tourismusbank*, ÖHT). The guarantee amount indemnified by the Austrian federal government in cases of failure has been raised to equal the amount with which BÜRGES is indemnified. In addition to financial support, ÖHT will in the future put more emphasis on the provision of advice to SMEs in the tourism sector.

The principal aim of the Business Angels Network – i^2 scheme, operated by the Innovation Agency (*Innovationsagentur*), is to create an organised private venture capital market by linking together entrepreneurs and investors, thereby increasing the efficiency and effectiveness of Austria's risk capital market. The “business angel” is the investor – defined as an ambitious, high net worth individual having capital to invest, business know-how to share and no family connection to the investment. The scheme, known as “ i^2 ” (*i.e.* ideas \times investment) in Austria, normally searches for private venture capital but also includes the formal venture capital market as well as firms seeking strategic investments. Based on a questionnaire, the scheme matches potential partners, bringing together the investor and the entrepreneur.

After its first four years of existence, an assessment of the i^2 scheme yielded the following. Venture capital was sought by 240 companies (currently there are 95 listed companies seeking venture capital up to EUR 120 million; 27% of the firms are start-ups, 52% in the first/second stage, 18% in the growing phase and 3% in the restructuring phase). A majority of the firms deal with information technology; 82 investors have applied, 57 of whom are private individuals wishing to invest a total of EUR 25 million (EUR 439 000 on average per project). The remaining investors are strategic investors, venture capital funds, and private investment companies from both Austria and Germany; 550 introductions between investors and entrepreneurs have been completed and 14 capital investments have been made so far.

The Seed Finance Programme supports young high-tech businesses with fewer than 25 employees and provides start-up capital and consultancy services during the establishment and expansion phases. By the end of 2000, the Innovation Agency had supported 85 young high-tech businesses to a total of EUR 16.2 million. Most of the projects belong to the following technological fields: microelectronics and information technology, materials technology, medicine, medical technology and biotechnology. 59% of those who establish businesses hold a university degree.

Technology and innovation

The Austrian Industrial Research Promotion Fund (*Forschungsförderungsfonds für die gewerbliche Wirtschaft*, FFF) is the main instrument in Austria for the stimulation of business R&D and innovation. The objectives of the FFF are the stimulation of joint national and international research, the encouragement of young researchers and the stimulation of research in sectors where little research is carried out. Within the *R&D Dynamics Programme*, FFF funds – exclusively for SMEs – the set up, extension, adaptation and modernisation of laboratories and the costs for additional research personnel needed for the more efficient execution of a regular FFF innovation project. The micro-technology initiative started in the beginning of 2001. To promote the initiative on a large scale, both company projects and know-how transfer are considered. Laying foundations for scientific research is also promoted. The FFF provides EUR 10.9 million annually for the three-year programme. In the different programmes, 903 projects were supported by the FFF in 2000 at a total cost of EUR 256.7 million, representing a record increase of 26% compared with 1999 levels.

The Industrial Centres and Networks of Excellence (K_{ind} and K_{net}) Programme was introduced in 1999 by the Austrian Federal Ministry of Economics and Labour. The programme's aim is to establish networks of competence led by industrial technology clusters rather than scientific disciplines. An important aspect is the support of SME participation in such networks. The centres receive non-repayable subsidies of up to 40% of the cost of either industrial research programmes or technology transfer programmes to companies. Emphasis is placed on SMEs which receive coaching in order to support their specific technological demand. Ten centres and four networks (for acoustic, mechatronic,

biomass and wood) have already been established. This programme is considered important for ensuring Austria's long-term quality as a business location and for the further development of technology clusters.

The *TechnoKontakte* project was set up to disseminate organisational and technological know-how. With financial support from the Federal Ministry of Economics and Labour, "firm-to-firm visits" are organised by the *TechnoKontakte Veranstaltungs-GmbH* to give interested businesses an opportunity to learn from other successful businesses.

The Tecma (Technology Marketing Austria) patent exploitation initiative was set up in the Innovation Agency in order to market the results of R&D carried out by Austrian universities, businesses and individuals by licensing or selling patents and know-how. Around 28% of the enquiries made since the start of 2001 have been by private investors, approximately 20% from businesses and some 52% by university inventors.

The 2000 tax reform brought about a substantial increase in the research allowance, which now amounts to 25%, or 35% if research expenditure in a particular business is above the past three-year average. In the framework of the 2002 economic upturn law, tax measures in the field of research and technology development have been extended. Complementary to the tax relief mentioned above, a research allowance amounting to 10%, and alternatively a research premium of 3% for certain expenses, have been introduced.

Electronic commerce

The promotion of IT use in businesses, SMEs in particular, is a major concern of Austrian IT policy at the federal and regional levels. In 2000, the Federal Ministry of Economics and Labour launched the "e-business in a new economy" initiative. In the first stage, seven working groups of national and international experts identified 35 measures in various fields, from "e-location" to content and tourism. The final report of the working groups served as the basis for an action plan which will cover the following areas of activity: information and awareness ("ebiz" communication platform, multimedia and "ebiz" awards); creation and growth of businesses (contact point for start-ups providing infrastructure, advice and information on venture capital); research and development (competition for R&D projects, etc.); eContent Austria (promotional activities for the content industry); innovation through eBusiness (technology transfer to SMEs, eBusiness for clusters); and eLocation Austria. The action plan serves as an umbrella for all of the Ministry's IT-related activities. The Ministry plans to allocate EUR 22 million between these measures within the next two years.

Moreover, the *Länder* governments and their regional development and technology centres play an active role in the diffusion of IT to businesses. Another important player, both at the federal and regional level, is the Austrian Federal Economic Chamber (WKÖ), providing consulting services and promotional activities for its members as well as the Chamber's training institution, the Institute for Economic Development (*Wirtschaftsförderungsinstitut*, WIFI).

In addition, in 2000 the Austrian Industrial Research Promotion Fund and the Innovation and Technology Fund supported 141 innovation projects in the field of information and communication technologies with a total cost of EUR 22.5 million. The greatest number of these projects (58) were supported in e-business sector.

Management

The Institute for Economic Development is part of the Economic Chamber. It serves to support and enhance its members' competitiveness in the marketplace and offers various training courses. Most companies seek practical solutions in management, production and marketing. Subsidised consultancies are offered to SMEs, up to 50% of the net costs of the consultancy may be covered up to a maximum of 40 hours per annum. There are also specific programmes for enterprises in crisis, transfer of business and entrepreneur coaching, where four hours are covered up to 100% by WIFI. In 2000, 2 434 consultancies (26 600 hours of consultancy) were offered and 212 consulting companies were involved. The sizes of the

businesses requesting the service were as follows: 58.3% had up to five employees; 28.4% had between 6 to 20 employees; 9.8% enterprises had 21 to 50 employees and 3.5% had more than 50 employees.

The Austrian Federal Economic Chamber's Internet portal *www.gruenderservice.net* offers comprehensive information to Austrian business starters, including a start-up-guide, information on company succession, a franchise platform and a guide assisting business starters with procedures and formalities. Since *www.gruenderservice.net* was launched in March 2000, an additional 10 000 visitors consult its 140 000 Web pages on average each month.

The 2000 tax reform introduced a training allowance of up to 9% of the costs of staff training and further training, thus putting investments in human capital and in physical assets on an equal footing where taxation is concerned. The allowance is intended to be an extra incentive for entrepreneurs to invest in the occupational and further training of their employees. The 2002 economic upturn law raised the allowance to 20%.

Export promotion

Between 1998 and 2000, EUR 43.6 million was dedicated through the export initiative to several measures with the general aim of generating additional exports and raising the export share in GDP to 30%. Collaboration between firms was supported to optimise financial opportunities and access new markets. The export initiative consisted of measures in the following eight areas: restructuring financial institutions with the aid of new financial tools; extending financial tools through increased co-operation between the agencies providing export insurance and the Austrian Control Bank; mainstreaming economic policy (*e.g.* setting up industrial clusters); offering new business services (export promotion and market research); creating more effective industrial processes (*e.g.* installation of an intergovernmental database on export-related information; increasing export orientation in the field of education (*e.g.* increased emphasis on using European educational programmes); improving the international legal framework (*e.g.* establishing new international agreements as well as expanding existing ones); and tax-related measures (*e.g.* exemptions for credits and loans related to guaranteed export promotion). The *export initiative* was successfully completed at the end of 2000. The evaluation of the implementation shows that the measures implemented have made an important contribution to the overall efforts of Austrian enterprises.

To take account of the growing importance of exports for the Austrian economy (33.8% of GDP in 2000 – an increase of more than 50% in four years) and further encourage enterprises to engage in exports, the government and the Austrian Federal Economic Chamber developed a new Internationalisation Partnership Programme. This programme will directly target structural weaknesses of the Austrian export market and will put special emphasis on SMEs' problems in this context. Five priorities have been defined: a communication and co-operation platform as a discussion forum; a marketing platform to encourage SMEs to co-operate in export marketing; an Internet platform named *export* that improves the Internet presence of enterprises and their products; a scientific platform; and a platform on future markets to increase presence in fringe markets. The Internet *export* platform has recently become operational, the budget for its preparation in 2001 exceeding EUR 1.45 million.

The Austrian Control Bank (*Österreichische Kontrollbank Aktiengesellschaft*, OeKB) is an important financial and information service provider for the export industry and the capital market. An instrument specially targeted at SMEs is the *OeKB Market Opening Guarantee*. This guarantee is handled through the Austrian Export Fund and reimburses some of the costs incurred in opening up a new market outside the European Union if the SME does not reach a certain turnover target there.

Other programmes

In the framework of the "capital market offensive" (*Kapitalmarktoffensive*), a range of legal amendments was implemented at the beginning of 2001 aiming at the stimulation of the Austrian capital market. Among others, the tax exemption for employees' stock ownership was doubled and stock option advantages have since been granted.

The Federal Ministry for Education, Science and Culture instated the *Computerbillion* in order to equip all Austrian schools with Internet access. In addition, a particular focus is placed on the qualification of IT experts.

Due to amendments to the labour law dating from 1 January 2001, workers' rights to continued payment of wages in case of illness have been adjusted to match those of employees. At the same time, non-wage costs were reduced in order to promote Austria as a business location.

In order to improve the basic conditions for acquisitions, the 2000 tax reform amended the 1955 Inheritance and Gift Tax Act. With effect from 1 January 2000, an allowance of ATS 5 million was introduced for cases where business assets were taken over without any money changing hands. This allowance is available only when property is acquired either as a result of a death or via a gift *inter vivos*.

The Austrian government intends to facilitate the electronic transaction of all administrative procedures by 2005. Among others, the possibility of electronic registration of a profession (*elektronische Gewerbeanmeldung*) has already been introduced. Registering authorities will have general access to public registers, and will be able to retrieve documents which have already been submitted to an authority. The presentation of original documents is therefore no longer necessary in most cases. The Internet portal www.help.business.gv.at provides information regarding start-ups, business promotion, taxes, etc., and offers the possibility of electronic submission. The legal and technical requirements for the electronic submission of balance sheets were established in May 2001.

Belgium

SMEs in the economy

In 1997, over half a million enterprises were registered for VAT in Belgium, employing 3.19 million persons and generating output totalling approximately EUR 500 billion. SMEs (fewer than 250 employees) accounted for 99.8% of those firms while small firms (fewer than 50 employees) represented 99.2% of the total. Almost 95% of firms had fewer than ten employees and 71% had no salaried employees at all. SMEs in Belgium accounted for 69% of all private sector employment in 1997 while small firms generated 58.3% of the total; micro-firms (fewer than ten employees) were responsible for over 40% and firms with no employees generated 18% of employment. SMEs accounted for 67% of output in 1997, small firms accounting for 51% and micro-firms, 29%. Firms with no salaried employees generated 12% of total output.

While SMEs accounted for nearly 100% of firms across sectors, there was significant variation between sectors in terms of the SME share in employment and output. SMEs accounted for almost 53% of employment in the industry and energy sector and in business services, and as much as 88% in trade, hotel and restaurant activities. SMEs in certain service activities such as business services, wholesale and retail trade, hotels and restaurants, generated over 80% of output while SMEs in the industry and energy sector generated just over 40% of the sector's total.

SME policies and programmes

No significant shift in Belgian policy for SMEs (businesses with up to 500 employees) has occurred since 2000, apart from a policy brief on electronic commerce coming from the Federal Minister for Economic Affairs. Action has been taken to implement earlier policy commitments to assist SMEs. A notable development in this regard has been the work of the Agency for Administrative Simplification, which is attached to the Prime Minister's office. Between mid-1999, when the present government came to power, and October 2001, a total of 48 administrative procedures (affecting citizens and SMEs) were simplified. Between now and the end of the current parliament's term (2003), it is planned to implement 70 administrative simplification projects. Some are very important in that they concern all enterprises. Examples are the electronic VAT declaration and the multifunctional social security declaration.² Also, a network of civil servants from federal ministries and public agencies has been formed to make proposals for further simplification and to reduce redundant data costs (*i.e.* repeated requests). Table 3.1 illustrates Belgium's efforts to develop the knowledge and skill base of candidate entrepreneurs, the table showing the number of files examined by the Belgian guild chambers, relating to "basic knowledge of business management" and "vocational knowledge", over the period 1997 to 2000. This last action is part of the strategy for a measured reduction of the administrative cost of regulation. The Federal Minister for Economic Affairs issued a policy brief on e-commerce, but this does not target SMEs specifically. Rather, it sets out the framework for the development of e-commerce in terms of principles, concepts, effective security and potential global methods of action.

2. The purpose of the multifunctional declaration is to satisfy, with one data collection, the requirements of the different sectors of social security dealing with collection of contributions, determination of entitlements and benefit calculation. This measure should make it possible to do away with some twenty official forms and simplify another thirty or so.

Table 3.1. Certification of “Basic knowledge of business management” and “vocational knowledge”

Number of files examined by the Belgian guild chambers concerning “basic knowledge of business management” and “vocational knowledge”				
Type	1997	1998	1999	2000
Basic knowledge of business management				
Number of files examined	15 583	15 508	38 599	41 024
of which: authorised	14 945	14 765	35 245	37 501
rejected	638	743	1 863	1 948
deferred	–	–	1 491	1 575
Vocational knowledge				
Number of files examined	28 311	26 583	28 469	26 347
of which: authorised	25 470	23 932	23 579	22 205
rejected	2 841	2 651	2 644	2 391
deferred	–	–	2 226	1 751

Note: Pursuant to the programme law of 10 February 1998 seeking to promote independent enterprise, entrepreneurial competencies were subdivided into “basic knowledge of business management” and “vocational knowledge”. In 1999 the requirements regarding basic management knowledge were increased. Any SME performing an activity needing to be entered in the trades or crafts register must provide proof of a basic knowledge of business management. 1999 was thus a year of transition. As regards certification of business management knowledge, the figures for 1999 and 2000 reflect the impact of the new legislation. There was thus an increase in the total number of applications examined, authorisations, refusals and deferrals in those years. As regards certification of vocational (sector-specific) knowledge, the statistical processing unit has remained unchanged. It is therefore possible to examine the trend over a longer period. Here it should be noted that the number of authorisations granted has fallen continuously since 1997.

Source: Ministère des Classes moyennes et de l'Agriculture, DGI. *Conseil supérieur des indépendants des PME*, 2002 Annual Report.

Canada

SMEs in the economy

At the end of 2000, there were approximately 2 million businesses in Canada. About half of these had no employees, and of the other half:

- 99.7% were SMEs, which are businesses with fewer than 500 employees.
- 98% had fewer than 100 employees.
- 75% had fewer than 10 employees.
- 58% of businesses had no more than four employees on their payroll.

SMEs account for about 60% of Canada's private-sector payroll employment. Self-employed individuals represented about 16% of the total labour force in 2000. Within the manufacturing sector, firms with fewer than four employees account for approximately 3% of employment, while those with fewer than 50 employees generate approximately 22% of employment. SMEs generate approximately 55% of manufacturing employment. Both the public and private sectors have programmes and policies that support SMEs. In this profile, selected programmes, policies, and services, mainly of the federal government, will be reviewed.

Framework policies

In Canada, the federal government's economic strategy is aimed at putting in place an environment conducive to business growth based on the goals of fiscal balance, low inflation, and access to international markets. Within this macroeconomic climate, the federal strategy is to promote innovation, human resources, a competitive marketplace, and a leading-edge information highway through which information about government programmes and services is provided in order to improve trade, investment, and access to financing. The overall goal is to create a world-class, competitive, knowledge-based economy.

The government acknowledges that the growth of the overall economy depends on the growth of SMEs. Young SMEs have difficulty obtaining financing through traditional banks when compared with larger firms, established for a longer period. The federal government has taken steps to make investment in SMEs more attractive. Although most small firms usually do not undertake formal research and development activities, they are known to be incremental innovators in both the commercialisation of existing technologies and the customisation of products and services to meet the needs of consumers and market demand.

In 2000, the federal government announced the largest tax reductions in Canadian history, and many provinces have done likewise. In conjunction with other tax cuts, which include decreases in personal income taxes, the federal government has also lowered the capital gains and corporate taxes. The federal government has reduced the inclusion rate for capital gains from three-quarters to one-half. It also introduced a tax-free rollover of qualified small-business investments up to CAD 2 million when proceeds are reinvested in another small business. The general corporate tax rate is also being gradually reduced from 28% to 21% by 2004. These tax measures are intended to allow businesses to grow and become more competitive in the new economy.

SME policies and programmes

The policies and programmes of the federal government generally fall into four categories:³

- Creating the right climate through policy, legislative and regulatory initiatives.
- Increasing clients' and stakeholders' awareness of current issues, opportunities and responsibilities.
- Helping clients and stakeholders to develop their ability to respond to opportunities.
- Encouraging the adoption of behaviour that contribute to productivity, employment and enterprise growth.

Since 1995, the government's policy role for SMEs has shifted to emphasise the development and provision of information on economic performance, market trends, emerging opportunities, new technologies, and best practices that can help SMEs improve their competitiveness. The Canadian Business Service Centres, which can be found in each Canadian province and territory, provide information on federal and provincial government services, programmes, and regulations aimed at SMEs. As well, governments use on-line means to deliver information and services and also, to maintain an interpersonal support network. Efforts are focussed where policies and programmes could correct gaps in the marketplace. This policy stance has led to reduced government programming, fewer subsidies, and more of a focus on getting general policies right and less on trying to address problems with a scattered programming approach. The government now provides more facilitation and less direct financial support. This is a policy stance that has received support from the small business community.

Entrepreneurship

Since entrepreneurial activity is known to be associated with national economic growth, entrepreneurship is an important activity for any country.⁴ To facilitate entrepreneurship, the government has better streamlined information available to SMEs. In order to simplify the process of acquiring accurate, timely, and relevant information and referrals, the federal and provincial governments created 13 Canadian Business Service Centres (CBSCs), one for every province and territory. Many of them have a large number of satellite offices in chambers of commerce across the country. They provide a wide range of information, which can also be found on the Internet at www.cbsc.org/, on government services, programmes and regulations about starting a new business or improving an existing one. In so doing they provide information on all levels of government. One of the most popular features that can be found on the CBSCs' Web site is the Interactive Business Planner (IBP), which is the first business planning software product specifically designed to operate on the Internet. It uses Internet capabilities to assist entrepreneurs in preparing a three-year business plan for their new or existing business.

Since tax situations can often be complex, the Canada Customs and Revenue Agency (CCRA) has been working with small businesses to improve services, reduce the burden of compliance, and maintain confidence in Canada's tax system. The CCRA Web site, which can be found at www.ccradrc.gc.ca/, provides a Guide for Canadian Small Businesses. The guide contains information on CCRA programmes that SMEs should know about, including an overview of their obligations and entitlements under the laws that the CCRA administers. As well as explaining how to plan for taxes, keep records, and make and report payments, it also explains the different kinds of business structures, income tax reporting and payment, payroll deductions, importing and exporting, and how to prepare for and handle an audit.

Human Resources Development Canada (HRDC) (www.hrdc-drhc.gc.ca/), the federal department that plans and implements Canada's human resource policies and programmes, also helps workers who are seeking to become self-employed. HRDC provides Self-Employment Assistance (SEA), which helps Canadians create their own jobs and businesses. HRDC focuses its efforts at the community level by providing technical advice, income support, and coaching geared to individual needs. For example,

3. Canada, Industry Canada, *Building A More Innovative Economy* (Ottawa, 1994).

4. Paul D. Reynolds et al., *Global Entrepreneurship Monitor: 2001 Executive Report* (2001), p. 12.

with support from HRDC, communities can identify potential growth sectors in their communities and market niches, and then encourage business start-ups in these areas.

Strategis is a Web site maintained by Industry Canada found at www.strategis.gc.ca/. Launched in 1996, Strategis uses the Internet to provide business and consumer information to all Canadians. The information available on Strategis results in significant savings and improved service to Canadian SMEs. On the Strategis Web site, an on-line guide for SMEs entitled "Your Guide to Government of Canada Services and Support for Small Businesses" can be found at www.strategis.gc.ca/sc_mangb/smeguide/.

In addition, there are four regional development agencies (RDAs): Atlantic Canada Opportunities Agency, Canada Economic Development for Quebec Regions, Federal Economic Development Initiative for Northern Ontario, and Western Economic Diversification Canada. Each RDA is responsible for its own economically diverse region of Canada and is available to assist SMEs.

The Atlantic Canada Opportunities Agency (ACOA) (www.acoa.gc.ca/), which is the federal agency responsible for economic development in Atlantic Canada, works to increase the number of start-ups by providing on-line business-development tools for entrepreneurs. One of its main focuses is youth entrepreneurship. Its Web site provides the "Young Entrepreneurs' Info Kit", which is a how-to kit aimed at anyone under the age of 30 who wants to own a business. This package gives advice on how to determine if entrepreneurship is for you and also, provides information on various programmes and resources. In partnership with the Community Business Development Centres (CBDCs), ACOA also offers the Seed Capital ConneXion Programme for young entrepreneurs, where up to CAD 15 000 is available in the form of a repayable, unsecured personal loan and up to CAD 2 000 is available for specialised training and business counselling. The CBDCs are a network of 41 not-for-profit, quasi-private sector organisations across Eastern Canada. Their mandate is to stimulate private-sector employment in rural Atlantic Canada through business financing, counselling, and advisory services to small businesses.

Canada Economic Development for Quebec Regions (CED(Q)) (www.dec-ced.gc.ca/) offers services in information, skills acquisition, training, and funding to foster economic development in Quebec's regions. Its main objectives include focussing on the development of SMEs and enhancing entrepreneurship. One of the programmes it provides is the IDEA-SME Programme, which, along with other priority areas, delivers services, funds activities, and provides resources in the area of entrepreneurship. CED(Q) offers a loan programme in order to help innovative SMEs receive project funding in the areas of innovation, exporting, and research and development. The IDEA-SME Fund was created in partnership with the Business Development Bank of Canada. As well as guaranteeing support for firms receiving loans under this programme, CED(Q) shares the risk with its other partners, such as the Bank of Montreal Capital Corporation and the National Bank of Canada.

The Federal Economic Development Initiative for Northern Ontario (FedNor) (www.fednor.gc.ca/) works with community partners and other organisations to improve access to capital, information, and markets for SMEs. It does this through investment initiatives such as the Northern Ontario Business Development Loan Fund for Small and Medium-Sized Businesses, which is a partnership between FedNor and the Credit Unions of Northern Ontario. Term loans of between CAD 25 000 and CAD 500 000 are available provided there is an agreement that mentoring and counselling support services will be used and paid for if needed. FedNor's Business Planning Initiative supports private-sector entrepreneurs who require a full and professional business plan. Applicants must select an appropriate consultant before they will receive the up to CAD 5 000 in requested funding.

Western Economic Diversification Canada (WD) (www.wd.gc.ca/) deals with economic development within the four western provinces. It provides many on-line products and links from its Web site to SME information centres. The WD Web site offers an interactive on-line self-assessment quiz titled "Am I an Entrepreneur?" and also directs entrepreneurs to the Online Small Business Workshop (OSBW). The OSBW is an Internet-based workshop designed to help with developing a business idea, starting a new venture, and improving an existing small business. WD sees youth entrepreneurship as an important contributor to the development of rural communities. The Western Youth Entrepreneur Programme (WYEP) is a CAD 15 million programme that helps to develop job opportunities by providing both flexible-term business loans of up to CAD 125 000 and services to young people.

Financing

“A financing gap is considered to be any factor in the market that restricts access to capital sources.”⁵ Despite considerable effort by the public sector to close financing gaps in the market, these gaps are still present for SMEs, in particular for knowledge-based businesses. Gaps exist for various reasons: size gaps exist because financing requirements of SMEs are often not large, and therefore, SMEs do not represent enough potential to attract interest from financial institutions; risk gaps exist because financing for growth is rejected as financing ratios either do not match what lenders expect or lenders demand more collateral than SMEs can pledge; knowledge gaps exist because financial institutions do not understand knowledge-based businesses; and flexibility gaps exist because flexible terms and conditions are not offered on loans from financial institutions and SMEs do not even try to request terms other than those dictated by their financial institution.⁶ SMEs in the start-up stage have the most difficulty obtaining financing when compared to older companies.⁷ Although financial institutions have made significant inroads in improving the accessibility of debt financing for SMEs, much more needs to be done.⁸ In order to obtain financing, SMEs must usually look to alternative means such as credit unions and trust and leasing companies, venture capital, personal money, family support, and informal “angel” support.⁹ Some options are highlighted below.

The federal government’s Canada Small Business Financing Programme lending commenced on 1 April 1999 through the Canada Small Business Financing Act (CSBFA), which facilitates access to debt financing to increase the availability of financing for small businesses. Under this programme, the federal government partially guarantees loans to most small businesses with annual gross revenues less than CAD 5 million. Although banks and other financial institutions make the loans, the government pays 85% of any losses incurred as a result of default. The marketplace gap it fills is as relevant today as it was at the inception of its predecessor, the Small Business Loans Act, in 1961. In 2000-2001, more than 14 400 loans were made under the programme, amounting to approximately CAD 1.2 billion in debt financing. Over 50% of CSBFA loans were granted to start-ups or new businesses. A five-year pilot project extending the CSBFA programme to capital leases will be launched on 1 April 2002. The Capital Leasing Pilot Project gives SMEs an additional financing option, and should allow younger and smaller firms, who in the past have been underserved by the leasing industry, to make better use of their limited capital to innovate and enhance their businesses. Both elements of the CSBFA – loans and leases – operate with an objective of cost recovery. Small businesses pay fees designed to cover the government’s payment and losses.

The Business Development Bank of Canada (BDC), which can be found on the Internet at www.bdc.ca/, is a Crown corporation dedicated to filling marketplace gaps by providing financial and consulting solutions that meet the needs of small businesses. It supports entrepreneurship by providing financial and management services, both on its own and jointly with other institutions. Most importantly, the BDC is a complementary source of SME financing and is required to earn a rate of return at least equal to the federal government’s cost of funds. While doing this, it still must offer a wide variety of financial products to support the long-term growth of Canadian businesses in all sectors of the economy, with particular emphasis on knowledge and export-based industries. Among others, it provides the following products: venture capital in exchange for an equity participation of between 15% and 49% or unsecured convertible debt financing; venture loans, which combine characteristics of terms loans and venture capital, where repayment is a combination of interest payments and royalties specifically tailored to a company’s cash flow; and seed capital from three regional funds, which provide financing and management support until the company can seek conventional venture-capital investors. A review of

5. Carleton University Centre for the Study of Training, Investment, and Economic Restructuring, *Capital Markets in Western Canada: A Review of Research Findings* (Western Economic Diversification, May 1999), p. 5.

6. Angus Reid Group, “Financing Services to Canadian Small and Medium-Sized Enterprises,” *Supporting Small Business Innovation: Review of the Business Development Bank of Canada* (Ottawa: Industry Canada, 2000), p. 117.

7. *Ibid.*, p. 114.

8. *Ibid.*

9. *Ibid.*

the BDC determined it to be a success.¹⁰ During fiscal year 2000-2001, the BDC provided a combination of financing and consulting services to almost 20 000 clients.¹¹ The total amount of new loans authorised increased to CAD 1.5 billion, of which 47% went to knowledge-based businesses and exporters; these loans complemented CAD 1.3 billion of financing from other sources. The BDC invested CAD 114 million of venture capital in 71 investments, which leveraged CAD 636 million from other sources. Its portfolio grew by about 11% to CAD 6.1 billion this year and is expected to reach approximately CAD 9.5 billion in 2006.

In partnership with major financial institutions, Industry Canada also developed a Web site, called Sources of Financing, which is found on the Internet at www.strategis.ic.gc.ca/sources. It aims to inform SMEs about debt, equity, and micro-credit funding sources available to them and offers a complete guide to the types of financing available.

In 2000, the SME Financing Data Initiative was launched as an ongoing effort to understand the nature of the gaps and to provide comprehensive and unbiased information to policy-makers. This initiative is being implemented over five years.

Technology and innovation

The 2001 Speech from the Throne recognised an innovative economy driven by research and development as being essential to creating opportunity for Canadians.¹² It noted that an innovative economy, where the benefits of new ideas are shared by every sector and region, requires a highly skilled workforce and investments in new technology. Canada believes it has laid a solid foundation for success in the new economy. In particular, its innovation system includes various agencies at the federal, provincial, and local levels that can assist SMEs with various aspects of innovation. All programmes and services are intended to make Canada economically stronger. Some of the current government initiatives are listed below.

Technology Partnerships Canada (TPC), located on the Internet at www.tpc.ic.gc.ca/, uses a unique investment approach designed to enhance job creation. It does this by partnering with the private sector to invest in research and development in key growth sectors of the global knowledge-based economy. Businesses usually repay the investments made by TPC through sales-based royalties. TPC supports innovative SMEs across Canada in partnership with the National Research Council-Industrial Research Assistance Programme (NRC-IRAP). The TPC-IRAP Pre-commercialisation Assistance Programme assesses and implements investments for SMEs in projects of up to CAD 1.5 million.

The Industrial Research Assistance Programme (IRAP) is designed to help SMEs meet the technological challenges they face in delivering new products, processes or services through the provision of technological advice, innovation support, and financial help. Its goal is to enhance innovation capacity so that good ideas can be turned into profitable businesses as quickly as possible. More information about this programme can be found on the Internet at www.nrc.ca/irap/.

The Canadian Technology Network, which can be found on the Internet at www.ctn.nrc.ca/, gives technology-related SMEs access to a wide variety of technology and business assistance. A linked network of advisors is available across the country and can work with a particular SME to identify its needs and help find the management that can meet the challenges it faces. All advisors are employed by organisations in Canada known for technology or related business success and competence.

Since 1994, the Communications Research Centre (CRC) Innovation Centre has been helping both innovative young companies and more-experienced SMEs develop their potential through on-site technology incubation. Information on the Centre can be found from the CRC Web site, which is at

10. Canada, Business Development Bank of Canada, *Supporting Small Business Innovation: Review of the Business Development Bank of Canada* (Ottawa: Industry Canada, 2000), pp. 59-61.

11. Canada, Business Development Bank of Canada, *BDC Innovating Productivity: 2001 Annual Report* (Ottawa, 2001), p. 2.

12. Canada, Governor General of Canada, *Speech from the Throne to Open the First Session of the 37th Parliament of Canada*, 30 January 2001.

www.crc.ca/. The technologies, facilities, and expertise at this location can be used so that new companies can test their wings and older companies can carry out research and development on new products.

Tax incentives through the federal government's Scientific Research and Experimental Development (SR&ED) Programme encourage investment in research and development that leads to new or improved technologically advanced products and processes. The SR&ED Programme gives claimants cash refunds and/or tax credits for their expenditures on eligible research and development work done in Canada. Eligible work includes experimental development, applied research, basic research, and support work in engineering, design, operations research, mathematical analysis, computer programming, data collection, testing, and psychological research. Information on this programme is readily available on the Internet at www.ccr-a-adrc.gc.ca/taxcredit/sred/.

Although many programmes that foster SME participation in innovative practices exist, Canada still has an "innovation gap". The gap is apparent in three areas: the creation, adoption and commercialisation of knowledge, the supply of highly qualified people, and the innovation environment. Canada recognises the need to close these gaps in order to ultimately raise its standard of living. In February 2002, the federal government presented Canada's Innovation Strategy in order to address these gaps and challenge other players to join in the effort. The full text of the two papers addressing these issues can be viewed on the Internet at www.innovationstrategy.gc.ca/. The strategy outlines a series of actions that the federal government can take in the near future to address specific challenges in the areas where innovation gaps are known to exist.

Electronic commerce

The benefits of electronic commerce are numerous. Among others, these benefits include reduced communication costs, inexpensive distribution of digital products, easier market entry, and the ability to conduct business without time or geographic constraints.¹³

The increase in Internet use is changing the way SMEs are conducting business and relating to their customers. Recent data from the Canadian Federation of Independent Business (CFIB) show that Internet use in firms is increasing steadily in Canada. In the second quarter of 2000, 69% of business owners surveyed said that their firms were actively using the Internet. These findings are up from 67% recorded in the first quarter of 2000 and 61% at the start of 1999. Internet use increases with firm size. In 2000, almost all surveyed businesses with more than 100 employees were using the Internet in some way. 80% of firms with between 20 and 100 people were using the Internet. Approximately 71% of firms with between five and 19 employees were connected to the Internet. Internet usage in establishments with fewer than five employees had reached almost 60%.¹⁴

Small businesses in Canada that are not online do not find that there are any significant barriers preventing them from doing so and that the most important reason for them not using the Internet is that they do not realise the potential benefits of participating in e-commerce.¹⁵ A 1999 survey found the most common reasons for businesses not using e-commerce to be that their products and services are not conducive to the Internet, a preference to maintain their current business model, and security concerns, in that order.¹⁶

The likelihood of a small business adopting Internet technology depends on characteristics such as the kind of markets that businesses serve and the region in which they are located. In sectors where information is the product, the Internet is viewed as the ideal method of doing business. In the second quarter of 2000, 90% of surveyed business-service firms in Canada were using the Internet and 52% were considered to e-businesses, where e-businesses are defined as firms using the Internet to market their

13. Innova Quest Inc., *The State of Electronic Commerce in Atlantic Canada: Final Report* (Ottawa: Atlantic Canada Opportunities Agency, 2000), p. 2.

14. Canadian Federation of Independent Business, *E-business Update: Internet use Among Small and Medium-sized Firms CFIB Mid-year Survey Results* (Toronto, August 2000), p. 1.

15. SES Canada Research Inc., *The SES Web Entrepreneurship Survey* (Toronto, Fall 2000), p. 33.

16. Statistics Canada, *Information and Communications Technologies and Electronic Commerce in Canadian Industry* (Ottawa, 2000), pp. 16-17.

services or make transactions online. Large-scale operations in sectors such as manufacturing, wholesale, as well as franchises are emerging as major adopters of e-business. Businesses serving mainly the consumer market, such as retailers, hotels, restaurants, and personal-service firms, had the lowest amount of Internet activity at only 60%. 74% of SMEs in British Columbia were using the Internet. Alberta and Ontario both had 72% of firms using the Internet. As well, these provinces all had the largest percentage of e-businesses at 40%. In Nova Scotia, 73% of businesses used the Internet but only 26% were using e-business.¹⁷

The increasing effectiveness of security measures such as encryption and secure electronic transaction systems should contribute to business and consumer confidence in e-business. The policies of the federal government recognise that security is essential to having a trustworthy environment for electronic transactions on open networks. Cryptography is an important technology that can contribute to the growth of e-commerce as it allows consumers and businesses to authenticate and safeguard sensitive information. This information includes credit card numbers, electronically signed documents, and personal email. In the context of cryptography, the government has introduced a policy that allows Canadians the freedom to develop, import and use whatever cryptography products they choose. Additionally, the government is acting as a model user of security technologies in the delivery of government services.

The federal government has a clearly defined goal to become the most connected nation in the world. Although Canada has made great strides in this area, improvements are still needed. In 1998, the Prime Minister announced Canada's Electronic Commerce Strategy and outlined initiatives designed to establish Canada as a world leader in the adoption and use of electronic commerce. Since then, the government has been working in close collaboration with the private sector. The federal government has concentrated on creating the most favourable environment possible in areas necessary for the rapid development of e-commerce. The 2000 federal budget provided initial two-year funding for a new Government On-Line strategy. In the budget introduced 10 December 2001, the government further supported this initiative by committing CAD 600 million over the next four years to the implementation of this strategy by 2005.¹⁸

Management

Canada recognises that competent management skills are a necessity for SME success. A significant number of SMEs go out of business due to their own shortcomings, one of which is management, and not because of external factors, such as labour legislation, competition, and technological change. A study published by Statistics Canada in 1997 indicated that internal causes of bankruptcy include problems associated with general management skills, firm strategies, expansions and buyouts, financial planning, financial management and record keeping, human resources, marketing, and production and operations. All of these are primarily rooted in the deficiencies of firm management. The study indicated that in almost 71% of firms, deficiencies in general and financial management were the highest internal factors contributing to firm bankruptcy and 47% of firms failed due to poor marketing capabilities. Managers of these failed firms lacked the needed knowledge and experience to make their businesses successful. In contrast, firms found to exhibit strong management skills indicated that these skills were the main factor contributing to their growth. Because of these findings, the government provides information and services to improve SME management skills, such as business planning, marketing, sales, service, finance, and human-resource management.¹⁹

Human Resources Management is an information source designed to help SME employers meet their human-resource-related needs and help develop their business management skills. It provides information on hiring, entrepreneurship, productivity, competitiveness, layoffs and terminations, staff relations and planning, pay and benefits, training and development, and labour laws. The Web site is a partnership between Human Resources Development Canada and Industry Canada and can be located at www.hrmanagement.gc.ca/.

17. Canadian Federation of Independent Business, *E-business Update: Internet use Among Small and Medium-sized Firms CFIB Mid-year Survey Results* (Toronto, August 2000), pp. 2-3.

18. Canada, Department of Finance, *The Budget Plan 2001* (Ottawa, December 2001).

19. J. Baldwin, *Failing Concerns: Business Bankruptcy in Canada* (Ottawa: Statistics Canada, 1997), pp. 23-24.

Industry Canada also maintains two other Web sites to assist entrepreneurs with management skills. "Steps to Growth Capital", which can be found at www.strategis.ic.gc.ca/growth, is an interactive Internet site that offers a step-by-step guide on how entrepreneurs wishing to grow their businesses can prepare themselves for securing risk capital. "Steps to Competitiveness", which can be found on the Internet at www.strategis.ic.gc.ca/steps, assists entrepreneurs in assessing their SMEs in certain areas, such as marketing and strategic planning, in order to determine if they are competitive in these areas.

Internationalisation/globalisation promotion

In essence, all of the above mentioned programmes, services, and policies are meant to promote the internationalisation of SMEs in the new economy. Additional programmes and services are available to SMEs specifically in the area of exporting.

Team Canada Inc. is a partnership of federal, provincial, and territorial governments providing assistance to Canadian companies so that they can succeed in world markets. Team Canada Inc. provides programmes and services in the areas of skills development, market information, counselling and advice, market entry services, and trade financing. ExportSource (www.exportsource.ca/) is Team Canada Inc.'s on-line resource for export information. ExportSource provides a single access point to all trade-related government departments and agencies on subjects including: preparing to export, marketing research, marketing exports, entering the market, financing exports, and preventing and resolving problems.

The Business Development Bank of Canada offers a product called Working Capital for Exporters. It is designed to help small businesses finance exports and export-related activities. This product provides up to CAD 250 000 for pre-shipment financing in order to cover the high costs associated with initiating and developing international markets. The repayment terms are flexible and allow small companies to both build foreign sales and ensure their long-term viability.

Two other government-owned financial institutions deal exclusively with exporting. The Canadian Commercial Corporation (CCC) (www.ccc.ca/), an export sales' agency wholly owned by the Government of Canada, works with Canadian exporters to help them win sales in world markets by assuming some of the transaction risk. The Export Development Corporation (EDC) (www.edc-see.ca/) is a Canadian financial institution devoted exclusively to providing trade-finance services to support Canadian exporters and investors in over 200 markets, 130 of which are in developing markets.

Czech Republic

SMEs in the economy

SMEs (fewer than 250 employees) in the Czech Republic accounted for 99.8% of the total number of firms in 2000. In that year, SMEs in industry, construction, trade, catering, transport, finance, services and agriculture, combined, accounted for 59.5% of the total number of employees. The SME share in the total output of these sectors amounted to 52.9% and 52.6% in value added. SME exports were 36.2% of the total for the Czech Republic while SME imports were 49.4% of the total. SMEs generated 40.4% of GDP in 2000.

Framework policies

Policies in support of entrepreneurship and SMEs are based on the following postulates: SMEs increase market dynamism, have the ability to absorb a substantial number of workers released by large enterprises, and are a stabilising element of the economic system. The underlying business environment is decisive for SME development, playing a significant role in determining and influencing the demand for their products and services, and facilitating, or, on the contrary, restricting their access to markets.

The economic and social contribution of SMEs can be described as their ability to: alleviate the negative impact of structural change; function as subcontractors for large corporations; create conditions for the development and introduction of new technologies; create jobs with low capital costs; decentralise business activity; and help foster faster development of regions, small towns and rural communities.

Three principal acts regulate business activities in the Czech Republic:

- The Commercial Code, effective since 1992 and amended in 2000.
- The Trade Licensing Act (also known as the Small Business Act), in force since 1991 and amended in 2001.
- The Law on State Support to Small and Medium-Sized Enterprises, effective since 1992, and the amended law due to enter into force on 1 January 2003.

A new Support Programme for Small and Medium-Sized Enterprises in the Czech Republic (2001-2004) was adopted in December 2000. The intent of the new policy is to define: the relationship between the state and SMEs during the period leading up to the Czech Republic's expected accession to the European Union; the role of SMEs in the economy; and the scope and form of regulation and government intervention needed for attaining the objectives of economic policies in this sector, including delimiting the institutional framework and the manner of its financing.

The long-term objective of the policy is to maximise SMEs' contribution to economic development – in terms of national output, technological progress, competitiveness, reduction of unemployment, and regional, social and economic differentiation. The medium-term objectives of the policy are to: increase the share of SMEs in the renewal of economic growth and exports; reduce unemployment; improve the technological level and competitiveness of SMEs; support co-operation between innovative SMEs and various research bodies, both public and private; and assist individuals starting up in business.

The policy aims to: increase the efficiency of support programmes; improve the transparency of the support system; expand successful programmes, and when appropriate, extend their duration; and to reduce the administrative burden on SMEs. This new SME policy is intended to focus on first-time entrepreneurs, recently established enterprises, and SMEs capable of receiving commercial funding.

SME policies and programmes

In the framework of the SME support system, the detailed SME policy has been approved annually by the Czech government since 1991 with small differences between successive annual programmes. For 2001-2004, 17 SME programmes (described below) support competitiveness in the private sector, comprising both national and regional programmes.

Entrepreneurship

To increase entrepreneur numbers and start-ups, the START programme was launched in the framework of the Support Programme for Small and Medium-Sized Enterprises (2001-2004). The original aim of this programme was to provide subsidised loans to start a business to workers made redundant following the restructuring of the mining industry. For 2002 and later, the programme's scope has been broadened, with subsidised loans available to all first-time entrepreneurs, carrying a maximum repayment period of six years. An entrepreneur can obtain an interest-free loan of CZK 500 000 and in the case of several partners, the loan amount can reach CZK 1 million.

Financing

The Czech government applies a range of programmes which aim to alleviate the difficulties experienced by SMEs in accessing capital. Soft loans are granted for both investment and operations and, as of 1999, guarantees for revolving loans have been provided, which also cover loans to refinance previous operational loans. The main support instruments applied in the field of access to capital are guarantees for bank credits and leasing, guarantees for capital entry, low-interest loans, reimbursable grants, interest rate subsidies, and subsidies towards the costs of implementing certification systems. A new instrument used since 2001 to support SMEs is a guarantee for entry into public tenders and for certification of products. Grants can be awarded towards: certification costs – the MARKET Programme (compliance with various standards, ISO 9000, ISO 1400, EMAS Programme); and cost of creating new job opportunities – the SPECIAL programme (targeting social groups requiring special attention).

Under the GUARANTEE Programme, SMEs can apply for a subsidised loan or a leasing guarantee for viable projects – both investment and operational loans can be assisted. In the case of a leasing guarantee, a contribution of at least 10% is required from the client. For major projects an independent review is commissioned and the costs are borne by the applicant firm. Participation in this programme allows combined participation in other SME programmes.

The MARKET Programme awards assistance to SMEs by way of subsidised interest rates and grants for certification costs. Interest rate subsidies are granted for investment loans if the loan serves for project financing: a 7% annual interest rate subsidy applies even in the case of simultaneous participation in the REGENERATION programme; a 3% annual interest rate subsidy on a bank loan is possible in the case of simultaneous participation in the REGION and COMMUNITY programmes. The total subsidy must not exceed CZK 5 million in the former case and CZK 2 million in the latter case.

The SMALL LOANS Programme was introduced for 2001-2004 with the aim to promote the development of small enterprises (fewer than 50 employees) through access to the necessary capital. Assistance ranges from CZK 300 000 to CZK 1 million, with a repayment period of four years.

Technology and innovation

In 2001, support for technology development in SMEs continued to be provided through the TECHNOS and PARK programmes. The TECHNOS programme supports research, development and innovation in SMEs by accelerating their rate of technology acquisition through the realisation of R&D

projects. The programme has three main parts concerning new technologies, new materials and new information technologies. Eligibility criteria relate to: the level of research proposed; dissemination of research results; environmental impact; energy considerations; time schedule; and the applicant's economic reliability. Assistance takes the form of reimbursable and non-reimbursable costs (up to 50% of project costs, with ceilings). The assistance may also require the collaboration of other participants on the project. Projects must not exceed a duration of three years. Applicant projects are selected and evaluated by public competition. A group of independent experts appointed by the Ministry of Industry and Trade selects the applications and assesses both the technology and economic level of each project. This group monitors the entire project throughout its existence and makes a final evaluation.

The PARK programme supports the launch and operation of science and technology parks. The programme aims to contribute to regional structural change through areas designated for high-technology activities and involving: research; technology transfer; innovative enterprise education; risk reduction due to synergy effects; innovation counselling, etc. To fulfil project eligibility criteria, applicants must: function as a business incubator; have a connection with an R&D base; prove themselves to be high-skilled and innovative; and present an economically viable project plan. Each applicant must own or lease the land and buildings in the S&T park for at least ten years. Projects must be compatible with the local and regional economy and should last two years at most. State support is granted for: *i*) launching and running a science and technology park, if at least 50% of an operational park area is reserved in advance by existing innovative firms; and *ii*) developing an existing science and technology park, if existing innovative firms which are members of the park account for at least 70% of the operational park area. Up to 50% of project costs can be covered, subject to a ceiling of CZK 8 million. The selection and evaluation of applicant projects follows the same procedures as for the TECHNOS programme.

Electronic commerce

According to a survey conducted in the Czech Republic in 2000, approximately 91% of firms with more than 25 employees used the Internet, compared with 43% two years earlier.

Fifteen core measures for e-commerce support were decided by the Czech government in January 2000. An action plan to implement the government's information policy through the end of 2002 was approved in May 2000. The measures are intended to, *inter alia*: *i*) create conditions for the use of electronic signatures in the framework of e-commerce; *ii*) create conditions enabling public access to Internet; *iii*) enforce utilisation of e-commerce principles in public administration; *iv*) support SMEs in the use of e-commerce; and *v*) create legislative conditions for the development of secure electronic banking and a secure electronic payment system.

The Czech government's strategy for e-commerce development in the SME sector focuses on the following areas:

- Rationalisation of entrepreneurial activities with the aim to increase efficiency and productivity with the help of the Internet.
- Innovation and the acquisition of new business models.
- Competitiveness – devising a strategy for meeting the competition challenge presented by new firms entering established markets.
- Market-driving strategies to reflect an increased integration of the supply chain.

A basic precondition for development of e-commerce is that SMEs have the necessary technologies and skills. Other existing support measures have been strengthened, such as those provided for the establishment of Web sites and SME network projects.

Management

For 2001-2004, two main programmes promote the objective of better SME management: **MARKETING** and **CONSULTING** (the former is also geared to export promotion). The **MARKETING** programme aims to facilitate Czech SMEs' access to foreign markets and to close the gap between the range and quality of support services (information, consulting and educational services) available to Czech SMEs and those enjoyed by SMEs in the European Union. The programme provides firms with a subsidy for marketing information, marketing education and the creation of promotional materials, covering up to 60% of expenditure, with a ceiling of CZK 100 000. The aim of the **CONSULTING** programme is to provide low-cost specialised business consulting, information and services. Assistance is also provided for the training of entrepreneurs, and for services of the Association of Businesswomen and Women Managers. Certification systems, such as ISO 9000, ISO 14000 and EMAS continue to be supported.

Export promotion

Under the **MARKETING** programme, SMEs can obtain a subsidy – up to 60% of expenditure – from the Czech Trade Agency for export and marketing consultation. Financial assistance is also given for presentations, exhibitions and trade shows, with aid ranging from CZK 50 000 to CZK 150 000 .

Regional programmes

A number of regional and local programmes are also implemented in support of SMEs. The **REGION** programme awards financial assistance to small firms (fewer than 50 employees) implementing a project in designated regions. SMEs registered in the region can apply for subsidised interest rates if they commit to certain job creation conditions. Loans must not exceed CZK 20 million, and simultaneous participation in other SME programmes is permitted.

The **COMMUNITY** programme provides financial assistance to SMEs in communities with a population of less than 2 000, and in the municipality of Milovice. Businesses registered in and intending to implement a project in the programme area businesses can apply for interest rate subsidies for bank investment loans, on the condition that they create one full-time job within one year of receiving the assistance. Loans may not exceed CZK 20 million, and simultaneous participation in other SME programmes is allowed.

The **PREFERENCE** programme awards soft loans to firms with fewer than 25 employees for projects implemented in regions involved in the **REGION** programme. The programme provides investment loans of a maximum of CZK 5 million with six years maturity and a fixed annual interest rate of 8%. The loan will be secured under standard banking rules. At least two new full-time jobs must be created within one year of provision of the loan. Participation in this programme cannot be combined with participation in other SME programmes, with the exception of the **SPECIAL** and **MARKET** programmes (when a grant for certification costs is applied for, in the latter case).

The **REGENERATION** programme is an SME programme focused on national heritage areas and zones, open to any small business (fewer than 50 employees) with a project in an eligible town or community. Subsidised interest rates amounting to 3% a year on a bank investment loan can be awarded to successful applicants. Another essential condition of eligibility is the requirement to create at least two full time jobs within one year. The job creation target varies with the size of the loan. Participation in this programme allows combination with other SME programmes, except for the **CREDIT** and **PREFERENCE** programmes.

The **OPERATION** programme aims to ensure the survival of small enterprises in specified territories and promote their further development, by means of operating loans for the execution of business plans. The loan repayment period is two years with an annual interest rate of 9%. The maximum loan amount is CZK 1 million. The **BORDER** programme has the objective of increasing employment and economic activity in specified border regions through investment-oriented loans focused on the execution of small firms' business plans. Loans bear a 6% interest rate, carry a six-year repayment

period, and must not exceed CZK 7 million. The REGIONAL GUARANTEE aims to provide easy access to bank loans in structurally and economically weak regions. The guarantee can cover up to 75% of the principal of a bank loan and unpaid interest not exceeding 30% of the principal of the loan. The cost of the guarantee to the entrepreneur is 0.4% per annum of the guaranteed sum.

Other programmes

Other SME support programmes implemented during 2001-2004, include:

- COOPERATION – this programme promotes the establishment of SME associations that co-operate with the aim of strengthening their market position. Grants covering 50% of the association's project costs are awarded to a maximum of CZK 3 million.
- DESIGN – the rationale for this programme is that design activity significantly improves competitiveness, helps create jobs, has a positive effect on the environment, contributes to improving the standard of living, and helps to shape lifestyles. The programme assists SMEs in performing an analysis of their production programmes from the standpoint of design, provides methodological assistance with incorporating design into business strategies, assists with the selection of designers, and creates optimal conditions for effective co-operation between designers and enterprises. Subsidies are available for independent expertise, organisation of presentations, and design consulting services.

Denmark

SMEs in the economy

In Denmark, SMEs account for almost 100% of firms (the share of large firms in the total amount only 0.2%), and very small firms (0-9 employees) represent 92% of the total number. SMEs represent 70% of total employment while very small firms generate 30% of the total. Twenty per cent of SMEs were selling online to other companies in 2000 and this share had risen to 27% in 2001.²⁰

Framework policies

In its programme, the new government, which came into power in November 2001, has stated that raising output is a precondition for financing further growth in welfare. The Danish government is putting forward a comprehensive growth strategy, in terms of both production and employment. The aim is to strengthen growth conditions so as to encourage more Danes onto the labour market, equip the economy to generate added value through work and ensure more value for each *kroner* invested. The government will therefore aim to provide favourable framework conditions for enterprises. Taxation levels are considered by industry to be a major obstacle for the generation of employment and output, and the government has therefore introduced a freeze on all taxes, with the intention of reducing income tax rates starting in 2004. The government intends to deal with those systems and regulations that curtail incentive, and individuals and commercial enterprises alike will be given better opportunities to chart their own course. A government priority is to promote openness and responsiveness to the outside world and to ensure that new economic and trade opportunities offered by the global economy are exploited.

Direct subsidies, which were used in the past, have been reduced over time and replaced by specific support activities that target particular obstacles. Frequently, these support activities are limited in time, with the intention that the market would be able to take over and continue with the support activity.

SME policies and programmes

The Ministry of Economic and Business Affairs is responsible for Denmark's overall SME policy and a number of agencies implement policies and contribute to policy planning in varying degrees. The most important of these is the National Agency for Enterprise and Housing. The economic framework of the Ministry's SME policy is determined in the annual budget decided by Parliament. As the SME environment is a product of the policies of several other Ministries (concerned with labour, taxes, R&D), these ministries may also play an active role in SME policy. In particular, the Danish Trade Council at the Ministry of Foreign Affairs has an important role in export promotion by offering SMEs access to information, consultancy, and assistance in market preparation, for more than 100 markets worldwide.

The government has published a catalogue of measures to improve industry competitiveness. Some of these measures are of particular value for SMEs, even if they will also benefit from most of the other actions.

In recent years, greater attention has been directed to entrepreneurship. Incubators for innovative entrepreneurs have been established in co-operation with the private sector. One-stop shops have

20. Source: Conditions for Growth in Denmark, Danish Ministry of Economic and Business Affairs, 2002.

been set up in co-operation between national and regional authorities, private organisations and companies, to co-ordinate consulting activities in the region in order to make it easier for entrepreneurs to obtain relevant support and improve firm survival.

Regulatory reform

One of the main priorities of the Danish government is regulatory reform. In addition to simplifying the administration of the public sector at all levels, one of the fundamental aims of the government is the simplification of the rules and regulations that set the ground rules for the conduct of everyday life.

To co-ordinate this endeavour, the government established the Division for Better Regulation in 2002. This division has been placed within the Ministry of Finance and works on a number of projects, including a comprehensive review of the regulatory system in Denmark aimed at, among other things, reducing the administrative burdens for both citizens and businesses.

The Commerce and Companies Agency is responsible for two initiatives, which aim at easing the administrative and regulatory burdens on businesses. One programme works at introducing e-government solutions. This will soon lead to the opening of a Web portal, where companies can conduct all of their statutory communications with government agencies. The other programme aims at simplifying the administrative impact of new business legislation. All new business-related legislation is assessed by business test panels. These panels consist of representative companies that estimate the administrative impact of the new legislation on their businesses. The results form an integral part of the legislative process and work to make better and simpler business legislation.

To ease the administrative burdens on SME, a bill from the Minister of Employment concerning safety organisation was passed by Parliament in 2002. The requirement for setting up a safety organisation now applies to enterprises with ten or more employees (previously, five or more employees) leaving small enterprises more free to decide how to organise their safety work.

Entrepreneurship

Entrepreneurs are a vital source of innovation and dynamism in an economy. The government's goal is to encourage more people to set up their own companies, and to ensure greater survival rates. The government's priorities are outlined in *Promoting Competitiveness*, and the chosen initiatives are designed to improve conditions by updating establishment account schemes and abolishing time limits on carrying forward deficits and losses. *Promoting Competitiveness* also eases regulations relating to the succession process by allowing employees to take over a company, subject to the same conditions as family members.

In November 2002, the government is due to present its action plan on *Promoting Entrepreneurship*.²¹ This action plan will focus on Denmark's entrepreneur culture, financing schemes for company establishment, and regional advisory services for entrepreneurs. The government also intends to strengthen frameworks to encourage the establishment of new companies and aims to improve the entrepreneurial culture and increase entrepreneurial activity among the young and elderly, and also those that already have some business experience.

Financing

Efforts to improve access to financing for SMEs have evolved since the early 1990s. The provision of grants has been abandoned and replaced by a more market-oriented approach. Thus, equity guarantees to venture capital companies were launched in 1994. Moreover, the government has supported the creation of a viable, commercial market for subordinated debt used for active financing of SMEs. By funding part of a feasibility analysis, the government similarly helped pave the way for a second-tier marketplace for trading shares in SMEs. To further the commercialisation of research and

spur the creation of technology-based start-ups, eight technology incubators have been established that have all received financial support from the government.

In a move to achieve a forward-looking, integrated approach to public support for SMEs' access to finance, several initiatives have been set up within the realm of the Danish Growth Fund (DGF), a government-funded investment fund. A loan guarantee scheme, managed by DGF and backed by the European Investment Fund, has boosted bank lending to SMEs. DGF also comprises the organisational framework for a newly formed national business angel network. A crucial reorientation of the Fund's investment strategy has occurred. DGF has undertaken to expand investments to innovative SMEs by converting its DKK 2 billion bond holdings, in line with market developments, into equity or quasi-equity investments. Consequently, DGF has discontinued the provision of soft loans, marking a switch to a more commercial investment approach. Returns on successful ventures are now expected to offset losses on failed investments. Nevertheless, the Fund's investment remit remains unchanged. It continues to target the supply of capital to those segments of the market where private funding is inadequate due to high perceived risks (particularly seed funding). An added advantage of using market-based financial instruments is that investees, at the outset, are familiar with the demands and conditions laid down by external investors.

Technology and innovation

A nation-wide network of Technological Information Centres (TICs) provides assistance to the business community and especially SMEs. These services comprise information, advice and assistance in finding relevant counselling for firms; they also collaborate in campaigns and programmes initiated by the government with all services provided free of charge. The Ministry of Science, Technology and Innovation supports ten Authorised Technological Service Institutes (GTS institutes) which are independent institutions operating under market conditions and are important parts in the system of diffusion. They sell technological consulting services to companies and public authorities and act as bridge-builders between Danish and foreign research institutions and enterprises in supplying Danish enterprises with state of the art knowledge and counselling in technology and management.

In April 2002, the government presented its IT and telecommunications policy in the parliamentary report "IT for All: Denmark's Future". The report outlines the government's IT and telecommunications policy intentions and details seven further fields vital for positive IT and telecommunications development in Denmark. These are: enhanced use of IT in corporate Denmark, a competitive telecommunications sector, strong IT competency, an IT-based public sector, IT security – including the introduction of digital signatures – useful content on the Net and a Danish stamp on IT in the EU. These policy objectives are underpinned by the IT Plan of Action 2002, presented in April and containing a number of initiatives, all of which will be implemented in 2002. The action plan is seen as the first step in long-term government IT efforts planned for the years ahead.

Export promotion

The Export Guarantee Fund insures exporters against political and commercial risks. Support is also provided by business counsellors and trade officers of the Danish Trade Council at the Ministry of Foreign Affairs and those employed in over 100 embassies, consulates and trade offices around the world, working on the promotion of exports and investment. The aim is to assist Danish enterprises having limited export experience, in planning their marketing, exhibitions and campaigns. Business counsellors and trade officers prepare product and competitor information, market analyses and users are charged reasonable rates for these services. Furthermore, the Danish Trade Council assists SMEs on international markets through various programmes and services. An Export Start Programme, where SMEs participate in a programme to enhance or start their export activity, has proven successful. In 2001, the Council developed an Internet portal for SMEs where enterprises, amongst other things, can self-assess their readiness for export. New programmes and services are under development, including a subcontractor programme and a workshop programme. The National Agency for Enterprise and Housing can assist enterprises that encounter technical trade barriers. Such actions can be taken bilaterally or through the European Commission.

Other programmes

With the Home Service Scheme, the Danish Commerce and Companies Agency aims to promote the development of vital enterprises which employ unskilled workers in cleaning services. The private households that buy cleaning services from enterprises under the scheme receive a subsidy of 40%. Further support to enterprises is available in the form of a telephone help line, publication of handbooks, etc.

According to the EU regulation concerning health and safety at work, it is a requirement that enterprises carry out risk assessments. Aiming at easing the administrative burdens of SME, the Danish Working Environment Service has developed guidelines and forms suitable for small enterprises. The guidance material is developed for different industry branches.

The Ministry of Economic and Business Affairs Hotline provides information by telephone on public sector regulations and services in all ministries.

Surveys and reports on industrial development and common strategy policy papers are used to identify regional strongholds that can be further developed by strengthening the interaction between business and regional knowledge and educational institutions. This is followed up by the establishment of project groups that develop concrete ideas for projects. Twenty project groups are currently working with the development of new project ideas that include actors in both Funen and Jutland. In Zealand, between 120 and 150 local employment promotion actors have been involved in the work to come up with proposals for projects which may increase employment growth in the region concerned.

Danish municipalities are setting up local co-ordination committees, which constitute a forum for co-operation between the relevant actors in the field of employment. The main purpose of the co-operation committees is to strengthen general preventive measures in relation to citizens who have difficulties in maintaining or obtaining employment. The committee also acts in an advisory capacity in relation to, for instance, enterprises and trade unions.

A new related initiative from the Ministry of Employment to strengthen efforts to create an inclusive labour market is financial support, in the form of grants, to establish local placement units. The form of the units may differ, and there is a broad framework for the organisation of the placement activities. Placement units aim to make it easier for enterprises to recruit persons in the target group.

The National Agency for Enterprise and Housing together with a business newspaper *Børsen* and an unemployment insurance company, ASE, have established *Startguiden* on the Internet, which is a service that provides information on all matters related to the setting up and operating a business. Other services include an expert panel comprising lawyers, accountants and other experts who reply to questions on line within 24 hours, a newsletter and a network application where entrepreneurs can establish experience-groups and communicate across occupational sectors and geographical lines. In 2001, 250 000 enterprises sought information about products of the Enterprise Guide and Hotline.

Finland

SMEs in the economy

In 1999, there were 220 000 enterprises in Finland, and SMEs (fewer than 250 employees) represented 98.5% of total firms. Firms with fewer than ten employees account for approximately 90% of the total, while those with more than 500 employees represent approximately 0.1% of the total. Within manufacturing, firms with fewer than ten employees account for approximately 85% of the total, and those with fewer than 50 employees represent 97% of the manufacturing total. Approximately 10% of manufacturing employees are in firms with fewer than ten employees, 24% are in firms with fewer than 50 employees, and 42% work in firms that employ more than 500. The share of manufacturing production by size class was roughly as follows in 1999: 5% of output was generated by firms with fewer than ten employees; 14% was generated by firms with fewer than 50 employees, and about 30% by SMEs; firms employing fewer than 500 generated approximately 45% of manufacturing output. Overall, SMEs are reported to account for 52% of private sector employment, 37% of turnover and 40% of GDP. Sectors where SMEs contribute most to employment are manufacturing, wholesale and retail trade, business and other services, and construction.

Framework policies

Concerning policy measures related to business and industry, the key areas of interest are how to boost the competition environment and market access as well as the promotion of entrepreneurship. In the government's 2001 Broad Economic Policy Guidelines, the structural policy priorities included the following: *i*) enhancing compliance with regulations in public procurement, especially at the local level; *ii*) increasing transparency in the provision of public services in order to heighten private firm participation; *iii*) enhancing competition in industries such as distribution and construction; and *iv*) developing the risk capital market by establishing a fiscal framework more conducive to investment and entrepreneurship.

In 2001, the Ministry of Trade and Industry (MTI) introduced a new "Business Environment Policy in the New Economy" intended to promote competitiveness in the policy areas that will play a central role in the coming years. The new policy emphasises the importance of promoting skills and technologies, ensuring good functioning of competition, strengthening entrepreneurship and developing a regional business environment policy.

SME policies and programmes

There is no official SME policy in application in Finland. SME issues have been incorporated into the current enterprise policy. The Finnish enterprise policy aims to create a competitive business environment and climate for enterprises, regardless of their size, field of activity or location. As the great majority of enterprises in Finland are small and medium-sized, their needs are especially emphasised in planning and implementation of enterprise policy. In Finland, enterprise policy measures are wide in scope and the responsibility for their implementation is distributed among various administrative branches and regional operators. The present enterprise policy is implemented across various ministries in a co-ordinated manner within the framework of the government's long-term Entrepreneurship Project.

Entrepreneurship

The Entrepreneurship Project was initiated in the year 2000, when measures fostering entrepreneurship and enterprise were drawn up to be included in a project that was set up in line with the government programme. The project's objective is to promote stable economic growth, employment and competitiveness by enhancing the establishment of new firms and the growth of existing firms. The project comprises more than a hundred concrete measures, which are being carried out in co-operation between nine ministries and the Association of Finnish Local and Regional Authorities. The Employment and Economic Development Centres (EEDCs), entrepreneurs, sectoral organisations and other partners also play a key role. Valuable experience has been gained from this wide-scoping operating method. Emphasis in the project has been placed on measures applied to reduce administrative burdens, to open public service production up for competition, to enhance entrepreneurial education and training, to introduce new financing instruments, and to launch various pilot and development projects.

Financing

In general, the Finnish risk capital market functions relatively well, which is mainly the result of an intensified public involvement in the market since the mid-1990s. The public effort was followed by large private venture investments, mainly by pension funds. Funds raised have increased by more than 50% from 1998 to 2000, while annual investments in the same period more than doubled. The actual number of new venture-backed companies, which amounted to more than 300 in 2000, also emphasises the expansion of venture capital in Finland.

Pension funds have been an important source of funds. The largest providers of new funds in 2000 were insurance companies contributing more than one-third of total funds raised. In total, more than 50% of new funds raised originate from these two sources. Government capital amounts to one-fifth of new funds raised. Corporate venture capitalists contributed less than 10% of the total funds raised.

Forty venture capital firms are active, including both privately and publicly funded companies. The public actors – SITRA (The Finnish National Fund for Research and Development), TESI (Finnish Industry Investment) and regional authorities – have joint owner interests in different venture capital firms. SITRA co-invests in 20 domestic venture capital funds with ten related management companies and is involved in 13 technology transfer companies. TESI is a co-investor in nine regional venture capital firms. These patterns illustrate the public sector involvement in the Finnish venture capital industry. The primary goal of TESI is to promote the production and commercialisation of innovations by setting up funds specialising in financing enterprises in the seed and growth stages.

SITRA is an important player in all segments of the risk capital markets, its activities varying from direct portfolio investments to minority ownership of technology-transfer companies at universities and research institutions.

Regarding the venture capital firms' preferred investment stages, one-third of the investments are made in the seed capital segment. It is reasonable to conclude that government funding – directly or indirectly – is still the main contributor to the Finnish seed capital segment that has undergone a positive development in recent years. Annual seed capital investments have increased more than six-fold between 1998 and 2000. The seed capital share of total venture capital investments has increased from 3% in 1998 to 9% in 2000 and was even higher in 1999, reaching almost 14% of annual investments.

Finnvera is a specialised state-owned financing company that promotes Finnish exports by offering export credit guarantees and supports domestic operations of SMEs by offering risk financing and guarantees, even when the collateral available would not satisfy other lenders. Special credits of Finnvera comprise start-up loans granted to the founder of a new enterprise, micro-loans and loans granted to female entrepreneurs. Finnvera also offers small enterprise guarantees, based on special financing arrangements between Finnvera and the banks. In 2000, a new financing programme to promote the growth of micro-enterprises, Pikara, was launched, having been developed by Finnvera in co-operation with MTI, the EEDCs and the entrepreneurs' organisations. Pikara is a financing programme set up to promote the growth of micro-enterprises and is geared towards encouraging and

guiding micro-enterprises towards controlled and planned growth. Finally, the EEDCs also act as important channels for public finance for SMEs. They provide firms with various loans, guarantees and subsidies. The role of EEDCs as significant channels for EU finance is particularly noteworthy.

Technology and innovation

The National Technology Agency (Tekes) programmes have developed research and technology co-operation between large enterprises, research organisations and SMEs. An important aim is to facilitate SMEs to participate in the national technology programmes co-ordinated and financed by Tekes. Technology experts at EEDCs act as a link between Tekes and regional enterprises. The co-operation with the National Board of Patents and Registration in Finland continues, and the network of regional innovation advisors has been strengthened. Several support programmes promote co-operation, innovation activities, networking, and technology transfer between SMEs and educational establishments. They are co-ordinated through the EEDCs.

Tekes is a key institution for financing applied and industrial R&D, using capital from the state budget via MTI. Some 40% of industrial funding by Tekes is awarded to companies with fewer than 50 employees. 70% of all venture capital investments in Finland have received Tekes funding at some stage of their development. Tekes is a complementary source of financing for private venture capital investors since it provides funding in the earlier stages while venture capitalists provides additional funding as the firms mature.

Under the recently launched LIKSA programme, Tekes offers grants to newly established firms in co-operation with SITRA, which contributes additional funding through equity investments in the projects. By the beginning of 2002, close to 40 applicants has been selected for the programme. The range of technologies is wide, and ICT and biotechnology are well represented. In 2002 Tekes launches a new TULI programme in order to commercialise a new technology knowledge and research results. This programme is considered as a “pre-pre-seed” activity, which supports the development of business plans for potential entrepreneurs. The Finnish Science Park Association (TEKEL) co-ordinates the programme with Tekes.

Technology clinics are arranged by Tekes for technology transfer and for the diffusion of new methods and expertise from research institutes and universities towards SMEs. The Technical Research Centre of Finland (VTT) is an active operator in the clinics. VTT also focuses on regional development offering information about their services to SMEs in the regions.

Electronic commerce

SMEs have invested in ICT to the extent that the current ICT penetration rate for those employing 10-49 persons is 95%. Micro-enterprises (1-9 employees) have a 75% penetration rate and are the only category where general awareness or introductory measures are still needed. Geographically, penetration has also developed relatively evenly in the SME sector.

The use of Internet in enterprise functions is heavily concentrated on the supply chain and e-administration side. Some 82% of enterprises with Internet access use it for e-banking. Customer interface and B2C markets in particular are developing in a less dynamic fashion. Surveys indicate that enterprises see structural obstacles for increasing the share of Internet sales. Firstly, as Finland is the most sparsely populated country in Europe, it is very challenging to try to bridge digital transactions and physical delivery of products. Enterprises have developed centralised delivery systems with respect to trade channels and direct digital sales interfaces with customers offer less potential. Secondly, as enterprises adopt the most efficient digital solutions, the use of Internet in supply management, in banking and administration have taken priority. Enterprises have also shown a strong interest in material covering Finnish success cases in concrete enterprise function development and productivity improvement and well known consumer brand digital success stories have less appeal.

The government launched a number of projects to support the development of electronic business. Creating user confidence by various means is deemed important, and EU legislation

implementation is a central part of the approach. Digital tools to cover e-logistics, various mobile services, e-accounting and e-invoicing are targeted priorities and are also subject to technology development programme efforts. E-government is an important part of e-business. Companies can file digital tax returns and business registry reports, and all government special financing services are accessible through one portal. Electronic marketplaces have been created for public procurement. The government is also piloting open and neutral portal development in special areas such as tourism, handicraft and health services.

Management

The Ministry of Trade and Industry (MTI) and the regional network of 15 EEDCs seek to improve the operational conditions for SMEs by arranging counselling, training, and enterprise development projects. These activities aim to activate the establishment of SMEs; develop the business skills of management and personnel; develop skills in marketing and internationalisation; promote product development; promote the utilisation of new technology and improve productivity; increase co-operation between enterprises and promote networking; and develop service enterprises. The EEDCs offer a selection of specialist and development services appropriate to the various phases in the life-cycle of an SME.

Management training organised by the EEDCs is designed specifically to meet the needs of SMEs, and during the training process, the emphasis is on the practical approach both in terms of the choice of teachers and the teaching methods. Specialist and consultation services are nation-wide brand products and the quality of specialist and consultation services is assured in advance by careful selection of qualified specialists who are subject to strict eligibility criteria and who are given the appropriate training to deliver the programme.

Examples of new training and development services offered by the EEDCs include ProStart, eSTEP and Ladies' Business School. The ProStart programme is focused on assessing and developing a business idea in order to evaluate its viability and the preconditions for becoming an entrepreneur and to assist in working on the idea. The eSTEP service is designed to help SMEs to make full use of the potential of ICT in their company. The service is based on a network of specially trained and certified private-sector consultants who will conduct company level e-analysis and give impartial advice in the form of action programmes integrating digital networking tools into company functions. Finally, the Ladies' Business School programme is targeted at women who hold a management position in SMEs. The aim is to develop the ability of these participants to analyse, plan and develop their business activities and to adopt more up-to-date management systems and methods as well as to function as an effective leader.

Export promotion

The structure of Finnish industry is based today more and more on the use of new technology and solid technological know-how. Internationalisation is a vital condition for SMEs, and products need to be directly designed to international markets. After the recession of the early 1990s, the expansion of exports in the electrical and electronics industries has revived other sectors, too. The share of exports of goods and services in the GDP reached 42% in 2000. SMEs' growth and development in Finland has been assisted by increased efficiency through R&D funding, together with support schemes related to the foreign marketing of products.

Internationalisation assistance, which was previously a separate aid scheme, was combined with SME development, to constitute the Aid to Business Act from the beginning of 2001. Development aid granted for internationalisation projects is used to promote the export capacity of SMEs and their internationalisation. The aid is aimed at diversifying Finnish exports and launching the exports of new enterprises by providing them with market access and paving the way for their products. In 2001, nearly EUR 13.5 million was granted as aid for more than 400 internationalisation projects. Close to one-quarter of the aid was allocated to projects for SMEs involved in manufactured machinery, equipment

and wood products. Substantial amounts of aid were also granted for internationalisation projects of enterprises engaged in the provision business services.

Foreign marketing of SME products can also be assisted through campaigns co-organised by enterprises of different branches. The aim of assistance schemes promoting the internationalisation of sector-specific enterprises is to support the administration of the international marketing and business practices of SMEs, to enhance networking and to lower the threshold of SMEs for participating in trade in international markets. In 2001, EUR 17.9 million was allocated within the aid scheme for the internationalisation of sector-specific enterprises. The majority of the sector-specific internationalisation subsidies have been granted to joint ventures supporting the marketing of the equipment and services of electrical and electronics industries as well as the marketing of the machinery and equipment of the metal industry.

MTI can support through operational subsidies, the activities of organisations promoting foreign trade. The activities of these organisations aim to provide SMEs with services related to the administration of export marketing and internationalisation in the fields of education, data transfer, tourism and marketing. Among such organisations are the Finnish Institute for International Trade (FINTRA) and Finpro, under which the network of Finnish trade centres operates. Finland has export centres in 38 countries, where a total of 45 trade centres and their services are available to SMEs.

France

SMEs in the economy

There is no single definition of an SME. The various criteria used differ according to the laws or regulations introducing measures to assist SMEs. In France, since the war, SMEs have usually been defined as enterprises having more than 10 or 20 (in the industrial sector) employees and fewer than 500.

A Recommendation of the European Union of 3 April 1996 has clarified the situation: SMEs are defined as enterprises with fewer than 250 employees, and are classified as “micro enterprises” (0 to 9 employees), “small” (10 to 49) and “medium” (50 to 249).

For the purposes of analysing French SMEs, particularly in the industrial sector, an additional category has been introduced: “very small enterprises” (10 to 19 employees). The criterion of independence is taken into account by excluding certain enterprises from the SME classification on the basis of turnover thresholds or financial data.

According to these definitions, the 2.4 million SMEs in France represent 99.8% of all firms in the industrial, commercial and services sectors (excluding agriculture, financial activities, the renting of real estate and administration). They employ 7.9 million persons, corresponding to 65% of the active population, and account for 51% of turnover and 53% of value added of all firms in the industrial, commercial and services sectors, but only 30% of exports (EUR 1.2 trillion and EUR 121 billion respectively).

While SMEs account for less than half (48%) of the workforce in the industrial sector (excluding agri-food) and transport, they represent 86% of all employees in construction and civil engineering, 72% in commerce, 62% in agri-food and 54% in services.

In education, health and social services, SMEs employ 92% of the total workforce, firms with fewer than five employees alone providing nearly 30% of jobs.

Figure 3.1. Distribution of enterprises by size class

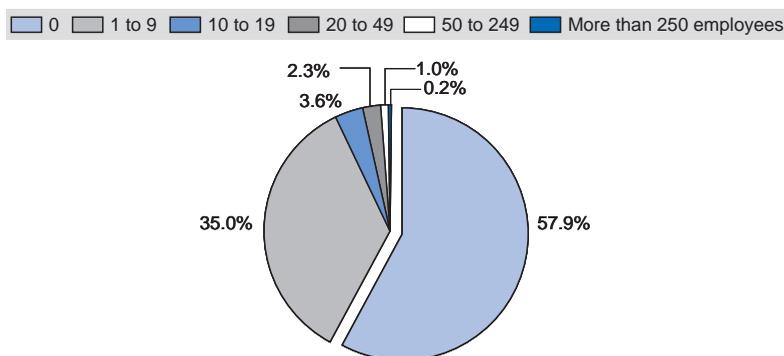
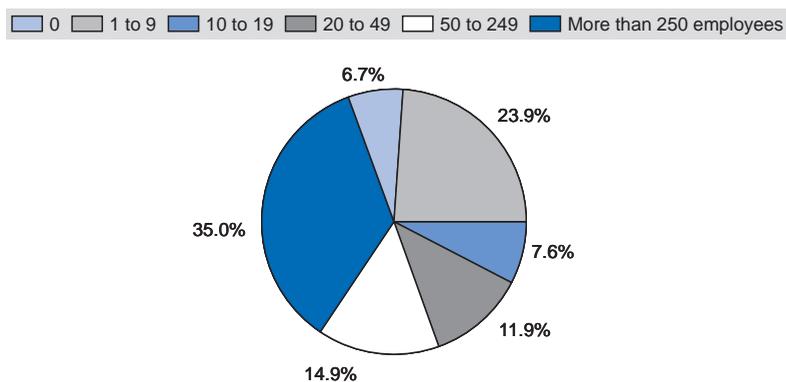
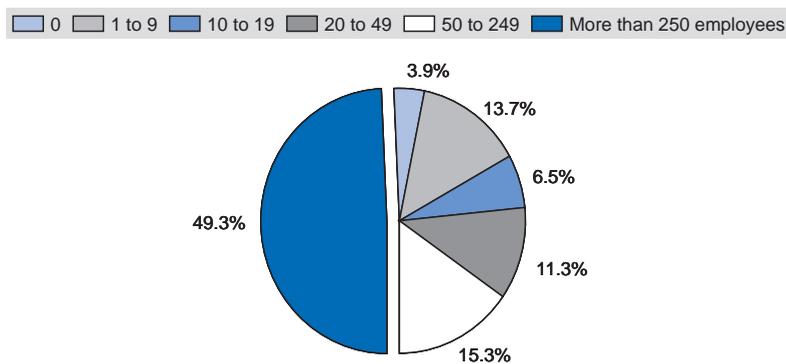
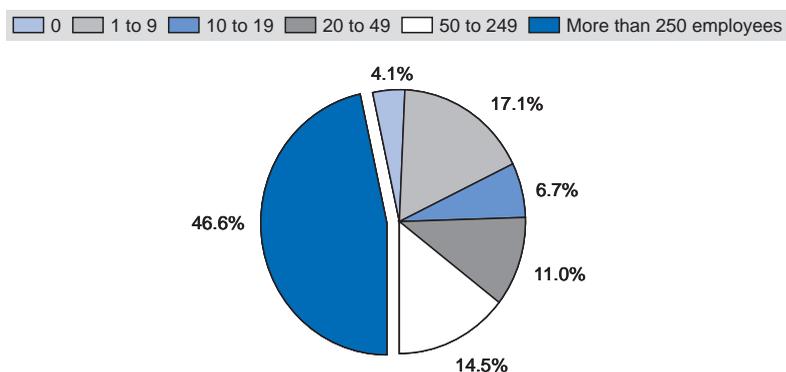


Figure 3.2. **Employment distribution by enterprise size class**

Source: DGI-INSEE-Decas, tax database for the year 1999 (real regime).

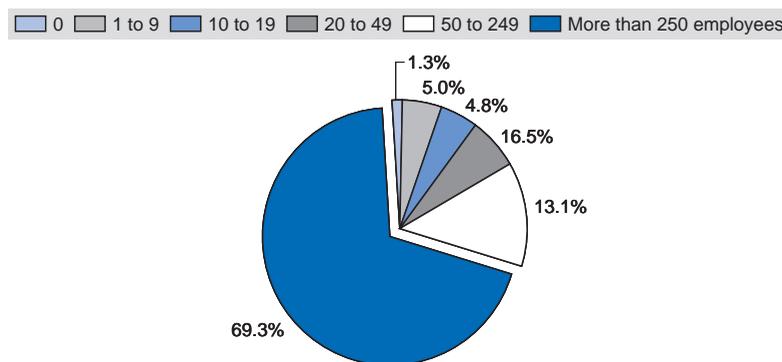
Figure 3.3. **Turnover distribution by enterprise size class**

Source: DGI-INSEE-Decas, tax database for the year 1999 (real profits and losses).

Figure 3.4. **Value added distribution by enterprise size class**

Source: DGI-INSEE-Decas, tax database for the year 1999 (real profits and losses).

Figure 3.5. Exports distribution by enterprise size class



Source: DGI-INSEE-Decas, tax database for the year 1999 (real profits and losses).

Enterprises with fewer than 20 employees account overall for 30% of total jobs: 53% in education, health and social action and in construction and civil engineering, 40% in commerce, 30% in services and agri-food, 16% in transport and 14% in industry (excluding agri-food).

Framework policies

French SME policy is geared towards creating conditions conducive to the development of SMEs and therefore employment. It is oriented in the following three directions:

- To foster the creation, expansion and transfer of ownership of enterprises, in particular by providing support to local players. The goal is to place entrepreneurial ambitions at the heart of a package to stimulate business-creation dynamics and expand employment.
- To promote business modernisation, by using local networks of start-up assistance, facilitating innovative start-ups so that entrepreneurs can make and sell new products and find new markets; this involves new technology and is aimed at promoting “quality”.
- To improve the legal, administrative and financial environment of enterprises, in particular by:
 - Simplifying administrative procedures and thus freeing corporate executives from non-productive routine tasks. This would ease administrative constraints and simplify the tax and employment regimes of small businesses. The objective is to give entrepreneurs the means to do what they do best: to create, lead and develop businesses.
- Spreading the (financial) risk more widely when creating, but also expanding, enterprises.

Such a policy allows for the diversity of people and firms, and also for that of the various economic and social interests involved, whether national or local, public or private (*e.g.* banks), so that the dynamics at work can be fully unleashed in all of the relevant employment areas and territories.

The government's policy includes measures aiming to:

- Give support to innovative firms and to the creation and transfer of ownership of businesses.
- Stimulate interaction amongst the players (including advisory bodies and local authorities) to help entrepreneurs develop their firms (through new markets, new technologies, training, quality control and certification procedures, etc.).
- Improve the financing of small and medium-sized enterprises, develop venture capital and encourage greater recourse to the SME Development Bank (BDPME).
- Direct state subsidies to SMEs towards a policy for a business environment consisting in particular of a more equitable share of resources and costs among operators, limiting complex administrative procedures and providing appropriate training for entrepreneurs and their employees.

SME policies and programmes

Promoting entrepreneurship

Enterprise creation in France fell from some 200 000 a year in the late 1980s to 175 000 in the late 1990s. Entrepreneurial density (the number of firms created in relation to the population) is markedly lower in France than in other industrialised countries such as the United Kingdom or the United States. Enterprise transfer problems are also giving cause for concern, since 500 000 firms are forecast to change hands over the next ten years when their current owners retire.

Armed with these figures, the new government is placing enterprise creation and support for transfer of ownership high on its agenda. The aim of the proposals on business initiative published on 7 October 2002 is to meet the target of 1 million new enterprises within five years. The measures concern all categories of entrepreneur and every facet of enterprise creation, acquisition and transfer, including regulatory, social, finance, tax, information and communications issues. The proposals come under six headings:

- *Theme 1: "Making enterprise creation simple, fast and accessible to all"*. In other words, making it faster, simpler and less expensive to set up a firm. It will now be possible to set up a company with capital of EUR 1, and entrepreneurs will be allowed to begin completing the formalities on the day they register their companies. There will be no more delays or geographical constraints to hinder enterprise creation, and incorporation will be possible on-line via the Internet. Some of the requirements prior to or at the time of registration will be lifted and entrepreneurs will be given more freedom to register their companies at their home address. Finally, entrepreneurs will be offered better protection, notably by means of a provision that they will not lose all their personal assets if their companies fail.
- *Theme 2: "Building bridges to enterprise creation"*. The diversity of potential entrepreneurs calls for individual solutions. The "dual activity" option will give all wage-earners one year to set up their own business, allowing them sufficient time for their project and providing these "employee/entrepreneurs" with special social insurance cover for that year.
- *Theme 3: "Financing business initiative"*. This will create new opportunities for the financing of business initiatives by banks, relatives, the stock exchange and subsidies. One aim is to direct personal savings towards the burgeoning economy, in particular by fostering a local approach to investment.
- *Theme 4: "Social backing for entrepreneurs"*. For the first year of business, an entrepreneur's social insurance contributions will be deferred and spread over several years; better and simpler support for enterprise creation will be available to people experiencing financial difficulties/exclusion or the unemployed, and the arrangements will be extended to other categories of entrepreneurs such as job-seekers over the age of 50.
- *Theme 5: "Facilitating enterprise acquisition and transfer"*. The current tax regime creams off a large share of a firm's resources at the very time when its future is uncertain. The tax burden on enterprise acquisition and transfers will be lightened, and simpler procedures will facilitate changes in corporate ownership.
- *Theme 6: "Boosting entrepreneurship"*. Entrepreneurship, and the desire to be master of one's own destiny by going into business, are not valued highly enough in France. An unprecedented effort by the education system is required so as to promote entrepreneurship and change mentalities. A campaign will be launched to raise awareness and an inventory drawn up of good entrepreneurial practice, with the best examples serving as benchmarks for more widespread development. Entrepreneurship will be embedded within secondary school programmes, and a partnership will be set up with players in the education system.

Helping SMIs develop

Local industrial development measures are implemented essentially at regional level as part of state/region programmes. They are put into effect by the Regional Directorates for Industry, Research and the Environment (DRIRE).

Set up in January 1994, the Small and Medium-Sized Industry Development Fund (FDPMI) supports investment in equipment to improve the technological level and competitiveness of enterprises. To be eligible, firms must have a sound financial basis, employ fewer than 250 people, be independent, and have a turnover and balance sheet not exceeding EUR 39 million and EUR 26 million respectively. More than 75% of successful applicants are businesses with fewer than 50 employees.

Regional advisory funds (FRAC) help SMIs to benefit from the services of outside advisers and consultants for a given project which is particularly important for their development (strategy, commercial environment, quality, management, etc.). State aid takes the form of subsidies of between 50% and 80% of the cost of the relevant studies or diagnoses, depending on the duration of the expertise.

Adopted on a general basis in 1989, the Manager Recruitment Subsidy (ARC) is given to SMIs which create a new job and recruit a high-level manager for an indefinite period. The subsidy, which may not be combined with any other similar public assistance, is limited to the first year and represents 50% of salary and payroll taxes up to a maximum of EUR 30 000.

Technology and innovation

Considered as key factors for competitiveness, industrial research and innovation are assisted in many ways.

The "ATOUT" procedure for promoting technology diffusion in SMIs is designed to speed up the acquisition of new technology by SMIs. While there is a strong temptation to focus on pure innovation (a totally new process or product) and advanced technology, for very many SMIs, it is more important first to master technologies developed elsewhere. ATOUT procedures are therefore aimed at supporting the acquisition, adaptation and integration by firms of new, generic, pervasive techniques which represent for them a significant technological step forward.

The French Innovation Agency (ANVAR) plays a key role in supporting industrial development and growth by promoting innovation, and in particular technological innovation. The Agency helps exploit the results of scientific and technical research, and participates in finding the financing required for enterprise expansion, notably through its expertise. In 2001, ANVAR provided innovation funding for 2 943 initiatives to the tune of EUR 225.2 million, a significant increase over the 2000 figure of EUR 217.8 million. One-quarter of this amount was given as subsidies, with three quarters taking the form of advances, repayable in the event of success.

The Ministry for Research and Technology has developed a set of procedures to promote the training of young graduates through research, and to enhance research and innovation in enterprises. These procedures are based on a tripartite co-operation between a young graduate, a skills centre and the enterprise which employs the graduate during the training period. There are different levels of training: higher-level technician (research contracts for higher-level technicians – CORTECHS), engineer or master engineer (technological research diploma – DRT; lengthy apprenticeship), doctorate (industrial contract for training through research – CIFRE) or post-doctorate (post-doc).

The Regional Centres for Innovation and Technology Transfer (CRITT) are responsible for promoting technology transfers to SMEs. They have their own budget, amounting to EUR 10.8 million in 2002 and 2003.

The Industrial Contracts for Training through Research (CIFREs) are designed to enhance the technological capacity of enterprises by organising research and development programmes for young researchers (five years post-secondary education) in collaboration with a research team external to the

enterprise. In 2001, 43% of CIFREs were allocated to SMEs. In 1998, 660 contracts were concluded, 670 in 1999, 720 in 2000 and 796 in 2001. The goal is to reach 800 contracts in 2002 and 860 in 2003.

Money for training for and through research has also been given since 1998 for post-doctorate students, with the twofold objective of helping young graduates to find jobs and encouraging SMEs to make greater efforts with regard to technological research and innovation: 70 fixed-term contracts were concluded in 2003.

SMEs also have access to financing from the Research and Technology Fund (FRT) in the form of project subsidies in the framework of EUREKA procedures, advances in technology, large-scale programmes and networks.

Women entrepreneurs

Business creation by women helps develop professional equality and economic growth. Nevertheless, although the labour market participation rate of women has been growing constantly over the last two decades and now stands at 48.3%, the fact remains that despite exemplary success stories, very few women create their own enterprise. Only some 30% of enterprises were started by women, who represent only 20.2% of entrepreneurs with ten employees or more (INSEE 1999).

Among the constraints encountered by women wishing to create their own enterprise, are:

- Greater difficulty in obtaining bank loans.
- Lack of consideration of the special nature of enterprise creation by women.
- Lack of suitable support structures.

In this context, France, which has adopted a deliberate policy to promote women's rights and equality between men and women in the country's social, economic and political life, has continued to support women who wish to create, take over or develop an enterprise.

The measures launched and implemented in 2002 are designed to meet the three following objectives.

Improving financing possibilities and access to bank loans

To this end, it was decided to increase the financial capacity of the Guarantee Fund for the creation, acquisition or development of enterprises by women (FGIF). Set up in 1989, the FGIF gives partial guarantees for loans taken out by women from banks.

In addition to the EUR 762 245 paid to it in the first three months of 2001, the FGIF benefited from an additional allocation of EUR 228 673 at the end of 2001.

Furthermore, to enhance the capacity of the Ministry's various guarantee funds to intervene, the Solidarity Guarantee Fund for Women Entrepreneurs and Employment was set up on 3 May 2002. This fund now comprises four guarantee lines, including the FGIF. All four function autonomously while being linked by the principle of solidarity. Thus, whenever one of the guarantee lines reaches its maximum financial capacity, one of the others may contribute funds to it. The state and its different partners intervene financially only as a last resort, in other words when the whole Solidarity Fund has reached its maximum financial capacity.

Lastly, at its creation, the management of the Solidarity Fund was given to *France Active Garantie*, replacing the *Institut de Développement de l'Économie Solidaire* (IDES)

Increasing support for women entrepreneurs

The change in the FGIF's manager and the creation of the Solidarity Fund for Women Entrepreneurs were accompanied by a change in the FGIF implementing procedures. Thus, the six-month time limit for setting up a guarantee has been abolished.

Moreover, 2002 was the year in which negotiations took place with a view to decentralising the processing of applications and decision-making by the FGIF, due to come into effect as from the

beginning of 2003. Two major network heads are to be involved in this decentralisation: *France Active Garantie* and *France Initiative Réseau*. Thus, two draft “sub-delegation” agreements should be submitted for approval to the new body directing the Solidarity Fund before the end of 2002.

At the same time, two contracts for promoting and directing the system are being prepared with these two networks. These deal, on the one hand, with the communication and awareness initiatives to be undertaken by these networks and, on the other, the financial arrangements and post-creation follow-up relating to women entrepreneurs supported by the FGIF. The aim is to provide such women with services that maximise the likelihood of success in their project.

Increasing the awareness of players about enterprise creation by women

Several objectives have been set for 2002 and 2003:

- Developing the partnership with the Enterprise Creation Agency (APCE).
- Drafting a protocol agreement with the *Caisse des dépôts et consignation* providing that this fund, amongst others, should include in its partnership agreements, clauses giving greater consideration to the specific characteristics of enterprise creation by women.
- Co-ordinating with the FORCE network which brings together the seven main networks for supporting enterprise creation.
- Participating in the micro-enterprise fair.
- Drafting protocol agreements with several bank networks giving greater consideration to the specific characteristics of enterprise creation by women.

Financing

Many economic studies, including those conducted under the auspices of the *Conseil National du Crédit* and the *Titre de la Banque de France* or the *Commissariat Général du Plan*, tend to show that the cost of credit is no longer the major obstacle it once was for the financing of small enterprises. Their access to credit, on the other hand, especially for the smallest enterprises, or during the key phases of growth (creation, acquisition, rapid development, etc.), remains a real problem.

Thus, the interest subsidy policy, which once served a purpose, has lost much of its effectiveness, partly because it has no influence on the *a priori* risk of a loan application. Nevertheless, the problem of access to bank loans by small enterprises continues to arise in spite of dynamic credit supply: banks are extremely cautious when studying applications from SMEs or micro-enterprises. Studies regarding such applications are all the more costly in that, as pointed out by the *Conseil National du Crédit et du Titre*, there are few tools for calculating the risk with regard to such enterprises, due in large part to the lack of information available. This explains the reluctance of banks to support such enterprises, in particular as regards their creation, transfer or development projects.

In this context, the focus should be on guarantee mechanisms enabling enterprises to have easier access to credit by facilitating risk-taking by banks. Monies destined for interest subsidies to craft enterprises are gradually being transferred to micro-enterprises:²² the guarantees required of entrepreneurs are thus limited, and their principal place of residence is often protected.

22. In 1999 and 2000, the budget for soft loans granted by the banks, with State support, was maintained at € 152.45 million. It was devoted solely to financing measures to bring health and safety standards into line with European Directives (implementation of which is to be completed this year) and expenses related to the passage from 1999 to the year 2000, and adoption of the euro, so as to avoid penalising enterprises which had fallen behind or would have had trouble in meeting due dates.

Nevertheless, in answer to a request from professional organisations, allocation of the 2000 budget, *i.e.* € 152.45 million, was extended to the year 2001. 85% of the 1999 budget, of the same amount, was distributed, but only 52% of that of the year 2000 had been allocated at 31 December of that year.

The task of Sofaris (a French company which guarantees the funding of small and medium-sized enterprises) is to facilitate SMEs' access to financing, by guaranteeing the loans, and in certain cases equity capital, allocated to them by different financial institutions.

To this end, Sofaris administers guarantee funds, financed essentially by the state, in order to assume part of the risk related to the granting of credit (medium and long-term loans, equity type loans, furniture leasing and lease purchases, surety bonds on French markets and exports, etc.) as well as equity funding (25% of the annual budget) to SMEs. This system, based on close co-operation with banks and venture-capital agencies, is an important tool in the government's industrial policy.

Lastly, the PRE (a French regional employment subsidy), which was only implemented in July 2002 and on an experimental basis in five regions, could be extended as an experiment in 2003 in order to assess its effectiveness, provision being made to use it more widely in the 2004 budget preparations with a view to a full year's operation.

Internationalisation

Marketing insurance is the main instrument for supporting the international expansion of SMEs. It consists of insuring SMEs against the risk of the commercial failure of conducting business abroad.

State/region planning contracts include foreign trade provisions that furnish export start-up subsidies – 50% from the state and 50% from the regions – to SMEs (subsidising the recruitment of export staff, consultants, etc.). Allocations under the new state/region plans (2000-2006) amount to a total of EUR 63.6 million, or some EUR 9.5 million a year.

The CODEX procedure, under which advances repayable after five years were paid to one or more large-scale SME establishments abroad in highly promising areas outside the European Union, was abolished in July 1998. It was replaced by a guarantee fund created under heading 64-00, "foreign aid grants". This fund, used to insure SMEs investing in emerging and transition economies against economic risk, was set up in March 1999 under the group responsible for its management (SOFARIS – AFD – COFACE).

Germany

SMEs in the economy

In Germany, there are approximately 3.3 million SMEs active in the crafts, industry, trade, tourism, service, and liberal professions. Businesses with under 500 employees, or having less than EUR 50 million turnover, contribute 57% of corporate value added, create nearly 70% of jobs, about 80% of training places, and account for 46% of gross investment in Germany. Within manufacturing, almost 68% of firms have fewer than ten employees, over 91% employ fewer than 50, and over 95% of firms employ fewer than 100 persons. Less than 1% of manufacturing firms have more than 500 employees. Manufacturing firms with fewer than 250 employees account for 45% of employment, while those with fewer than 50 and ten employees, generate, respectively, 22.5% and 7.4% of employment in that sector. Examining the share of manufacturing production by size class for 1999 reveals that firms with more than 250 employees generated almost 67% of manufacturing output while firms with fewer than 50 employees accounted for almost 12% of output.

Framework policies

Through its tax policy, the German government has given decisive impulses to strengthen SMEs. The reform measures adopted for the years 1998 to 2005 give SMEs some EUR 15 billion in tax relief in their start-up year. SMEs benefited from tax relief amounting to approximately EUR 8 billion in 2001. Households will benefit from tax relief of more than EUR 34 billion by 2005. This will particularly benefit domestic demand.

To reduce the burden of red tape that impedes SMEs in particular, the federal government established a project group at the end of 1999 which is studying possibilities for more efficient systems and procedures and which is translating them into proposals for action. One focus of the project group is to increase the use of new technologies to accelerate administrative processes and remove bureaucratic obstacles. In March 2001, the project group published an interim report with more than 80 individual measures of a specific nature. Among the concrete projects for 2002 are the testing of a nation-wide ID number for companies (to be used with all government agencies) that will eliminate the many existing number systems and registers. In addition, the Federal Ministry of Economics and Technology has issued a publication providing 150 good examples of how government agencies and local authorities can make their services "business friendly". These examples are outlined in public presentations, the purpose being their emulation. Business transactions between companies and health insurance funds, including the benefits sector, have been possible via data transmission since October 2001. The data are passed on to the health insurance funds responsible for individual employees, with the result that employers have only virtual partners to deal with. There is no longer the need for completing, sorting, and sending forms.

SME policies and programmes

Through its SME policy, the German government aims to strengthen the performance and competitiveness of SMEs and offer them new growth and development possibilities. In particular, the start-up process in Germany is to be given additional dynamic and the stability and growth of existing companies supported. In this connection, the government observes the limits set by the European Union's policy on government aids.

Entrepreneurship

The entrepreneurial dynamic in Germany is fostered by, among other things, programmes at schools and universities that familiarise students with entrepreneurship issues. The initiative to set up university chairs for start-up studies, which has been undertaken by the German government in co-operation with the *Deutsche Ausgleichsbank*, has grown to include the participation of additional partners from the business sector and has resulted in the establishment of 42 chairs. More chairs are in the process of being established. The EXIST programme has so far provided financial assistance to five regional networkers that create and operate models to motivate, train, and support start-up entrepreneurs coming from universities. More than 350 innovative business start-ups have been launched by the EXIST regions. Some of them also receive financial assistance from the EXIST-Seed programme.

Furthermore, as part of the JUNIOR school project launched by the *Deutsches Institut der Wirtschaft*, students in school grades nine and above establish mini-companies operating under market conditions while participants learn, under school supervision, the appropriate responses to issues arising in self-employment. During the 2001/2002 school year, some 220 mini-companies with 3 000 students from 12 German states participated in the project. And in 2001, the first business camp for mini-companies was held, also to promote enterprise and individual responsibility. There are also many other school initiatives in the individual German states, as well as a brochure binder developed by the *Deutsche Ausgleichsbank* with practice-related school material on self-employment which has already been sent to 14 000 teachers.

Financing

The shortcomings of capital markets can present obstacles that are difficult to overcome for start-up entrepreneurs and for SMEs. The German government therefore supports start-up entrepreneurs and SMEs with a set of financing-assistance instruments tailored to their needs. The European Recovery Programme (ERP) assists the establishment of companies in the more traditional fields such as handicrafts. In 2001, a total of EUR 5.6 billion were made available for ERP loans at favourable interest rates. In addition, start-ups and existing companies are being assisted by programmes of two assistance banks – *Deutsche Ausgleichsbank* and *Kreditanstalt für Wiederaufbau* – which in 2001 gave more than EUR 10 billion to fund loans granted to SMEs. The introduction of the so-called start-up funding programme, which was established for the special purpose of covering the capital needs of smaller start-ups (up to EUR 50 000) and gives borrowers' banks an 80% release from liability, has proved to be particularly helpful for start-up entrepreneurs. Women are taking advantages of this possibility to a greater than proportional extent. Since its launching in May 1999, more than 17 000 start-ups have been assisted with a loan volume of nearly EUR 550 million. To help start-up entrepreneurs and SMEs gain access to bank loans, loan guarantees have also been made available as the security normally required by banks.

In the field of risk capital, the German government makes available, in considerable volumes, venture capital for young technology companies especially via the VTC – Venture Capital for Small Technology Companies. The funds are provided either as direct co-investment via the *Deutsche Ausgleichsbank's* technology venture capital fund association or as venture capital via the venture capital donors refinanced by the *Kreditanstalt für Wiederaufbau*. Through this programme, over EUR 500 million in risk capital was mobilised in 2000 for some 1 000 young companies. While only companies in which venture capital donors have already taken stakes have been eligible for assistance under the Venture Capital for Small Technology Companies programme (VTC), the VTC Early Phase programme, established in June 2001, helps start-up entrepreneurs even if there has not yet been any involvement by commercial stakeholders. The technology venture capital fund association takes on shares of up to EUR 150 000 per company. Through these programmes, the federal government is assisting the development of a private risk capital market in Germany, and in addition, providing supplementary support for these direct measures by strengthening the business angels market. Under the Business Angel Network Germany, 40 business angel networks, which were created in the past few years, have been merged.

Technology and innovation

In the field of technology, R&D, and innovation, a number of assistance measures aim to improve the technology base of SMEs. The new PRO INNO programme (Programme Innovation Capabilities for SMEs) aims to intensify R&D co-operation both among SMEs and with the scientific community. This can also entail the temporary transfer of staff from companies to research facilities and *vice versa*, as well as companies' support for the exploitation of innovations. In addition, the programme Technologies of the Future for SMEs and the programme Support for Innovative Networks, launched in September 1999, assist applicant collaborative projects within which SMEs, including handicraft firms, co-operate with research facilities and universities. Special assistance is given to SMEs in Germany's new states in the form of the "Assist Research, Development, and Innovation in SMEs and External Industrial Research Facilities in Germany's New States" programme. The section of the programme for R&D staff assistance is aimed at stimulating SMEs in the goods producing industries in Germany's new states and strengthening and expanding their personnel base in the R&D sector. The section of the programme for R&D project assistance supports SMEs in trade and industry and assists external industrial research facilities in the development of new products and processes. The InnoRegio competition is also tailored to the special innovation circumstances in Germany's new states; it assists new forms of regional co-operation among educational and research facilities, business, and administrations, thus helping to develop marketable products and services.

Electronic commerce

The German government is assisting 24 regional centres of expertise in e-commerce in which SMEs are given a broad range of information, advice, and training for making better use of the Internet. In addition, there are branch-specific centres of expertise for trade and tourism and another centre for the liberal professions is currently in preparation. Through these initiatives, the federal government is assisting SMEs to meet the challenges of the Internet age. The Multimedia Start-up Competition is intended to be a stimulus for turning innovative business ideas into reality in the promising multimedia sector. The German Internet Prize seeks to encourage the creation of model examples and successfully tested best practice examples of innovative Internet solutions adopted by SMEs, which can provide guidance to other interested parties.

Management

Offering training and advisory services to start-up entrepreneurs and SMEs is a central element of Germany's SME policy. In this context, the German government relies particularly on the chamber organisations and on other partners in the business community that supply consulting and training measures, and the government assists start-up entrepreneurs and SMEs in making use of such services. In 2000, some EUR 30 million were allocated by the Federal Ministry of Economics and Technology for consulting and training efforts and benefited approximately 200 000 start-up entrepreneurs and small businesses. In addition, the *Deutsche Ausgleichsbank* operates its own consulting centres at more than 40 locations in Germany's new states.

The round tables established by the *Deutsche Ausgleichsbank* and the chambers are assistance measures that have proven to be of great value and are used for companies experiencing crisis situations. Assistance is provided, using sometimes external experts, at more than 30 locations in Germany.

Export promotion

Assistance for the development of foreign sales markets and production sites is primarily undertaken by a close network of German chambers of commerce abroad, by so-called "delegates' offices", and by representations. Their offerings for SMEs range from market reconnaissance to the preparation of market studies, concrete advice in structuring joint ventures, and the placing of investments. Important information on markets, products, and possible co-operation partners abroad

are also provided to SMEs by the Federal Office of Foreign Trade Information. Alongside general information services on specific topics (such as customs requirements, import procedures), branches, and markets, the Office also provides a special information service with targeted research, supported by numerous market observers abroad. The third pillar of external economic assistance is the business and economic services of the German embassies and consulates abroad. On the initiative of the Federal Ministry of Economics and Technology, the most important protagonists of Germany's external economic assistance created the "iXPOS" Internet portal early in 2001 in the framework of service collaboration in external economic affairs; this constitutes an overview of all of the important service offerings in connection with doing business abroad and of the support measures available to SMEs.

The federal government also assists SMEs by providing export credit guarantees, investment guarantees against political risks in order to protect foreign investment, and assistance for participation in trade fairs abroad since international fairs are of particular significance for opening up export possibilities. Foreign investment is also facilitated through low-interest loans granted in the framework of the "KfW SME Programme Abroad". Finally, the establishment of contacts with foreign partners is facilitated through the organisation of co-operation meetings.

Other programmes

To draw attention to the transmission of business ownership to successive generations, the Federal Ministry of Economics and Technology launched the "Next – Initiative Business Successorship" campaign in May 2001. The campaign aims at diffusing information to present owners and potential successors and events have been held throughout Germany together with other partners from the business community, concentrating on the topic of successorship. In co-operation with the chambers, the *Deutsche Ausgleichsbank* operates the project of an Internet firm bourse CHANGE/CHANCE. More than 700 network partners in chambers, savings banks, and bank co-operatives are participating in this project nation-wide. There are presently approximately 10 000 ads placed in the firm bourses.

Greece

SMEs in the economy

Small and medium-sized enterprises constitute the core of the Hellenic Economy and are a major factor of social cohesion. SMEs in Greece account for a substantial share of the business sector, being the key factor for generating employment opportunities and growth at both regional and national levels. SMEs make up almost 99% of businesses, are responsible for 19% of exports, and contribute up to 12% of GDP. From a total number of 509 000 enterprises recorded in the 1998 census, 96.3% of enterprises had fewer than nine employees, 3.6% had between ten and 99 employees, while only 0.2% employed more than 100.

Framework policies

The Greek economy has been growing steadily since the mid-1990s and enjoyed an economic growth rate of 4.3% in 2000. Joining the euro area in January 2001 marked the start of a new era and offered opportunities for sustainable growth. Economic policy for the period until 2002 was aimed at satisfying a number of objectives, including: a smooth transition to the euro currency; the improvement of Greek competitiveness within the euro area by intensifying structural reforms; preserving macroeconomic stability; and achieving a reduction in unemployment. The current policy approach emphasises the adoption of a new, dynamic, entrepreneurial spirit, emphasises job creation and aims to foster:

- Qualitative and quantitative improvements in productivity and production costs.
- Elimination of barriers to the creation of new enterprises.
- Establishment of a more conducive entrepreneurial environment.
- Modernisation of technology.

Greek SMEs, comprising both traditional and modern enterprises, can be characterised by very different structural and operational patterns. A major challenge in the coming years is to restructure enterprises and to help small enterprises grow. Encouraging trends include the recent robust growth in Greek exports of high technology products, and an annual expenditure on information and communication technologies amounting to 6% of GNP, equal to the European Union average rate. The Greek government's industrial policies aim at improving firm competitiveness, to be achieved mainly by addressing the structural problems of industry and of SMEs.

SME policies and programmes

The principal objective of Greek SME policy is the creation of a favourable entrepreneurial environment capable of securing:

- An increase in competitiveness.
- A return on investment.
- Successful innovation and diffusion of technology.
- An improvement in infrastructure.
- Access to financial and credit institutions.
- Access to international markets.

In particular, current SME policy aims at:

- Developing new activities and new forms of entrepreneurship.
- Modernising public administration.
- Rationalising the entrepreneurial environment.
- Simplifying the regulatory framework and procedures.
- Supporting entrepreneurship and R&D with regard to certain population groups, *e.g.* women, the young, and the disabled.

The framework of SME policies is consistent with National Development Strategic Goals and the evolution of national economic, social and development indicators. The principal policy axes are decided mainly by the Ministry of National Economy and the Ministry of Development. Final measures and actions are implemented by intermediate bodies of the Public and Private Sectors, such as:

- Hellenic Organisation of Small and Medium Enterprises and Handicraft (EOMMEX).
- Professional organisations and sectoral bodies such as chambers and unions.
- Other public organisations such HEPO (export promotion) and ELOT (standardisation).
- Other intermediary bodies mainly at the peripheral level.
- Private development enterprises.

The Structural Funds and the Cohesion Fund of the European Union finance all actions concerning SMEs (SME programmes, operational programmes, initiatives for SMEs) while the European Social Fund focuses on employment policies. A series of programmes directed at both manufacturing and services is implemented based on three principal axes: improvement of the internal operational business environment, strengthening of competitiveness, and growth in and diversification of employment. The majority of SME programmes cited here are included in the Operational Programme for Competitiveness 2000-2006 implemented by the Ministry for Development. Most programmes started in 2001.

One focus of policies and programmes for SMEs is on measures to improve the modernisation of the institutional framework for entrepreneurial activity through simplification of procedures for the creation and functioning of enterprises, and decentralisation of public operational procedures. Significant progress has been made in streamlining the administrative environment for SMEs; the time frame and cost of setting up a new business have both been drastically reduced. The time frame will be from seven to ten days shorter while the costs will drop by 30%. The number of certificates that are required for an installation licence has been reduced from nine to six while the timeframe for the entire procedure has been reduced by two months. The Electronic Guide was installed in February 2001 and aims to guide the entrepreneur through the process of setting up a business.

Another focus of SME policies and programmes is on measures to improve the establishment of a modern private infrastructure to be achieved through the adoption of new technologies; the creation of networks providing services for SME activities in areas such as electronic commerce and quality control, and the creation of support infrastructures such as incubators, business centres, information bureaux, and centres for entrepreneurial and technological development.

Entrepreneurship

The government aims to create an infrastructure that supports entrepreneurial activity through:

- An integrated support network for SMEs, and Centres of Entrepreneurial and Technological Development that provide services to SMEs, especially at the regional level.
- An SME observatory that will systematically monitor SMEs at the national, regional and local level, and gather and process data that will contribute to assessing SME competitiveness.
- Structures and mechanisms to monitor SME competitiveness as well as their integration into the digital economy.

A number of programmes in support of entrepreneurship are currently implemented. The Promoting Youth Entrepreneurship programme aims at the development, support and promotion of entrepreneurship for young people through the provision of financial support for the creation of new, viable SMEs. The support is provided for the realisation of specific business plans in the manufacturing, trade, service and tourism sectors. To be eligible for the programme, candidates must be between 18 and 35 years old, and must not have been active in business during the previous 12 months. Financial support is limited to a maximum of 50% of the budget as detailed in the business plan. A support ceiling of EUR 146 735 applies to manufacturing and EUR 88 041 for the trade, service and tourism sectors. In 2001, during the first cycle of the programme, a total of 1 080 new business proposals were evaluated, expected to result in 371 new start-ups, for a total budget of almost EUR 29 million.

The Promoting Women Entrepreneurship programme aims to support women aged between 18 and 55 in their efforts to start a business in the manufacturing, trade, service and tourism sectors by optimising their experience, knowledge and talents. The programme has a strong rural element, applies to all prefectures and has the general aim of strengthening rural entrepreneurial dynamics and the local economies. The programme budget is the same as that of the Promoting Youth Entrepreneurship programme. In 2001 and early 2002, during the first cycle of the programme, a total of 945 new business proposals were evaluated and were expected to result in 275 new enterprises founded by women. Programme expenditure was almost EUR 17.8 million.

The Promoting Entrepreneurship to Combat Social Exclusion programme is still in the preparation stage. When implemented, the programme will promote entrepreneurial opportunities for the socially excluded members of the population, and for those who are physically or mentally challenged. Other programmes in support of entrepreneurship include Promoting Entrepreneurship in the Field of the Environment, and Promoting Entrepreneurial Excellence.

Financing

A range of policies and programmes with the objective of improving SME access to financing have been implemented. Included among these are direct government measures for risk financing like venture capital, leasing, factoring, business angels; the creation of the New Economy Fund for co-operative financial and other actions; the creation of the Entrepreneurial High Technology Equity Fund; and the Development Law (2601/98) which focuses on:

- Newly established enterprises.
- Tax incentives and accelerated depreciation for existing enterprises at the expansion stage.
- High technology investments or investments using alternative energy resources or protecting environment resources.

Technology and e-commerce

The Get Connected programme promotes the adoption of information and communication technologies and targets businesses with fewer than ten employees, especially those that are not connected to the Internet or those that do not use the Internet for business purposes. The government also supports enterprises in other size classes (10-250 employees) to adopt information technologies with a view to improving their competitiveness.

Promoting access to the information society and improving on-line access and training for SMEs constitute a central political goal for the period running to 2004. A number of measures are organised within the framework of the concise programme of government actions – GREECE 2004. These include the Go Digital programme which has been in operation since 2000 and aims to familiarise 50 000 SMEs with the digital economy by promoting the Internet as an integral part of their functioning. At the same time, consortia of universities, technical colleges, and other institutions have committed to support and train programme participants. Currently, teams of support and guidance advisors are being trained and they in turn will inform SMEs about e-business practices and will focus on the range of services that are

available through the Internet. Another programme, E-Business, targets SMEs with more than five employees and assists their adoption of ICT by financing their integrated business plans.

Management

Special measures for the support of private investment have been developed to promote the modernisation of enterprises, and to bring about quality improvement in products and services quality. A number of measures are also applied in order to improve access to the labour market.

Other programmes

Most of the programmes mentioned in this review are included in the Operational Programme for Competitiveness 2000-2006 and are implemented by the Ministry for Development. A number of other measures included in this programme are directed at energy, tourism, and the labour market, falling within the framework of the Third Community Support Framework, and belong to European and national initiative programmes. All of these contribute to the creation of an integrated support structure for SMEs.

Hungary

SMEs in the economy

In 2000, 99.9% of Hungarian enterprises had fewer than 250 employees, 99.3% had fewer than 50 employees, and 96% had fewer than ten employees. SMEs employing fewer than 250 persons accounted for 68% of Hungarian employment while firms having between one and nine employees generated 26% of employment. SMEs generated 41% of GDP, 41% of turnover and 18% of exports.

The Table 3.2 below shows the evolution between September 2000 and September 2001 of enterprise numbers in the different size classes. Very small enterprises (one to nine employees) and medium-sized enterprises (50-249 employees) were the only two size classes which saw growth in their numbers (6.4% and 3% respectively), during this 12-month period, while large firms experienced a decline of 2.6% in their numbers.

Table 3.2. **Evolution of businesses by size class**
September 2000-September 2001

	Operating Businesses 30 September 2000	Operating Businesses 30 September 2001	2001/2000 (%)
Micro (0-9)	794 872	792 828	99.74
Small (10-49)	23 635	25 139	106.36
Micro and small (0-49)	818 507	817 967	99.93
Medium (50-249)	4 821	4 964	102.97
Micro, small and medium (0-249)	823 328	822 931	99.95
Large (250 and above)	1 098	1 069	97.36
Total	824 426	824 000	99.95

Source: National Statistical Office, Hungary.

Framework policies

Important changes to the regulatory system affecting SMEs were recently undertaken aiming to promote SME development, in line with social expectations and European Union requirements. Reflecting the importance the Hungarian government attaches to the improvement of SMEs' operating conditions, changes have been made to legislation that result in reduced taxes and a lighter administrative burden. The statutory minimum wage has been increased from HUF 25 500 to HUF 40 000 in 2001 and to HUF 50 000 in 2002.

Entrepreneurship

To promote and sustain economic growth, domestic and foreign investment, the government implemented the Széchenyi Plan, which is the National Development Programme. A part of the plan, the Enterprise-Strengthening Programme, which in 2001 contains 15 special SME-oriented tenders, covers the following areas: preparation for EU accession, investment, quality management, vehicle fleet development, development of a micro-credit system, trade, and handicraft development. In 2002, the sum of HUF 50 billion was allocated for enterprise development purposes, and the 2002 Enterprise Development Programme comprises 13 tenders. Support takes the form of non-repayable grants and

interest rate subsidies. On the basis of earlier experience, modifications to the terms of the tenders have been made which decrease the associated administrative work. Special attention is being paid to the needs of SMEs. For example, they can receive 50% payment in advance.

A new organisational unit operating within the Ministry of Economy has been established: the Co-ordination Secretariat of Enterprise Assistance for EU Integration. The Secretariat maintains contacts with the Prime Minister's Office and other ministries, chambers, SME interest groups and professional associations. The main goal of the Co-ordination Secretariat is to convey information from the macro sphere to the micro level, in order to prepare the small business sector for the EU single market and a new legal environment, thereby ensuring that the Hungarian small business sector is able to adjust to new market requirements, maintain its competitiveness and work profitably in new environment.

Financing

In agreement with the EU, the government raised the amount of micro credit issued by the Hungarian Foundation for Enterprise Promotion (HFEP) with the assistance of local entrepreneurial agencies. Since October 2001, the loan ceiling stands at HUF 6 million. To promote regional development, especially in some underprivileged areas, regional micro-loans are issued by the HFEP, co-financed by the European Phare resources. The loan conditions are the same as those of the Micro-Credit Programme.

At the end of 2000, Hungarian commercial banks had provided approximately 50 000 loans to small businesses, indicating a shift in their policies with regard to the financing of the SME sector. Loans to SMEs reached HUF 1 176 billion at the end of 2000. A similar trend can be observed in the area of guarantee provision. The Credit Guarantee Corporation plays an active role in the implementation of the government's programme to promote SME development and improve SME competitiveness. Both the number of guaranteed loans as well as the size of the guarantees provided have been growing significantly – the number of guaranteed loans and the amount of guarantees increased threefold between 1999 and 2000. The programme features are being simplified, resulting in faster and simpler evaluation, and greatly reduced guarantee fees.

Technology and innovation

Within the Ministry of Education, the Research and Development Division (successor of the National Committee for Technical Development) plays an important role. This division administers the Central Technical Development Basic Programme as well as the National Research and Development Programme. A tender system is operated which contributes to the renewal of technology in micro, small and medium-sized enterprises in areas such as applied R&D, biotechnology, information and communication technology, as well as environment protection. The non-reimbursable subsidy can cover up to 50% of total costs, up to 60% for small businesses.

The Prime Minister's Office manages the Information, Communication and Frequency-Management Budget Appropriation, which can allocate funding to SMEs for developing their information infrastructure and thereby improve their competitiveness.

Electronic commerce

Hungarian SMEs lag behind European Union SMEs in the use of information technology and e-business. In 2000, e-commerce conducted in Hungary amounted to approximately USD 17 million. The Information Technology (IT) Penetration Enhancing Programme of the Széchenyi Plan comprises four sub-programmes, which aim to develop a legal framework for IT use, to promote start-ups and develop SMEs in the IT sector. In 2001, the government spent HUF 20 billion on IT programmes and is due to spend double that amount in 2002. In 2001, the Unified Telecommunication Act and the Act on Electronic Signature were passed by the Parliament.

Management

The Hungarian Foundation for Enterprise Promotion (HFEP), established by the Hungarian government, banks and business representative organisations, implements the Small and Medium-Size Enterprise Development Programme of the European Commission's Phare programme. HFEP has carried out the Professional Promotion for SMEs project, co-financed by the EU. The aim of the project was to promote HFEP's local entrepreneurial agencies in order to develop a range of services to be provided directly to SMEs, and to do so in a way that will allow the agencies to remain profitable when state subsidies are withdrawn. In addition to the main project, 27 sub-projects will also be undertaken, on topics including development of marketing and enterprise co-operation, development and implementation of new products, and skills development.

Export promotion

The broadening of the exchange rate band in 2001 implies a challenge for the SME sector, in particular for exporting SMEs and those involved in the tourism industry. To alleviate these problems, the Hungarian government introduced a "seven point" economic package to support the SME sector. Three public institutions – the Hungarian Export-Import Bank Ltd. (EXIMBANK), the Hungarian Export Credit Insurance Ltd. (MEHIB), and the Credit Guarantee Corporation – provide their services to the SME sector at lower prices and in simplified terms.

Other programmes

Since November 2000, the various chamber organisations – chambers of commerce and industry and agrarian chambers – operate as public bodies and function on the basis of voluntary membership. Chambers consider their priority tasks to be SME promotion and the preparation of SMEs for EU accession. In order to achieve these objectives, the chambers provide a wide range of services: information bulletins, consultancy, lecture series, roundtable conferences, training courses and other programmes.

Ireland

SMEs in the economy

SMEs constitute the vast majority of enterprises in Ireland, amounting to 99% of the total in 1998. The percentage share of very small enterprises in Ireland (90%) is below the EU average (93%), while the shares of medium-sized enterprises (2%) and large enterprises (1%) are above the EU averages. Only 18% of total employment is accounted for by very small enterprises, a little more than half of the EU average. Altogether SMEs accounted for approximately 49% of employment, compared to the EU average of 66%, in 1998. Within manufacturing, almost two-thirds of employees work in firms that have more than 100 employees, and a quarter of the manufacturing workforce are in firms that have more than 500 employees.

Framework policies

The slowdown in growth at global level, the downturn in the technology sector and the competitiveness challenges faced by Irish firms in the globalised economy have combined to create a challenging business and trading environment for many in the Irish SME sector. The September 2001 terrorist attack in the United States compounded the recent uncertainties faced by governments and the business sector alike.

While the challenges should not be underestimated, it should nevertheless be recalled that the enterprise sector in Ireland today faces a vastly changed landscape compared with that experienced by business even ten years ago. Policies adopted by successive Irish governments during that period have ensured that SMEs have been afforded a central place in the making of public policy in Ireland. Ten years ago, a typical small firm had to operate in an environment of high taxation, slow growth and high interest rates. The venture capital market has widened and is more open to small firms. The stable exchange rate due to EMU membership has also played an important part in underpinning stability for the traded sector. Whilst the high growth rates of very recent years, *i.e.* 8.4% annual average growth rate (1995-2000), will not be sustained, Ireland continues to achieve high growth rates by international standards.

Ireland continues to give policy priority to the easing of the tax and regulatory burdens faced by the enterprise sector. The phased reduction of corporate tax and the easing in the compliance obligations for small firms have helped create a business-friendly environment. Successive social partnership agreements have played a key part in forming a consistently good industrial relations environment for a protracted period.

The National Development Plan 2000-2006 (www.NDP.ie) identifies the maintenance of economic and employment growth and the consolidation of Ireland's economic competitiveness as key objectives. From a planned total investment of over EUR 50.8 billion, approximately 80% of funds will be allocated for investment in economic and social infrastructure, employment and human resources and the productive sector. The development of a strong and highly skilled entrepreneurial class, the supply of sophisticated support structures and the provision of a conducive business environment are central to this process, reflected in the measures taken by Ireland in recent years.

SME policies and programmes

The involvement of the social partners in the identification of the general objectives of enterprise policies and consensus building is highly developed in Ireland. Successive partnership programmes

have provided a stable framework, which has enabled the country to achieve the highest level of economic growth in the OECD throughout the 1990s. The negotiations on the latest in a series of national agreements were formally launched in November 1999 and resulted in an agreement between all the parties to the negotiations over five operational frameworks as set out in the “Programme for Prosperity and Fairness” (PPF), www.gov.ie/taoiseach/publication/prosperityandfairness/. The parties to the negotiations included the government, employers (including representatives of Small Business), trade unions, farmers and the community and voluntary sector.

Listed objectives within the PPF include the development of entrepreneurship and an increase in the potential of the services economy.

The creation of the state agency Enterprise Ireland in July 1998 brought together support services from three separate entities to form a single, integrated organisation devoted to the development of Irish enterprise. The emphasis is on advising companies with ten or more employees that have demonstrated possible prospects and capabilities – those with leadership positions in their chosen markets, those in the process of establishing strong market positions, and newly created start-ups that aspire to leadership positions. Each company is assigned a development advisor as a primary point of contact with whom to assess needs and capabilities, formulate an agreed growth plan and access the range of services and resources needed to execute the plan.

Through their various programmes, Enterprise Ireland supports ambitious Irish companies to build capability, innovate, grow, create new partnerships and reach international customers. Support is also provided to international businesses to find world class suppliers and partners in Ireland and to trade profitably with Irish companies.

A major new policy recommendation entitled “Enterprise 2010: A New Strategy for the Promotion of Enterprise in Ireland in the 21st Century”, launched in 2000, provides a comprehensive analysis and set of policy proposals for the development of the enterprise sector in Ireland over the next decade. These include proposals for a single rate of corporation tax, the liberalisation of telecommunications, the regional rollout of telecommunications infrastructure, the establishment of a national digital park and the development of a significant increase in R&D capability based on the “Technology Foresight” analysis.

In 2000, six business innovation centres (BICs) were established in the regions to foster support for a regional focus on manufacturing and tradable service businesses and to provide additional seed capital for new innovative and technology firms. BICs disseminate information to small firms through the Web, offer access to research in the local economy and business support services, business information databases, online business training, technological and communications advice, and expert assistance in using the internet to access business information.

The Department of Enterprise, Trade and Employment also set up, during 2001, a Round Table for SMEs as part of its service to the small business sector. The Round Table participants include representatives of the small business sector, government officials, the development agencies and academics. The Round Table has as its objective the facilitation of exchanges of information and ideas affecting the small and medium sized enterprise sector and the provision of a focal point of contact, permitting ongoing participation and input by the SME sector to policy determination both at domestic and EU level.

Entrepreneurship

Ireland is committed to increasing the number and quality of high-growth start-ups and in ensuring that the environment and infrastructure is optimal for start-up activity at a national and regional level. The 1998-2001 target for high-growth start-ups has been exceeded by 250%.

The responsibility for provision of training and counselling for new entrepreneurs and micro-enterprises is located in the network of 35 city and county enterprise boards (CEBs). The CEBs provide a pivotal role in assisting start-up business and the development of micro-enterprise in Ireland. Under the National Development Plan (NDP) 2000-2006, the CEBs are engaged, *inter alia*, in the fostering of an

enterprise culture both through the existing educational structures and in existing enterprises. They have exceeded their initial target of assisting in the creation of 8 000 jobs: by the year 2000, over 20 000 jobs had been created with CEB assistance. These boards are free to design and deliver programmes tailored to meet the specific needs of their communities in four broad areas: *i*) preparation/review of local enterprise plans/promoting enterprise culture, *ii*) business information/advice, counselling and mentoring support, *iii*) financial assistance, and *iv*) management development. With the implementation of the new regional operational programmes, the focus of CEBs has moved to higher value-added jobs in the manufacturing and tradable services sector, to increasing competitiveness through access to e-business and the promotion of quality management and best practice. However, specially tailored packages are being designed to extend an enterprise culture to first level schools and to support the participation of women in business.

The importance of education and training in contributing to entrepreneurial activity has been identified as one of the objectives of the National Development Plan 2000-2006. Under the National Development Plan the provision for Research, Technological Development and Innovation (RTDI) in the third-level education sector includes an allocation of EUR 38.1 million for the technological sector in respect of three sub-measures: Postgraduate R&D Skills Programme (EUR 9.8 million), Enterprise Platform Programme (EUR 12.4 million) and Core Research Strengths Enhancement (EUR 15.9 million).

Efforts to promote youth enterprise are very active in Ireland. Young people are encouraged to explore entrepreneurship and enterprise development from the age of 12 under a number of different programmes. The Young Entrepreneurs Scheme targets second level students between the ages of 12-18; young-ebiz.com targets 15-17 year olds, Shell LiveWIRE targets 16-30 year olds and the Graduate Enterprise Scheme targets university and college graduates.

Financing

Finance measures provided to enterprises by development agencies in Ireland include: financial and capital measures (capital grants, feasibility studies, rent subsidies, seed capital, marketing grant, loan guarantees); labour-related measures (including employment grants, training grants, management development grant etc.); and technological and innovation support (technology transfer).

The Irish venture capital market continues to show strong growth ensuring critical support for the development and expansion of Irish business. The Enterprise Ireland 2000 Annual Report of its Seed Capital Programme confirms that investment rose to EUR 36.6 million in 2000, compared to EUR 26.2 million in 1999. This is seen as a measure of the continuing need of companies to have access to venture capital at various stages of their growth cycle.

Enterprise Ireland has also established a database of more than 70 high "net worth" individuals, or "business angels", with over EUR 12.7 million available to invest in small and medium enterprises. Their primary interest is in high growth companies.

Ireland's new Regional Development Growth Strategy puts strong emphasis on the creation of new business incubators to house high-potential start-ups. These are located on university campuses and in institutes of technology and community enterprise centres around the country. Funding of over EUR 2.5 million is being provided for the development of campus incubators and 46 new community enterprise centres are being built to complement the 70 which currently exist.

The Business Expansion Scheme, which was first introduced in 1984, has been extended on various occasions and was further extended to 31 December 2001. The scheme is as an income tax-based incentive for private investors to invest long-term equity capital in companies, in particular new and smaller companies, operating in certain sectors of the economy, which would otherwise find it difficult to raise such funding and would instead have to rely on loan finance. Provided that an investor holds his investment for a minimum period of five years, the scheme provides individual investors with tax relief, at their marginal rate, in respect of an investment of up to almost EUR 32 000 per annum in certain qualifying companies.

Technology and innovation

Ireland is committed to ensuring that technology is put at the heart of the business development process, embedding it within companies and exploiting its market relevance. There is clear evidence of the links between investment in research, technological development and innovation (RTDI) and enhanced economic activity through increased competitiveness, company growth and new company start-ups.

In recognition of the driving role of RTDI in economic development, EUR 2.5 billion is provided in the National Development Plan 2000-2006 for RTDI activities across all government departments and agencies – over EUR 1.5 billion of which was earmarked for RTDI for industrial development related activities. This money will be used as a means of enhancing innovation and competitiveness, in order to increase output and employment. This will be achieved through focused support for in-company R&D, the networking of companies with the wider S&T infrastructure, the better use of technology in balanced regional development and the preparation for future technological opportunities through the vehicle of the Science Foundation of Ireland.

Electronic commerce

The Empower initiative (a fast-track e-commerce project for small businesses) was launched in July 2000 by the Minister for Science, Technology and Commerce. Under the initiative each of the 35 city and county enterprise boards were to provide e-business services and incentives to micro-businesses, including:

- An awareness campaign.
- Technical assistance grants.
- Mentoring assistance.
- Training in the implementation of e-commerce solutions.
- Local and sectoral electronic networking.

The 35 city and county enterprise boards have been working to establish the structures, networks and training essential to the roll out of this initiative. All the boards have devised individual plans which are tailored to the specific needs of their small business client base and each board was allocated funding based on these plans.

Chambers of Commerce of Ireland e-Business Programme

The primary objective of the Chamber SME project is to build e-business capacity within the SME sector in Ireland by delivering training and awareness building activity among the chamber client base. The Chambers of Commerce of Ireland, in partnership with a national training organisation, has enhanced the training programme already developed under the original PRISM project and continued to build the capacity of the chamber network to deliver this training. An integral element of the Internet Business Strategy Programme is to ensure that the training is enterprise-led and the programme addresses the business issues of implementing an Internet/ICT strategy within a small to medium-sized business. Work carried out by chambers is complementary to that being undertaken by other state agencies and business support organisations ensuring that training and awareness is promoted at both the local and national level.

Case Studies: this section of the Web site contains an ever-expanding number of Irish based company case studies, which outline the strategic processes used in the implementation of their e-business initiatives. This will expand greatly as cases come through from the Acceleration Fund.

In October 2001, the County Enterprise Boards agreed ONLINE Inc. to develop an “e-Learning Repository” – in a joint venture between Newfoundland (Canada) and Ireland. The *E-Learning Repository for Small Enterprise* focuses on the training needs of participants by providing, *via* the Internet, short learning modules of about five hours each, supported by interactive learning activities.

As part of the government action plan on “Implementing the Information Society in Ireland”, the Department of Enterprise, Trade and Employment is responsible for the development of the BASIS (Business Access to State Information and Services) initiative. This initiative arises from a commitment by all levels of government to improve access to the compliance processes that affect business in Ireland by delivering electronic information and services based around the “life events” of a business, *e.g.* business start-up and development, paying taxes and employing staff.

Management

In recognition of the skills shortage in the early part of 2000 and the growing number of companies who were developing e-business initiatives, a series of training programmes were developed to address an identified need for specialist in-house e-business skills.

The Department of Enterprise, Trade and Employment, under Measure 2 of the Small Business Operational Programme took a number of steps to address the issue of access to public procurement opportunities by small business. Measure 2 was designed to facilitate access by small business to public markets as both the Task Force Report on Small Business and experience under the PRISMA Operational Programme had pointed to significant barriers to entry facing small firms in relation to public procurement.

Sub-measures included:

- The establishment of a database of public sector purchasers, with access through publication each year of a directory of public sector buyers.
- Publication of the “Guide to Tendering for Public Sector Contracts” which is available on Enterprise Ireland’s Web site: www.enterprise-ireland.com.
- Assistance to suppliers and workshops/seminars for buyers and suppliers.

Three specific skills development programmes (Web foundation, Web manager and Webmaster) were designed to address the issues involved and develop participants understanding and capability in the area.

Funding is also provided through the city and county enterprise boards for programmes aimed at increasing the entrepreneurial capability of individuals and firms through training and development initiatives targeted at second level schools and colleges, mentoring programmes for entrepreneurs and development and delivery of dedicated training modules in core management skills for managers/promoters of micro-enterprises.

The Tánaiste and Minister for Enterprise, Trade and Employment in July 2001, launched a new publication aimed at assisting budding entrepreneurs to fill the knowledge gap. “Starting Your Own Business” (2nd edition), www.entemp.ie/syob, is an updated edition of the very popular publication aimed at people starting, or thinking of starting, a business venture. The purpose of the guide, which has been revised and updated to include new sections on technology, e-business and working from home, is to provide business start-up information in one source and help to demystify the process. The publication will help prepare potential entrepreneurs in the current environment and stimulate the establishment of new businesses in an innovative and vital way.

The Training Support Scheme is operated by FAS (Irish training and development agency) and enables Irish SMEs (up to 150 employees) to improve their competitiveness in national and international markets. It specifically seeks to improve the skills of employees at all levels within the company – from operatives to management. This scheme is open to firms engaged in the commercial and business services related sectors and companies are required to show evidence of a clearly identifiable training need. Ideally, the proposal should be incorporated into a formal business plan or strategy – using a Business Development and Training Plan Framework. Grants can be approved, subject to the availability of funds, for human resource development (at all levels) in the following key priority areas: strategic planning, technology, productivity, marketing languages, safety management, information systems, quality service and finance. Grants are normally a percentage of the training cost – with a relatively higher percentage of the costs being accorded to small firms. All training must be provided by an approved training organisation.

Export promotion

Enterprise Ireland is building on its existing overseas incubator network which facilitates the establishment by Irish companies of a market presence which keeps them close to their customers. At the end of 2001, 11 incubators existed world-wide incorporating 36 units compared with two incubators at the end of 2000 with ten units. Enterprise Ireland's Eur-Opp 2003 initiative responds to the identified needs of indigenous companies which intend to enter or expand activity in euro area markets by means of a range of actions and supports aimed at:

- Overcoming barriers to entry.
- Strengthening competitiveness.
- Financial support.

The Eur-opp 2003 strategy is designed to increase substantially the numbers of companies selling in excess of EUR 6.4 million annually in the euro area, doubling the number from 55 to 110. Eur-opp 2003 is a three-year, opportunity-focused strategy, which puts in place a range of measures to step up the rate of entry of client companies into the euro area and provide them with the skills to transact business in Europe.

Ireland participated in the Edge Cities Network Programme, (which was co-funded by the EU under Article 10 of the ERDF Regulation second programme for inter-regional co-operation and innovative measures under the Structural Funds 1995-1999) in the field of interregional co-operation (Recite II). The programme forms a network between seven municipalities and local authorities on the edge of capital cities in Europe and aims to support the internationalisation of SMEs.

For business, the Edge Cities Network Programme offered identification of potential partners, development of potential business or market opportunities, sharing of market knowledge and experience, sub-contracting potential, supply and sourcing possibilities, technology and skills transfers and joint research, development, venture and investment potential.

Italy

SMEs in the economy

SMEs in Italy account for over 99% of firms in manufacturing and many services and utilities. Small enterprises (fewer than 50 employees) represent almost 98% of manufacturing firms and at least 99% in the quasi-totality of services. SMEs account for 71% of manufacturing employment and at least 90% of employment in construction and many service activities (wholesale and retail trade, hotels and restaurants, business services, real estate etc.). Small enterprises account for over half of manufacturing employment and between 80% and 90% of employment in many service categories.

Framework policies

The attention traditionally given by the Italian legislator to SMEs reflects the importance of the fabric of SMEs in the economy; and this attention has increased in recent months with the definitive launch, if not the completion, of a major drive to simplify legislation and administrative formalities for the benefit of citizens and enterprises, and the introduction of new tax and financial measures for business.

The recognition of the need to promote viable firms that can grow and compete in the global market, in keeping with the recommendations of the *Bologna Charter* and the principles of the *European Charter for Small Enterprises*, has produced a significant change in Italy's business culture.

The recent tax measures relating to the investment of profits, legalisation of the underground economy, accounting simplification, reform of the rules governing successions and donations, repatriation of profits from abroad and labour market reform – though the latter has barely started – should contribute to the emergence of a more modern, competitive economy, and enable enterprises to achieve their optimal size, the latter no longer being defined in terms of pre-set models but in terms of the needs of the reference market.

A preliminary assessment of the process of regulatory and administrative simplification launched by Bassanini Law 300 (which also comprised legislative reorganisation and devolution of central government functions to the regions) shows a reduction in the number of central and regional government laws and regulations (2 933 laws and regulations abolished compared with 321 new ones). Among the main achievements of the Administrative Simplification Unit with regard to the enterprise sector were the introduction of AIR (a methodology for analysing the impact of regulation introduced by the Law of 1999), simplification of administrative procedures, and the drafting of consolidated texts. The impact analysis methodology requires the legislator to verify, before adopting a new piece of legislation, whether alternative instruments exist and, if so, to select the instrument that is the most cost effective from the standpoint of citizens, enterprises and public agencies.

The Civil Service Department manages, with the assistance of FORMEZ, the one-stop shop project for enterprises at the local level, which provides businesses with all the information they need for dealing with government departments and agencies. One-stop shops are now operational in about 59% of communes, covering 71% of the population. Since their establishment, the time required to process applications by businesses has fallen sharply, to 65.1 days on average from the date the applications are filed.

SME policies and programmes

Entrepreneurship

Promoting firm creation through administrative simplification and taxation

The law on administrative simplification, the creation of the Simplification Observatory (a standing consultative body composed of members of government departments, the social partners and the antitrust authority, and co-ordinated by the Prime Minister's Office), the reform of the interdepartmental conference (*Conferenza di Servizi*), the one-stop shop legislation, and the setting of guidelines for preparation of joint action programmes, have played a crucial role in the emergence of new economic activities. According to some estimates²³ the number of administrative formalities for starting a new business has been cut from 25 in 1998 to five today, the maximum time required to complete the whole process has been shortened from 22 to ten weeks, and the total cost of starting a new business has fallen from EUR 1 150 to EUR 500.

Furthermore, the 2001 Finance Act introduced a lower tax rate for start-ups and self-employed workers. The reduced rate of tax replaces 10% of the IRPEF during the first year of activity and the following two years, and accounting obligations have been radically simplified. Tax assistance is also provided by the local services of the Revenue Department, accessible on line. Tax relief is given for training and facilities provided for employees (such as *crèches*).

Promoting firm creation through education and training

Education and training are considered to be the main determinants of social and economic development. Vocational training is provided in permanent territorial centres not only for young people but for all citizens.

In January 2000, a national higher committee on post-secondary technical education and training was set up, covering 13 new occupational profiles in five areas: communication, multimedia, computer applications, software development, information systems and technology. Over 1 000 courses have been organised by the Ministry of Education, Universities and Research, with the assistance of the European Social Fund.

Among the initiatives to promote entrepreneurship among the young, mention may be made of the role of *Sviluppo Italy SpA*, a state-controlled company created out of various existing public agencies which promote entrepreneurship. An on-line "start-up assistance" service was set up with the financial support of the ESF. It places skilled staff at the disposal of budding entrepreneurs to help them draw up their business plans. It is funded under Laws 44, 236, 135 and 448, since consolidated into a single law, No. 185/2000.

Another initiative was launched by *Fondazione IG Student* with the support of the European Social Fund and private contributions to develop young entrepreneur programmes in schools and universities.

During the 2001-2002 academic year, the programme's fourth year, some 77 000 students were due to receive training in starting a business. This training is provided by 20 regional IG Student limited liability companies controlled by the Foundation, and with the participation of 212 regional public and private institutions. IG Students recently received an award from the European Commission for its "best practice" in disseminating an entrepreneurial culture under the *Business Environment Simplification Task Force (Best) Procedure*.

Still on the subject of skill training, mention may also be made of the SKILLPASS project designed to provide on-line selection, guidance, theoretical and practical training for the job profiles sought after in the new economy. *Skillpass Spa* was set up by *Sviluppo Italia*, *Banca Intesa*, *Banca di Roma*, *Banco 121*, *Banca Popolare di Bergamo*, *Gruppo Bipop-Carire* and *Unicredito Italiano*.

Decree 593/200 ensures better access for SMEs to research and innovation as well as more effective interchange between the academic world and business, by providing automatic access to public funding under programmes for promoting industrial research. SMEs also benefit from tax breaks for recruiting skilled personnel, providing grants for PhD students, and contracting out industrial research.

Financing

Law 488/92 concerning the industrial sector and which has proved to be effective, will receive fresh financing but its scope will be broadened to cover services to enterprises. The aim is to encourage projects that promote innovation and the acquisition of a strategic and managerial culture, by making available external consultancy services. Mentoring will be provided for industrial initiatives as whole, in particular for process and product innovations that lessen the impact on the environment, and will include technical and administrative support to firms in the start-up phase, and help with marketing strategy.

Technology and innovation

Managing innovation as a major factor of economic growth means being able to translate rapidly the latest research findings into saleable technological products and innovative services. In this way, innovation is the outcome of applying knowledge as an economic factor of production.

The development agency *Sviluppo Italia* implements the Startech programme for the promotion and creation of innovative SMEs. This nation-wide programme seeks to promote and exploit research and specialised know-how through the creation of academic and technological spin-offs and knowledge-based firms. It is a horizontal programme that supports all phases of hi-tech entrepreneurship, from the research/know-how stage to the actual start-up, using methods adapted to the phases of technological innovation; it also ensures that there is an appropriate mix of public funds and private financing and creates synergies with other local initiatives and is fully integrated with and complementary to regional policies.

Startech is the outcome of an experiment conducted by *Sviluppo Italia* in two national pilot programmes, one in co-operation with the *Istituto Nazionale Fisica della Materia* and the other through a programme agreement with the Ministry for Scientific Research and Technology. These two pilot programmes, which were carried out in seven universities in southern Italy (Naples, Benevento, Catania, Lecce, Bari, Cagliari, Cosenza), involved 1 450 researchers, grant-recipients, academics and graduates, and led to the selection of some 40 high-tech entrepreneurial initiatives (51% of small spin-off firms from research). Both pilot initiatives were singled out as examples of good practice by DG Enterprise, in the framework of the FIT programme. The *Startech* programme is now fully operational after four years of pilot experiments. It represents an appropriate response to the need to disseminate an innovation culture.

The *Startech* programme comprises:

- mentoring services provided free of charge: technological mentoring, production/marketing partnerships, advice on patenting, help with team-building and management, business planning, fund raising assistance and technology watch; and
- a financial tool to provide seed and start-up capital for SMEs. This fund is used to take minority holdings in the venture capital of firms, and can be used in joint investment agreements with private institutional investors.

Electronic commerce

The close monitoring of e-business carried out by the permanent Electronic Commerce Observatory was given a full legal basis in the 2001 Finance Act, which allocated ITL 110 billion over the period 2001-2003 for the development of electronic commerce and SMEs, in the form of tax reliefs and capital contributions, primarily to SME partnerships and collaborative structures. In 1998, the Observatory laid down policy lines for electronic commerce. The ensuing reform of the regulations

governing e-commerce, which was entrusted to the Ministry of Industry, aims to promote the introduction and use of electronic commerce. It covers all transactions having a commercial value, from identification of counterparts to the recording of transactions, payment and physical delivery of the product. The Observatory also monitors changes in the economic and productive system, highlights the constraints and impediments to the adoption of new technologies by enterprises, and especially SMEs, government departments and consumers, and proposes legislative and regulatory initiatives in keeping with the development strategies set out in the European Charter for Small Enterprises.

The 2000 Finance Act and Law 57/2001 allocated financial resources to SMEs, within the limits of the “de minimis” rule, for fostering computer links between enterprises belonging to the Telematics between Administrations Committee (TAC). Financial support is provided for the purchase of software, hardware and relevant training. To obtain it, enterprises must join together in groups of at least five. The aims are to enhance the international competitiveness of the system and to cut production costs.

Two new initiatives are being launched to promote productive development, both managed by the Ministry of Industry. One is intended to promote innovative start-ups, the other to encourage collaborative set-ups between e-commerce firms. Analysis of the Italian system of aids shows that the bulk of support goes to fixed investment. The reasons for this may be sought in the difficulty SMEs experience in gaining access to the credit market, and in the need to attract capital and technology to the least developed areas. The two new initiatives aim, in contrast, to:

- Nurture innovative high-tech start-ups in close collaboration with universities and research centres, in order to exploit: the specialised skills in universities and in those institutions; official research and development activities; and the patents filed or held.
- Promote risk capital investment.
- Make it easier for enterprises to participate in new projects in the e-commerce sector, so as to create clusters of firms by sector, territory or industry and to achieve the critical mass necessary to enhance the visibility of the network.

Japan

SMEs in the economy

SMEs play an extremely important role throughout the whole of Japanese economy and society – as evidenced by their share in the total firm population, the shipment volume for which they are responsible, and the employment they generate. Data for 1999 show that SMEs numbered 4.84 million in that year, and accounted for 99.7% of all firms (excluding the primary sector). SMEs employ 31.2 million persons corresponding to 69.5% of total employment. In particular, in 1999, SMEs accounted for 52% of manufacturing shipment volume, 62% of wholesale sales, and 73% of retail sales. Overall, SMEs have drawn upon their resilience and creativity, resisting well during some difficult times for the Japanese economy. In recent years, however, the firm closure rate has exceeded the start-up rate. The new Small and Medium Enterprise Basic Law that came into effect in December 1999 has raised the maximum capitalisation allowed.

Framework policies

The Japanese economy has been sluggish for most of the past decade and deteriorated sharply of late. Unemployment is currently the highest it has been during the last half century. As such, Japan's SMEs find themselves in exceedingly difficult economic circumstances. Similarly, there have been a number of structural changes in the SME business climate over the last decade. Bankruptcy numbers are running high, especially in the construction and manufacturing industries. The number of companies being shut down continues to exceed the number of new companies being started, and the average age of SME management continues to edge relentlessly upwards.

On the positive side, there have been a number of conspicuous changes making it easier for SMEs to take advantage of new opportunities. SMEs are responding to the IT revolution, for example, not with a defensive effort to grudgingly keep up, but with proactive efforts in the expectation that new avenues for growth will be opened up. A major transformation has taken place in the way SMEs look at new business development, and the climate has moved decisively toward business creation with SME business innovation and with increasing numbers of SMEs favourably disposed to talking about and working for new business creation.

SMEs are important as the source of new business and new employment, and as a potential driving force for revitalising the economy; and the role of SMEs has become increasingly important in recent years. Accordingly, the Small and Medium Enterprise Basic Law was amended in December 1999, the first definitional amendment in 26 years, to set forth the basic policy philosophy of “developing and growing a wide range of independent SMEs for greater economic vitality”. Under the amended law, the main priorities of SME policy are: to promote innovation in SME management and encourage the creation of new businesses; to strengthen the education and training foundation of SME managers; and to facilitate adaptation to social and economic changes.

SME policies and programmes

The SME Agency within the Ministry of Economy, Trade and Industry (METI) is responsible for SME policy, and liaises closely with local governments and implementing organisations on specific policy measures. In addition, METI's eight regional bureaus nation-wide also contribute to the implementation of SME policy. The new Small and Medium Enterprise Basic Law emphasises not only the need to create and

support a better business climate for SMEs but also the importance of venture start-ups and other new business creation. Measures cited can be divided into some categories: *i)* supporting business creation and business innovation, *ii)* strengthening the education and training foundation of SME managers, *iii)* supporting SME restructuring, and *iv)* conducting research and provision of public sector education. Effective policy implementation is achieved through expanded policy assessment, strengthened co-operation with SME co-operatives, further utilisation of private sector capabilities, and balanced devolution.

Entrepreneurship

Because Japanese business conditions have been harsh for the last decade, as illustrated by the fact that more companies have shut down than have been started, comprehensive policies are being put in place, in addition to the provisions of the Law to Facilitate the Creation of New Businesses and other laws and regulations, to offer financing, personnel, information, technology, and other support for business creation and venture start-ups with the purpose of doubling the number of new businesses in five years. Specifically, efforts are being made to further enhance capital supply and other systems to directly and indirectly assist venture companies that may be short of collateral, systems to provide human resource support such as the provision of training opportunities, systems to support technology development such as assistance towards the funding of prototype development models, and systems to provide expertise and other management support such as through SME support centres.

Financing

With a view to complementing the role of private-sector financial institutions, the government financial institutions serving SMEs (the Japan Finance Corporation for Small Business, the National Life Finance Corporation, and the Shoko Chukin Bank) are doing what they can to ensure smooth access to capital for SMEs. Specifically:

- The Japan Finance Corporation for Small Business: This institution supplies the long-term capital SMEs need to develop their businesses and offers SMEs long-term, fixed-interest, low-interest capital.
- The National Life Finance Corporation: This institution offers primarily small, unsecured loans for very small companies.
- The Shoko Chukin Bank: This is a full-service financial institution with funds not only from the government but also from SME co-operatives and other organisations that serve the co-operatives, their members, and other clients.

Lending levels for these three institutions (as of 31 March 2001) were:

- Japan Finance Corporation for Small Business: JPY 7.5 trillion.
- National Life Finance Corporation: JPY 9.9 trillion.
- Shoko Chukin Bank: JPY 10.9 trillion.

The credit complementation system helps speed up financing for SMEs as the Credit Guarantee Association acts as guarantor for SMEs without sufficient credit or collateral when, for example, the same firm borrows capital from a bank or other financial institution and the Japan Small and Medium Enterprise Corporation then backs these guarantees. This system, which goes back 60 years, has been lauded not only in Japan but also in the international community at large. As of the end of March 2001, this system had a total of JPY 41.2 trillion credit guarantees outstanding.

Established in 1963, the Small Business Investment Company is a government policy institution engaged in investing in and otherwise supporting SMEs to promote the enhancement and sound development of SMEs' shareholder equity capital. In addition to supplying capital by buying new stock issues, convertible bond issues, and warrant bond issues so they can raise the funding they need for plant and capital investment at the early stage, R&D funding, and for other reasons, it also offers management consultation and other services upon demand to help the companies it has invested in grow their businesses.

Technology and innovation

The technical development of SMEs is also important for creating new businesses and promoting business innovation, and the SME Agency strongly supports this with subsidies and other policy measures. To support SMEs expanding their business to a new field, the government offers support to R&D through direct subsidies. Prefectures also support R&D through authorisations for R&D plans according to the Law on Extraordinary Measures for Technology Development Promotion for SMEs, and thereafter provide subsidies, financing, preferential tax treatment, or other incentives to SMEs. By the end of September 2001, 8 025 plans had been authorised.

Likewise, the national government may: *i)* designate R&D themes in line with economic and social requirements and subsequently offer support; *ii)* assign feasibility studies and R&D to SMEs; or *iii)* by assigning projects to SME consortiums, public technology institutions, universities and others within given regions, conduct feasibility studies and R&D that targets the technology's commercialisation.

It was along these lines that the national government established the Small Business Innovation Research (SBIR) system in 1999. Under this system, the national government provides subsidies and other support for SME efforts to commercialise R&D. Working to expand investment opportunities, this is a start-to-finish system setting financial support targets for SMEs and seeing the projects through to the technology's commercialisation. The amount of support designated to SME R&D was set at approximately JPY 18 billion for the 2001 fiscal year.

The Law on Supporting Business Innovation by Small and Medium Enterprises is intended to promote the creative development of SMEs and hence to contribute to the sound development of the Japanese economy by devising and implementing measures to support management innovation; and enabling SMEs to adapt to the changing economic climate with the help of measures to strengthen their managerial foundations – thereby contributing to future management innovation in SMEs that are vulnerable to the sharp changes in the economic climate.

Business innovation is intended to achieve sharply improved management, and *i)* the development and production of new products, *ii)* the development and provision of new services, *iii)* the adoption of new means of producing and selling products, *iv)* the adoption of new means of providing services, and *v)* the conduct of other new business activities. Regardless of industry sector, when specific SMEs, co-operatives, voluntary groups, and others draw up business innovation plans and the plans are approved by the national or a prefectural government, these approved plans are then eligible for subsidies, low-interest loans from government financial institutions, and preferential tax treatment, including lower taxes on plant and capital investment. The law went into effect in November 1999, and approximately 5 000 business innovation plans had been approved by October 2001.

Consistent with this business innovation support, business innovation fairs are held to publicise the business innovation efforts of companies whose plans have been approved, to introduce likely corporate partners to each other, to offer specialist information to SMEs attending fairs, to generate enhanced awareness, and thereby promote business innovation.

In addition, when industries that are particularly hard hit by abrupt changes in the economic climate or other factors are specified as designated industries, the business associations and other organisations in the designated industries may draw up business foundation strengthening plans to reinforce the managerial foundations contributing to future management innovation by their member SMEs. When approval is received from the competent Minister, the support measures for eligible firms can include low-interest financing from government financial institutions, preferential tax treatment including accelerated depreciation for machinery and other assets, and support under the provisions of the Small Business Credit Insurance Law. Three industries are currently specified as designated industries: alcoholic beverage manufacturing, electroplating, and the manufacturing and repair of ships, marine engines, and ship products.

Management

The new SME support system was established to help SMEs solve the diverse array of management issues they face. Begun as an innovative concept bringing together support personnel from the private

and public sectors versed in SME management issues, SME Support Centres provide SMEs with “over the counter” consultation, on-site professional assistance, business feasibility assessments, information services and training programmes. As of November 2001, there were 54 prefectural centres, 251 local centres and eight national support centres. All of these institutions are endeavouring to provide one-stop service for SMEs.

SME Support Centres focus mainly on support for business creation and business innovation. In addition to providing management strategy, marketing, and other counselling services for SMEs and for those wishing to start new companies, they are also able to send SME analysts, tax accountants, certified public accountants, and other expert consultants to assist SMEs, and can provide support for solving specific management issues faced by SMEs.

SME support centres together handled approximately 99 000 cases in the 2000 fiscal year, providing on-site support expertise in about 16 800 cases.

The Institute for Small Business Management and Technology provides training for SME executives, management, technicians, and SME support personnel. It currently has nine campuses nation-wide and provides training for approximately 14 000 people annually. In addition to offering practical training in a wide range of fields as well as management training for SMEs in an effort to promote managerial innovation, it also offers human resource development programmes for personnel of SME support organisations so that graduates can fully support SMEs. Beginning in the 2001 fiscal year, the institute is experimenting with satellite broadcasting, online distance learning, and other means to make its educational programmes more accessible to people in outlying areas.

Enhancing information access for SMEs is a government policy priority. By publishing annual reports on SME developments (*e.g.* the *White Paper on Small and Medium Enterprises in Japan*), the government strives to foster understanding of SMEs among both opinion leaders and the general public. Information efforts are being made to enhance understanding of SME policy measures among SME management so that they can take greater advantage of policy measures. Among the many means of information diffusion used are print media (*e.g.* a comprehensive guide to SME policy, pamphlets and leaflets), television broadcasts, Web sites and on-line magazines. The URL for the Small and Medium Enterprise Agency is www.chusho.meti.go.jp/.

Export promotion

The SME Agency offers SMEs both advice and information to make it easier for them to expand their businesses beyond Japan's borders. In a corporate match-making effort, the Agency also supports the provision of opportunities for Japanese and overseas SMEs to register with a common Internet database and thus facilitate the widest possible range of business linkages and strategic collaboration. In addition, its business advisors offer consulting to help resolve the practical issues involved in creating international strategic partnerships.

Korea

SMEs in the economy

SMEs are defined in Korea as firms having fewer than 300 employees. There are an estimated 2.9 million businesses in Korea, which employ 11.5 million persons. SMEs represent 99.6% of all Korean firms and 99.7% of manufacturing firms, and account for 83.9% of all employees and 76.2% of manufacturing employment, representing over half of value added and 43% of total exports. In certain service activities, such as wholesale and retail trade, hotels and restaurants, SMEs generate more than 90% of employment. The SME share in manufacturing employment increased from 63.5% in 1991 to 74% in 2000. In addition, there are some 2.5 million micro-enterprises in Korea, employing about 4.9 million workers – their share in the enterprise population and in employment are, respectively, 89.2% and 50.7%. The number of start-ups progressed significantly during the recent decade, going from 11 938 in 1993 to around 40 000 in both 2000 and 2001.

Framework policies

Korean framework policy priorities aim to achieve constant growth through the implementation of flexible macro-economic policies; to adapt to the rapidly changing external environment; and to prepare for the knowledge-based economy of the 21st century by promoting conditions for enhancing human capital. Ensuring a continual process of restructuring, driven by market forces, and creating a policy environment for the global economy as reflected by technology breakthroughs, a diversity of consumer demand, fierce competition and tightening the trade regulations are central themes in the government's policies.

Recognising these circumstances, the Small and Medium Business Administration (SMBA) plans to increase the percentage of high value-added SMEs to 55%, exports to 50%, and employment to 55% by 2010, thereby enabling Korea's SMEs to become creative, technology-intensive and risk-absorbing companies.

SME policies and programmes

Recognising the growing importance of SMEs in the national economy, the Korean government established the Small and Medium Business Administration (SMBA) in February 1996 with the aim to accelerate business start-ups and enhance the competitiveness of SMEs that have a strong technological base. The SMBA is an independent administrative body within the central government, and comprises an administrator, deputy administrator and five divisions in addition to 11 regional offices nation-wide staffed by 600 employees. The SMBA has carried out various activities and accomplished much since 1996, including promoting SME start-ups and SME growth; raising competitiveness through programmes that support: financing, personnel, market and technological development; creating a fair and competitive environment between large and small enterprises; and facilitating the restructuring process. These policies implemented by the SMBA have made a substantial contribution to overcoming the recent economic crisis by addressing problems of high unemployment, adverse trade balance and the economic downturn.

Current policies are geared to enhance the international competitiveness of SMEs by supporting the restructuring of manufacturing firms and accelerating the development of new knowledge-intensive

industry. The Korean government helps SME to be flexible and innovative through deregulation, e-strategy and technology support as tools for SME restructuring. Current SME policy emphasises indirect assistance measures that foster self-reliance among SME managers. In addition, the Korean government pursues co-operation with public and private communities to enhance efficiencies in carrying out incorporated policies. The Small Business Corporation (SBC) established by law under the umbrella of the SMBA, implements effectively government policies and programmes. The SBC carries out projects which promote SMEs, in co-operation with heads of local governments.

Bankruptcy legislation

The government has improved bankruptcy laws to facilitate the exit and restructuring of firms that experience financial difficulties. In the past, obtaining approval of a reorganisation plan required a waiting period of one to three years. The government has shortened the time period for each step of the reorganisation process, introducing in 1999 a binding period of one month. Several fast tracks, and less costly bankruptcy processes were adopted for small firms. The government is considering the adoption of a unified bankruptcy law by integrating the three existing bankruptcy-related laws. The unified bankruptcy law would allow stakeholders to choose an optimal bankruptcy process and would result in lower costs.

Administrative burdens

Korea has undertaken intensive regulatory reform to improve the business environment by streamlining the regulations that govern business activities such as entry barriers (licensing, registration), price controls and other business regulations. In April 1998, Korea established the Regulatory Reform Committee (RRC) under the Prime Minister, and this committee is empowered to review and repeal existing regulations. New regulations, necessary for environment and health reasons, require prior review and approval by the RRC. Since 1999, the RRC has repealed more than half (8 121) of all existing regulations and improved the quality of many others. 1 078 new regulations concerning the environment, safety and health, were introduced, having first been reviewed by the RRC.

The government has substantially streamlined administrative procedures required for start-ups that involve opening a factory. In the past, 53 approvals (mostly regulations concerning land, forestry, environment, safety and building construction) were required by 29 separate laws, involving a significant burden for firms. A unified factory establishment scheme was introduced, granting all necessary approvals for start-ups through a single application made to an SME unit in local government. These local SME units are required to complete the approval procedure with the relevant administrations within 45 days of receipt of the application, otherwise the application is deemed approved.

Tax incentives

Korea applies a comprehensive set of tax incentives for venture businesses and new start-ups. Income tax and corporate tax can be reduced by 50% for six years. Assets acquired for new businesses are exempt from local acquisition and registration taxes for the first two years. Property taxes can be reduced by 50% for the first five years. Stock option gains made by employees of venture businesses and start-ups are excluded from the income tax base, up to a maximum of KRW 30 million, provided that they are exercised three years after being granted.

Entrepreneurship

The Korean government has introduced various measures to promote entrepreneurship, including its support of college business club activities. In 2001, there were 503 business clubs with 11 844 active members in 217 universities in Korea. Financial assistance is provided for the establishment of new business clubs and for support to their projects. Local start-up road shows are organised for national competitions that involve college and university students, academics and researchers. The Korean

government encourages academics in public research institutes to start a business by granting a leave of absence for time spent in a venture enterprise, and by helping to register their laboratories as business entities. Information diffusion to those interested in starting a business is an important feature of Korea's entrepreneurship policies.

Another government priority is to increase the number of women entrepreneurs and to promote micro-enterprises. Recent legislation provides a basis for a variety of support programmes to promote business activity by women and alienated sectors of society such as regional SMEs, and companies run by small-size traders. Women entrepreneurs are assisted through 12 business incubators intended exclusively for women. The government aims to increase the rate of start-ups by improving information diffusion to prospective women entrepreneurs, through lectures, counselling, computerisation, and by holding competitions for start-ups that have a strong technology base. Other support measures include: training and consultancy services to enhance women's management skills; increased public procurement of products made by women entrepreneurs; exhibitions of their products; and exploration of overseas markets. The government has also decided to establish a support centre for women entrepreneurs. In addition, it started to provide assistance to micro-enterprises in February 1999 and instituted the "Act on Special Measures for Assisting Small Business and Micro-enterprises" in 2000. The SMBA administers 60 Small Business Development Centres (SBDC) which provide up-to-date counselling, consultations and a variety of information related to business start-ups and management.

Financing

The Korean government is focusing on the improvement of direct financing for SMEs. Where venture capital was provided by way of loans in the past, today SMEs receive financing in the form of investment. The investment-to-loan ratio of venture capital has surged from 1.1 in 1997 to 35.4 in 2001. Top-ranking small companies with high growth and profit performance are listed on the Kosdaq secondary capital market for direct financing. Listed SMEs have received KRW 18 trillion of direct financing from 1997 to 2001. The Kosdaq market is sluggish at present as a result of the current economic downturn, but the Korean government is seeking to use the stock market as the direct financing source by streamlining stock registration and the exit system procedures and strengthening investor confidence protection mechanisms. For micro-businesses not eligible for bank loans, the SMBA plans to raise about KRW 5-6 trillion in policy funds, which are used by micro-businesses in making facilities investments. A financial safety net is being established to help small businesses overcome the financing shortage stemming from temporary decreases in sales and management risks.

As demand for large capital investment increases along with rapid development of SMEs with high-skilled manpower, foreign capital investment in domestic SMEs has seen parallel growth. During the past several years, foreign investment in domestic venture companies has amounted to USD 420 million, channelled through funds such as Korea Venture Fund, Korea-Singapore Joint Venture Fund, overseas issuance of ABS, and other kinds of joint funds among domestic and international private venture capitals.

To facilitate SME access to bank loans, Korea established the Industrial Bank, which awards the bulk of its lending to SMEs. The SME Promotion Fund provides funds for restructuring projects to business start-ups and to SMEs less than three years old. Loans are available for a maximum of eight years, and must not exceed KRW 1 billion annually for plant investment and KRW 500 million for operational expenses, and may cover up to 100% of project costs. The government provided KRW 260 billion in start-up funds for 1 274 firms in 2001 and plans to provide KRW 250 billion in 2002. The SME Credit Guarantee Scheme provides guarantees for bank loans through the Korea Credit Guarantee Fund (KCGF) and the Korea Technology Credit Guarantee Fund (KTCGF). The KCGF has provided over KRW 30 trillion in loan guarantees to export-oriented and knowledge-based SMEs. The KTCGF targets high-technology firms, and has provided more than KRE 16 trillion in loan guarantees to high-technology SMEs in 2001.

Korea adopted a number of measures to promote the venture capital market, and a 1997 law allows banks and pension funds to invest in venture capital activities. Restrictions have been lifted on foreign equity investors in limited partnerships. Regulations regarding share issues have been lightened.

In 2001, the National Pension Fund regulations were amended, permitting the fund to invest in limited (venture capital) partnerships. To increase investment funds, venture capital companies and limited partnerships for venture capital are eligible for several preferential tax incentives: dividend income from start-ups or venture businesses is exempt from corporate income tax; various deductions are allowed; and capital gain taxes and securities transaction taxes can be waived under certain conditions.

In Korea, the number of business angels, business angel clubs and business angel mutual funds has increased rapidly in several recent years. By 2001, the investment in venture capital from business angels represented 7.9% of total venture capital investment in Korea. Individual investors (business angels) in venture capital are entitled to various income tax and capital gain tax incentives: tax incentives exist for venture capital investments by business angels – investors may deduct up to 15% of the invested amount from their income tax base. Dividend income is excluded from the consolidated income tax base. Capital gain taxes are waived on gains realised from share sales. Business angel networks are promoted through the angel investment mart, which matches venture businesses seeking finance, with business angels and venture capital companies.

The government also invests in venture capital, concentrating on start-ups and technology-based businesses. The SME Promotion Fund invests a part of its capital in limited partnerships, which provide venture capital for start-ups across the industry. During 1998-2001, the SME Promotion Fund invested KRW 400 billion in 200 limited partnerships, which established KRW 1 trillion in capital funds for venture business investment. In 2001, the SME Promotion Fund also established a special venture capital company, the Dasan Venture, with KRW 50 billion in funds. The Dasan Venture identifies promising start-ups in early stage and provides them with seed money as well as management know-how, under close co-operation with business incubating centres across the country.

Financing technology sectors

To help SMEs improve their technological capabilities, various programmes have been developed, some of them involving the collaboration of government, academia, and research organisations. The principal funds that are dedicated to this objective are:

- The Information Promotion Fund (IPF) which supports information and communications technology (ICT)-related projects and start-ups, and is involved in establishing limited partnerships. IPF invested KRW 126.2 billion in 22 limited partnerships that generated KRW 369.5 billion in funds for ICT venture businesses between 1998 and 2001. These partnerships are required to invest at least 40% of funds in firms that have been in existence for less than three years.
- The Science and Technology Fund (STF) aimed to invest KRW 50 billion in 2001 in technology-intensive start-ups. The Korea Technology Credit Guarantee Fund (KTCGF) provides (up to 100%) guarantees on venture capital investments.
- The Cultural Industry Promotion Fund (CIPF) and the Film Promotion Fund (FPF) also support limited partnerships, providing venture capital mainly for start-ups in digital content and film sector projects. In 2001, CIPF planned to invest KRW 10 billion in digital content projects, and the FPF planned to invest KRW 10 billion in film projects.

Technology and innovation

To strengthen SMEs' potential for technological innovation, the government provides a number of incentives, including tax benefits and financial assistance to aid technological development activities – and almost 35 000 SMEs are being assisted in this field. The number of SMEs with links to research institutes increased four-fold, from 1 578 in 1995 to 6 307 in 2000. In addition, the amount of R&D investment in SMEs has increased considerably, from KRW 851.6 billion in 1995 to slightly over KRW 2 trillion in 2000, and the sales-to-R&D investment ratio has increased by one percentage point from 2.4%.

The Korea Small Business Innovation Research Programme (KOSBIR) encourages public institutes to devote a considerable share (5%) of their investment in technology development to SMEs. Through KOSBIR, the amount of investment received by SMEs reached KRW 550 billion in 2002, making a

considerable contribution to technology development in SMEs. The SMBA encourages technology development through collaboration among SMEs, universities and government research centres, based on the recognition that 75% of highly-skilled workers are either with universities or with government-supported research institutes. In addition, the SMBA is pursuing projects for overseas technology co-operation, such as technology transfer, joint technology development and the introduction of technology experts to the country. By promoting overseas co-operation, the SMBA hopes to identify innovative businesses, or INNO-BIZ, that have world-class technology, and promote them as the driving force of 21st century Korea. The Technology Exchange will also contribute to the strengthening of competitiveness of SMEs by extending loans needed for technology commercialisation at low-interest rates.

The principal objectives of government policy in this respect are to:

- Develop a plan for promoting SME technological innovation and launch a committee, working jointly with related government ministries.
- Establish a strategic technology support system applicable to each stage of the growth process so as to maximise the effects of support.
- Establish a system of public-private co-operation through consortia comprising industry, academic, and research institutions.
- Develop programmes to promote start-ups, and to commercialise new technologies.
- Extend the SME technology support system by providing the necessary manpower and information.

One government goal is to improve SMEs' adoption of ICT; 30 000 SMEs are being assisted in this field. Enhancing managerial capacity for the adoption of ICT technologies is an important facet of this goal, and the government expects that a more strategic support system for SMEs and more self-reliance among SME managers will help realise this goal.

E-commerce

Electronic commerce is actively encouraged by the government through a number of programmes and measures. The SMBA has taken steps to provide consulting services to small businesses to help develop software solutions and to launch B2B networks among various businesses to encourage SMEs to take the leap into e-commerce. In SME cluster regions, broadband Internet networks, such as VDSL and Ethernet, are being installed to promote SME use of software programmes. In addition, an Internet-based SME hub, Korean Marketplace, supports global trading by incorporating the English-language home pages of 20 000 SMEs as of October 2002, and the bilingual homepages (Japanese or Chinese) of 1 700 firms. Korean Marketplace has also taken part in the G7's Information Network (GIN), ASMEConnect and ASEAN + 3SME Network.

Management – marketing and personnel

Efforts are being made to enhance competitiveness in SMEs' overseas marketing activities. By organising a training programme for marketing experts, SMBA is helping small businesses to open and expand markets abroad and is launching venture-supporting networks in major cities to foster their advancement in the global market. For those small businesses with high quality products but with a low level of recognition, the Korean government has awarded a Good Quality (GQ) brand to boost their sales.

The government also fosters the enhancement of co-operation between large corporations and SMEs and supports procurement of SME products by public organisations, the development of joint brands by a number of producers, and the attainment of quality certification, all of which contribute to enhance product reputation.

The government has also adopted a range of measures to improve labour market conditions. As part of the effort to attract industrial workers to SMEs, the SMBA is promoting a programme for college

students to work in small companies during vacation time. To facilitate contact opportunities between small businesses and the job-seeking workforce, the SMBA intends to organise large-scale job fairs on a regular basis to expand the SME employment base. Because of the shortage of industrial workers, the Korean government has promoted the importation of overseas workers since 1994. High-skilled workers are invited from Germany, Russia, Japan and the United States, and Korean workers go to these countries on exchange programmes. The exchange of skilled workers has contributed to resolving some of the technical problems faced by small businesses. The government provides a variety of programmes on the basis of voluntary participation such as training programmes for skilled workers, specialists, and ICT experts. Information is also offered on human resources through the SMBA network and the Ministry of Labour.

Internationalisation

International co-operation programmes have been developed to strengthen international competitiveness in trade, investment and technology transfer. Support is available for those wishing to start new technology-based venture enterprises abroad. Korean companies are making a substantial amount of overseas direct investment. The accumulated amount of FDI by small businesses outside Korea recorded USD 11.5 billion, or a 70% increase, between 1997 and 2001. Korea is, for example, China's seventh-largest investor, making a total of USD 4.4 billion in foreign investment as of the end of 2001. To assist SME activities in overseas markets, trade missions have been dispatched 65 times in 2002 and overseas training programmes were implemented to train export specialists involving 120 persons in 58 countries. SMEs are also being assisted in gaining direct access to overseas distribution channels. Along with Korea's growing participation and role in the international exchange programmes related to trade, investment and the workforce, Korea is also adopting an aggressive approach toward SME co-operation both in multilateral and bilateral settings. The SMBA is an active member of co-operation activities organised by international organisations, namely APEC and OECD, and is making efforts to strengthen co-operation with foreign counterparts in the small business sector.

Mexico

SMEs in the economy

There are approximately 2.84 million enterprises in Mexico, of which 99.7% are SMEs and which together generate 42% of GDP and 64% of total employment. Within the manufacturing sector, firms with fewer than 500 employees generate 66% of employment, firms with fewer than 100 employees account for 38%, and small firms (fewer than 50 employees) are responsible for 31% of employment in manufacturing.

Framework policies

Mexico's framework policies aim to achieve a highly integrated and internationally competitive SME sector, associated with balanced regional development. Current deregulation efforts focus on streamlining business regulations and reducing administrative response times. Nine ministries have reached agreement on removing or improving almost 50% of mandatory business formalities, and half of the agreed changes have now been implemented. The National Development Programme (NDP) has five principal objectives:

- To manage the economy responsibly.
- To improve the country's overall competitiveness.
- To generate an inclusive form of economic development.
- To achieve balanced regional development.
- To establish conditions for achieving sustainable development.

A major priority of the Mexican presidency is to create conditions favourable to employment generation and sustainable growth. The government places strong emphasis on SME development. The Entrepreneurial Development Plan (EDP) was created within the NDP and is a comprehensive programme aiming to improve enterprise competitiveness and to serve as a central axis of the government's new economic policy. The EDP requires that all enterprise stakeholders co-operate and develop joint strategies and actions in order to strengthen the productive sectors. The EDP objectives respond to the following challenges:

- Providing an economic, legal, and regulatory environment that promotes enterprise development.
- Facilitating access to financing for enterprises.
- Promoting entrepreneurial training, management and employee skills, to improve firm competitiveness.
- Promoting management, innovation, and technological development within enterprises.
- Developing industry in terms of specific regions and sectors.
- Restructuring and developing production chains in order to strengthen the domestic market and increase presence in external markets.

Policies have been designed to respond to SME-specific requirements so as to create a conducive business environment. Achieving balanced regional development and generating quality growth that benefits society as a whole is a government priority so policies require the involvement of economic and government agents in providing support services – notably educational and research institutes, business and industry associations, and local governments.

SME policies and programmes

Mexico implements a number of action plans involving policies and instruments that aim to create a conducive environment for SME development. These policies and instruments are applied in support of technological innovation, access to financing, human resource development and the provision of consultancy services. Because of the globalised economy, policies are required to assist SMEs in adopting technology, in improving SME competitiveness and productivity, in order to allow them to become world-class enterprises. The government views as a major challenge the need to create competitive SMEs that can take advantage of the free trade agreements that Mexico has signed. Therefore, mechanisms of exchange and co-operation with other economies are fostered, as are collaborative schemes involving public and private sectors, and academic and research institutions. The EDP has established a number of strategies to face these challenges. These are described below.

Policy environment

A conducive environment for SME development implies that administrative, economic and financial conditions facilitate investment, promote industry and strengthen markets. The government's strategy is to create an environment where SMEs are inhibited only by their own limitations. The main lines of action of this strategy relate to the promotion of: *i*) a flexible fiscal system that involves low compliance costs for firms; *ii*) a legal framework for enterprises concerning foreign as well as domestic investment; *iii*) an integrated regulatory enhancement process that reduces the administrative burden on, and is attractive to SMEs; *iv*) improvement in the communications and energy infrastructures; *v*) reform of the labour market framework; *vi*) educational enhancement and a new entrepreneurial culture; and *vii*) promotion of organisational change, and corporate social responsibility including environmental protection.

In order to obtain efficient and flexible solutions making the best use of available resources, co-ordination among all the involved parties is a prerequisite. For this purpose, the National Council for Micro, Small and Medium Enterprises has been revived, with the active participation of major industry associations, and is responsible for evaluating each programme according to its objectives and goals. Greater participation by the private sector is encouraged. The Council's evaluation recommendations are acted upon, being subsequently fully incorporated into the programmes.

The government attaches importance to: strengthening entrepreneurial organisations; recognising the role of local governments in economic development, in particular their ability to obtain the participation of social and economic actors; strengthening support service providers, *e.g.* chambers and councils, educational and technology institutions, financial bodies, etc.

Access to financing

Access to financing as a development lever is an essential element of the government strategy to encourage SMEs' competitiveness. The Ministry of Economy, in co-ordination with local governments and development and commercial banks, encourages SMEs to seek risk capital, provides guarantee funds to allow SMEs access to loans, and fosters the establishment of non-banking intermediaries. It is government policy to create, adapt, and/or consolidate programmes that facilitates the access of micro, small, and medium-sized enterprises to financing. In 2001, during National SME Week, Mexico's President announced the creation of the National Guarantee System that promotes collaboration between financial institutions and local governments. The Ministry of Economy encourages collaborative agreements with international financial institutions to support enterprise development and strengthen the production capacity of SMEs.

Promoting entrepreneurship and skills for competitiveness

This line of action seeks to strengthen a long-term vision within a global economic environment, promoting world-class competitiveness standards that generate strong and socially responsible enterprises. A number of programmes such as COMPITE and CRECE have been strengthened and

support funds are being provided through the FAMPYME programme to assist entrepreneurial and human capacity building, enhancing the knowledge development and skills of entrepreneurs, managers and employees. Counsellor certification programmes that guarantee the quality of business consultancy and technical assistance have been established. Enterprise incubation programmes receive support from public and private education institutions, entrepreneurial organisations and local governments.

The Ministry of Economy strengthened the CONTACTO PyME information system, which is supposed to cover SME requirements in its diffusion of business information, as well as supporting the adoption of appropriate information technology applications. SMEs can gain information regarding the market, their position with regard to their competitors, developments in standards, administrative procedures applicable to their activity, business opportunities etc. CONTACTO PyME provides information on 117 government support programmes, as well as business tools, and offers technology and innovation support, and promotes access to markets and internationalisation. Originally intended to be a free online business directory of Mexican enterprises with business matching capabilities, it was decided to extend its service offerings in view of its success. Added services include: quality assurance, export promotion, benchmarking and self-diagnostic tools, statistical information by sector and information on procedures and formalities relating to the Ministry of Economy. A number of success indicators are used with regard to programme implementation, including the number of enterprises registered; the number of support programmes promoted, and the number of visitors to the Web site. Even though a formal evaluation has not yet been carried out, several user surveys have helped to modify the Web site's design and content.

The Business Information Centre provides information on government support programmes for SMEs and has recently been strengthened. Business link centres have been established so as to facilitate access to information and technological innovation for SMEs. These centres also provide training, technical assistance, advisory and business plan support.

Technology and innovation

The Technology Transfer and Technological Services for SMEs programme comprises two sub-programmes: technological forums, and the System for Technological Information Services (SISTEC). They both seek to link SMEs with the principal centres for applied research and technological development in Mexico, identify technology issues and increase SME productivity. The rationale behind these programmes is that they will generate an increase in the technology culture of SMEs and open an innovative communication channel between SMEs and technology solution providers. The forum sub-programme, started in 1996, includes: free consultancy with technology solution providers to match specific technology issues; technological innovation exhibitions developed by SMEs, and technology services offered by research institutions, universities and government agencies. The SISTEC programme, available on the Internet, includes a database with information on 600 technological centres and institutes, and provides answers to queries within 48 hours.

The COMPITE (National Committee for Productivity and Technological Innovation) programme offers a four-day consulting service in the form of a workshop. Production bottlenecks are detected and, if necessary, production lines and plants are redesigned, using various production-related methods – delivery performance measures, waste theories, motivational techniques, team work concepts, etc. A group of workers, supervisors, production managers and if possible, the company's owner (usually seven to 15 people) participate. Consultancy services geared to opening access to markets are also provided.

Business link centres offer technical support and promote the adoption of information and communication technologies by SMEs. The centres seek to guide enterprises towards the highest quality and productivity standards in the global market. Specialised consultancy and support services are provided under the COMPITE framework. It is intended to establish productivity and technology link centres specialised in specific industrial activities, so that smaller enterprises can benefit from technological support in order to optimise their production processes. Such centres, having a sectoral mission, will be the technology suppliers to SMEs that are part of domestic production chains.

The organisation of technology forums at national, regional, and local government levels is encouraged to promote an exchange between industry and higher education institutions, and at the same time encourage linkages between enterprises and academic and research institutions. In this way, SMEs will enjoy easier access to new technologies. The industrial expansion network will be supported by higher education institutions, research centres, and specialised organisations, in such a way that appropriate technological solutions are provided to SMEs needs in each region and sector. The Ministry of Economy applies a Programme of Specialised Technical Advisors, and these advisors will be part of the technology expansion network. The Ministry of Economy and the National Council for Science and Technology (CONACYT) created the Sector Fund for Science and Technology for Economic Development to fund innovation and development projects that offer technology solutions and technology transfer to enterprises, in particular to smaller firms. The fund promotes the use of new technologies, offering technical assistance, financing and grants for technology projects. The CONACYT Web site included information on successful beneficiaries.

Encouraging technology transfer between large enterprises and SMEs through the sub-contracting process is another priority, and support systems will be established for smaller enterprises that are suppliers for large enterprises, in the hope that SMEs acquire the relevant technologies.

Regional and sectoral economic integration

The strengthening of production linkages is encouraged so that they might serve as triggers of regional development. This is expected to be accomplished by fostering enterprise association schemes, generating dedicated suppliers for trade and industry, and attracting manufacturing investment into regions and sectors. In support of these objectives of regional and sectoral integration, a Fund for the Promotion of Production Chains (FIDECAP) was launched. Regional and sectoral impact production projects are presented by entrepreneurs, productive organisations, local governments and other support service agents. Inter-enterprise strategic alliances are encouraged. An important part of this action line is the adoption of association schemes that promote manufacturing co-operation and complementarity and that respect existing competitive conditions between enterprises.

The Supplier Development Programme results from a collaboration agreement between government, banks and institutions aimed at: *i*) achieving the integration of SMEs into the productive, commercial and/or services chains of large businesses established in Mexico; *ii*) promoting contacts between large businesses and potential SME suppliers; and *iii*) linking qualified suppliers with development and commercial banks to meet their financing needs. Business interviews between SMEs and large enterprises are facilitated so that enterprises may have access to management counselling, financing and human resources development. In the supplier programme scheme, technical advice is provided by the purchasing party during the manufacturing process of samples, prototypes, pilot batches, etc. The programme's success depends on the interest of large enterprises in developing new suppliers and on how well the various SME programmes (public and private) are developed and integrated. The programme *Marcha Hacia el Sur*, launched in 2001, aims to establish investment projects that generate permanent quality jobs so as to contribute to the development of specific regions. The programme identifies and promotes high impact investment projects, which receive support for labour force training, and for refurbishment and equipment of industrial infrastructure, according to the number of jobs generated.

Export promotion

This line of action aims to promote exports by providing technical assistance, training and specialised consultancy services to SMEs in order to strengthen their production capability, support the design of export projects and increase opportunities to gain access to complementary guarantee funds that in turn make it easier to obtain financing. State Centres to Promote Exports (PYMEXPORTA) have been set up, using standardised service and support procedures in order to:

- Increase firm productivity.
- Increase product competitiveness and adapt it to the market.

- Adhere to international provisions and standards.
- Provide information about promotion and distribution channels.

The Ministry of Economy, BANCOMEXT (National Bank of Foreign Trade), and state governments implement the Programme to Consolidate and Promote Exporting Goods. Part of this programme is to provide easy access to information on foreign trade. Expanded coverage of information systems on foreign trade is made available through the Stands for Guidance for Exporters and the Centres for Export Development of BANCOMEXT.

The International Events Programme fosters SME exports by financially assisting their participation in international export-related events, such as fairs and exhibitions, export missions, Mexican product shows, etc. The costs of participating in such events are subsidised, and enterprises that are candidates for assistance are obliged to undergo a training process. While no specific policy impact has been evaluated, annual results are analysed and fed back into the programme which is adjusted as appropriate. The Ministry of Economy also supports the development of infrastructure for the distribution and marketing of Mexican products in areas of high consumption potential. SMEs are assisted in taking advantage of market niches.

The Joint Commission for Export Promotion (COMPEX), is a programme involving public and private sector participation, that seeks to analyse, evaluate, propose and agree on issues relating to the export of goods and services. The programme promotes export policies in the face of increasing market globalisation. Other programme objectives include the reduction of administrative barriers faced by SMEs in their exporting activities. This programme evolved from a programme which merely granted assistance (in dealing with export procedures) to its present form as a joint collaboration programme between public (local and federal levels) and private sectors (national enterprise organisations and chambers), with a broad aim of co-ordinating and agreeing on export promotion issues and lightening administrative and technical burdens. Regulatory reforms can result from this process. The Unit of International Trade Practices (UPCI) will strengthen its actions to fight artificial market barriers to Mexican export products, and will also combat unfair trade practices by means of impartial, transparent and timely processes within the terms stated in the corresponding standards.

In the interests of greater accountability, it is necessary to evaluate the effectiveness and efficiency of SME policies and to implement a system of public evaluation that facilitates improvements to support schemes, identifies areas of opportunity and satisfies citizens' concerns about the efficient use of resources.

Netherlands

SMEs in the economy

Over 99% of all companies in the Netherlands are SMEs. In 2000, there were 758 000 enterprises in the Netherlands, only 4 850 of which had more than 100 employees. Since 1988, SMEs in the Netherlands have generated higher annual employment growth than SMEs in any other EU member state, and small enterprises (fewer than ten employees) generated the largest increase in employment. In 1998, 9.5% of small enterprises and 26% of medium-sized enterprises were exporters.²⁴ 49% of Dutch SMEs launched a new product on the market in 2000. By 2000, small enterprises had substantially narrowed their catch up in Internet use. During the 1990s (except 1996 and 1997) the number of start-ups in the Netherlands increased steadily. Sectors that experienced rapid growth in start-ups included food and luxury goods, chemicals, construction, the metal industry and commercial services.

Framework policies

In 1999, the policy paper “The Entrepreneurial Society” was presented to the Speaker of the Lower House of the Dutch Parliament by the State Secretary for Economic Affairs. This policy document outlines an array of measures and initiatives in the fields of legislation and regulation, taxation, education, local and regional policy, innovation and growth. Specifically, three main policy areas are emphasised: market structure, regulation and public business services, and creating new opportunities by means of a productive climate.

Since 2000, on a quarterly basis, the *Monitor on Entrepreneurship (Ondernemerschapsmonitor)* is published, co-produced by the Ministry of Economic Affairs and the Economic Institute for SMEs (EIM). The *Monitor* describes the most important facts and figures about entrepreneurship (policy) and constitutes one of the ways in which the important theme of entrepreneurship is given attention by the Ministry. In December 2001, a follow-up to the actions in the above-mentioned policy paper was sent to Parliament.

Government policies for adjusting the market structure include the repeal of the Establishment of Business Act and amending the Bankruptcy Act. An evaluation of the Establishment of Business Act showed that it acted as a formidable barrier to entry for potential new businesses. In those industry sectors where the statutory regulations were substantially simplified in 1996, business start-ups increased significantly, while in sectors where the regulations were tightened, start-ups declined substantially as a consequence. Overall, the simplification of the Act led to a 10% increase in the business start ratio in the relevant sectors. By 1 January 2006 at the latest, the remaining requirements under the Establishment Act will disappear and the law itself will be repealed. There are no indications regarding the results of the partial repeal of the Establishment of Business Act (1 January 2001). However, in branches for which the Establishment Act was repealed (since 1 January 1999) a strong increase in the number of start-ups can be seen: the start-up rate increased from 3.6% in the period 1996-1998 to 5.9% in 1999.

The revision of the Bankruptcy Act is an important part of entrepreneurship policy, as it is important to deal with the stigma associated with failure and develop a cultural capacity to see firms fail. A special task force was designated by the government to investigate ways of amending the Act and

a consultation round was launched on the Internet to obtaining the views of those involved in company liquidations and other interested parties. The Bankruptcy Act has been amended, so that firms that have been granted a suspension of payments, are now given more possibilities to achieve a successful reorganisation and relaunch. The stigma associated with failure was a theme discussed at a major seminar on business failure in May 2001 (jointly organised by the Dutch Ministry of Economic Affairs and the European Commission, DG Enterprise).

The government of the Netherlands continues to reduce and improve business regulations so that entrepreneurs have greater scope to develop their activities. The MDL process is designed to remove access barriers to markets (M), to remove unnecessarily burdensome regulations (D) and to improve the quality and transparency of regulations (L). As part of the MDL process, projects are also being carried out to create a framework for a specific problem (*e.g.* market and government, supervision of privatised utilities, vouchers and individual budgets). A total of 15 of the 36 MDL I-projects have now been fully implemented. These projects concern: foodstuffs legislation, drivers' hours, supervision of privatised or public utilities, hospitals, health and safety laws, insurance agents, taxis, access to health insurance law, legal professions, city and regulation, normalisation and certification, preventive supervision of companies, estate agents, bailiffs, and specific payments from central to local government.

Two projects with important impacts on SMEs are foodstuffs regulation and preventive supervision of companies. The foodstuffs regulation project created more room for entrepreneurs to introduce new products and allowed outdated regulation on foodstuffs to be withdrawn (in total, 77 orders were withdrawn). The project for the supervision of companies simplifies the *ex ante* evaluation of new private or public limited liability companies by the government. The waiting time for new companies has been reduced from more than a month to one week.

Recently, MDL has started to prepare cost-benefit analysis, beginning with six projects, and it is intended to develop these analyses further. Projects currently running concern:

- Pipeline concessions.
- Restrictions to access to medical professions.
- Efficiency of the training market.
- Private sector service provision.
- Supervision of companies.
- Vouchers and personal budgets.
- Sowing seeds and seedlings act.
- Service oriented government.

Within the framework of the Competition, Deregulation and Legislative Quality project (MDW) the Point of Support for Intended Regulations (*Steunpunt voorgenomen regelgeving*) reviews the costs and benefits of intended regulations made by all Ministries. In 1999, 60 projects were reviewed.

In 2000, the Dutch government established the Advisory Commission on Testing Regulations on Administrative Burdens (ACTAL). This commission advises on the administrative burden of intended regulations. High priority is attached to easing the administrative burdens for business, especially for those involved in hiring their first employee. An important line of action is strengthening of individual ministerial responsibility for an annual action programme to reduce the administrative costs of existing legislation and regulations. The first departmental action programmes were presented to Parliament in May 2000.

SME policies and programmes

The Dutch government aims to simplify incentive and subsidy programmes and make them more accessible. The multitude of existing instruments for supporting business has made these programmes less transparent and less accessible for the business world, and consequently the customer and market orientation of the measures will be improved. Generally, use will be made of marketing techniques in

order to better align programme instruments more closely to the needs of the “customer”. Priority areas for government policies and programmes include entrepreneurship, the promotion of high growth innovative firms, as well as improved access to financing and to foreign markets.

Entrepreneurship

The Dutch government attaches great importance to teaching young people, during their education, about enterprise and offering them opportunities to prepare for entrepreneurship. The government has established a consultative commission on entrepreneurship and education with representatives from business, different education sectors, and social organisations (multicultural students, female entrepreneurs, employees). The commission has a threefold task:

- To create support and awareness within the education sphere and business and industry.
- To draft proposals for the development and implementation of the most promising and critical activities for fostering enterprise and entrepreneurial skills by commissioning a pilot project, to serve as a good example for other schools.
- To draft proposals to eliminate the problems which impede the move from education into entrepreneurship.

The budget for supporting entrepreneurship for 2000-2002 is approximately EUR 5 million, and the largest part is used as a subsidy to stimulate entrepreneurship in education. Meetings at the sector, regional and national levels are also organised with the business and education sectors. The interest in the subsidy has been overwhelming and the results of the first phase of the subsidy show a huge interest by schools in the promotion of entrepreneurship in education. The selected projects are placed on the Internet and on the *kennisnet*, a system to which all educational institutions are connected.

Financing

Government policies for improving SME access to financing include the following:

- Implement tax facilities for start-ups, modernisation, and change of business.
- Increase the scope for raising venture capital by increasing the budget for the SME Credit Guarantee Scheme (BBMKB): Two important initiatives are:
 - *Angel Roadshows*, which involve the organisation of ten regional meetings for innovative entrepreneurs and informal investors. These meetings are organised by the Partinvest Foundation (network of investors) in co-operation with the Nebib (network of investors and entrepreneurs) and other parties such as Syntens. The Ministry of Economic Affairs sponsors the roadshows.
 - *7th Heaven* comprises 20 meetings organised by the Nebib and several other parties, such as Biopartner (Ministry of Economic Affairs Life Science Initiative), Dreamstart (platform for technological starters) and Syntens. These meetings are not directly sponsored. However, several participating organisations are financed by the Ministry of Economic Affairs.
- Develop an assessment instrument in which risks and returns can be evaluated more effectively. The SME Account (*MKBalans*) is an instrument developed by the Ministry of Economic Affairs in close co-operation with the representative of the accounting organisations, the *Nivra*. The aims of the SME Account are threefold:
 - To reduce information asymmetry between financiers and entrepreneurs.
 - To assist entrepreneurs in developing the presentation of their yearly account.
 - To advise on ways to improve business policy.

The SME Account has been available since June 2001, and is available on the Web site of the Ministry of Economic Affairs (www.mkbalans.ez.nl). An active Internet policy must ensure that entrepreneurs can also find the SME Account on other crucial Web sites, such as those of the chambers of commerce, accounting organisations, etc. Syntens will likely play a crucial role in assisting entrepreneurs when they face problems or have questions after using the SME Account.

Technology and innovation

In its 1999 policy document on industry and services policy,²⁵ the Dutch government announced significant measures to improve the innovative capacity of industry. A crucial factor in this is a good knowledge climate. To this end, a number of structural reforms were carried out, described below.

A government priority was to expand the yield of publicly-funded knowledge development, to be achieved through:

- Strengthening fundamental research for the private sector, mainly via innovation-oriented research programmes (IOPs).
- Intensifying demand-led and innovation-based basic strategic research.
- Activating a knowledge exploitation policy (including a patents policy) at universities.

The ICES/KIS programme, which involved a boost to investment, is part of this reform. The government set aside NLG 465 million for 1999-2002 to strengthen the knowledge infrastructure by means of 12 public-private co-operation projects (ICES-KIS II).

Another priority was to strengthen innovative cluster policy by promoting co-operation between large and small companies; co-operation partnerships centring on ICT breakthrough technologies and the development of next-generation ICT applications; and intensifying strategic information provision. The first monitor studies for the clusters multimedia, construction and electromagnetic capacity technology (EMVT) have been completed.

Also considered to be important was improving the climate for technostarters through:

- An integrated approach to bottlenecks faced by technostarters (*e.g.* financing, accommodation, advice). The strategy will be pursued via the twinning concept (starters in ICT), the Life Sciences Action Plan (starters in biotechnology) and via the establishment of Dreamstart (a platform for technostarters) that disseminates the integrated approach to other areas of technology.
- Developing and organising technostarters and the venture capital market.

Another priority was to reduce labour market bottlenecks which increasingly hamper the innovative capacity of companies. This was to be achieved by:

- Applying labour radars to identify the causes of shortfalls and possible solutions.
- Appointing an ICT task force aimed at narrowing the severe shortfall in ICT experts.
- A professional education task force designed to increase the basis of support for investments in vocational education and to encourage best practices among sectors.

Improving the tax system to ensure a stimulating and competitive knowledge climate constitutes another government priority. Various tax measures are directed at this objective, such as the reduction of corporation tax for the first NLG 50 000 profit to 30%, a reduction in the capital tax rate and strengthening the Promotion of Research and Development Act (WBSO), largely geared toward starters.

Finally, the government seeks to develop an accessible, transparent and modern business-orientated technology instrument, partly through the streamlining of regulations.

Promoting high-growth firms

The establishment of a network of high growth companies, so that firms find it easier to break through the barriers in their development path, is a government priority. In December 1999 Growth Plus was established, to which 20 companies are connected. One of the activities of this network is the organisation of lectures and courses for high growth companies. In addition, the Ministry of Economic Affairs is exploring possibilities to extend the activities aimed at high growth companies to all companies that can be defined as “ambitious growth companies”, as these companies are confronted with approximately the same obstacles as the high growth companies.

25. *Ruimte voor Industriële Vernieuwing: agenda voor de industrie- en dienstenbeleid* (Scope for Industrial Innovation: Agenda for Industry and Services Policy), June 1999.

A number of support programmes exist, including pilot projects for one-stop shops in the Groningen and Drenthe provinces and in the Northwest Holland region, where entrepreneurs can request comprehensive information and integrated services. In September 1999, three pilot projects for a one-stop business counter were launched in Groningen, Drenthe and the Northwest Holland region. Participants are the chambers of commerce, municipalities and the Tax Department. At these business counters business information is streamlined and the entrepreneur can register as self-employed. Where possible, other forms of service are also integrated. The experiences gained in these pilot projects will serve to develop a toolkit, which will be made widely available. The Ministry of Economic Affairs, the Ministry of Internal Affairs, the Tax Department, the Association of Netherlands Municipalities (VNG), the Association of Chambers of Commerce (VVK), and the various project organisations will work closely together within the framework of the *Government Counter 2000 Programme*. If successful, business counters will be introduced on a voluntary basis in other parts of the Netherlands as well.

Export promotion

The Dutch government assists entrepreneurs in capturing new foreign markets by providing them with information, advice and funds. Trade missions for SMEs are organised on a regular basis. The New Business in Foreign Markets Programme (PSB) has been launched to urge SMEs to export to new markets. Focusing on export opportunities, this programme offers entrepreneurs free advice and support as well as subsidies. Under the auspices of the PSB, the export consultants of the chambers of commerce and sectoral organisations identify SMEs with export potential and seek to make them aware of exporting opportunities and benefits.

New Zealand

SMEs in the economy

While there is no official definition of an SME in New Zealand, they are considered, from a policy perspective, to be firms having the following characteristics: they involve personal ownership and management; they have few, if any, specialist managerial staff; and they are not part of a larger business enterprise. As an indication of the contribution of these types of businesses to the New Zealand economy, consider that firms with fewer than 50 employees constitute 99% of New Zealand enterprises and account for around 49% of total output. Micro-firms (fewer than ten employees) make up 92.6% of New Zealand enterprises and contribute 32% of total output. Within manufacturing, almost 97% of firms have fewer than 50 employees, while 0.1% are to be found in each of the two size classes (250-499) and (500+). Firms having fewer than 50 employees account for 55% of total employment, and micro-firms are responsible for 32% of employment. Manufacturing firms employing fewer than 50, generate 42% of manufacturing employment. SMEs in the New Zealand economy are particularly small by international standards.

Framework policies

In 2001, the New Zealand government released its framework for achieving and sustaining the higher growth rates needed to support New Zealand's economic and social goals. This Growth and Innovation Framework (GIF) underpins all economic policies, including those related to SMEs, to remove unnecessary growth impediments and ensure that they are well placed to take growth opportunities as they arise. There are two key aspects of GIF:

- Continuing to strengthen the foundations of the economy. This includes a focus on a stable macroeconomic framework; an open, competitive micro-economy; building a modern, cohesive society; maintaining a healthy population; and sound environmental management. For SMEs, there is significant effort being made to reduce the cost burden on business and, in particular, finding least cost regulatory and non-regulatory approaches to achieving social, environmental, and economic objectives. Further improvements in the regulatory framework concerning competition and compliance are being made, as well as an increasing focus on issues related to property protection, insolvency law, securities market regulation and insurance law.
- Building more effective innovation. This recognises innovation as the principal source of productivity improvement and, therefore, economic growth.

The government has recognised that, beyond the foundations, effective innovation relies on:

- An innovation system that works well. The policy framework aims to encourage the generation of new ideas, ensure that these are effectively transferred to those who can add value to them in an environment that encourages entrepreneurial success and facilitates rapid business growth.
- The availability of skilled and talented people. The framework has a medium-term objective of developing more talented people and a shorter-term focus on strengthening industry training and attracting talented people to live in New Zealand. Supporting these efforts are policies that aim to make the most of the significant network of New Zealanders living overseas.
- Strong links with the rest of the world through business, innovators and government. Major overseas investors provide an important source of new ideas, good management practice and

international opportunities. The government aims to encourage higher levels of foreign direct investment. Secondly, there is a strong emphasis in GIF on improving export promotion efforts and promoting a New Zealand brand focused on New Zealand's high levels of innovation.

- Focusing government resources on key sectors that support innovation and build on New Zealand's competitive advantage. The government has recognised that it needs to target its efforts to make the best use of limited resources. The government is facilitating public-private engagement in sectors that are capable of having a material impact on growth rates, and in which New Zealand has a competitive advantage, and which contribute well to growing an innovative economy.

The Ministry of Economic Development, in conjunction with the Treasury, the Ministry of Research Science and Technology, and the Ministry of Foreign Affairs and Trade, is responsible for co-ordinating and monitoring the implementation of GIF. This is supported by a range of economic development agencies, including Trade New Zealand, the Foundation for Research Science and Technology and Industry New Zealand.

SME policies and programmes

The Ministry of Economic Development has the primary responsibility for providing policy advice on SME related issues with other departments responsible for policy in their particular areas of expertise (such as the Ministry of Research, Science and Technology in technology assistance). Delivery of existing programmes is shared across a number of government agencies. For example, Industry New Zealand delivers a range of SME assistance programmes, the Foundation for Research, Science and Technology delivers technology assistance programmes, and Trade New Zealand delivers trade-related programmes.

Within the broad context of improving on market outcomes, the focus of direct enterprise assistance in New Zealand targets the enhancement of management capability, information transfer, and collaboration. The BIZ suite of programmes aims to deliver in these three areas. Most assistance focuses on information dissemination and business training. Funding programmes, such as the BIZ Enterprise Awards, provide monetary assistance on a 50:50 basis to enable entrepreneurs and small business owners to improve the capabilities of their businesses.

A series of new initiatives have also been introduced in order to help SMEs access risk capital. First, a New Capital Market has been set up as part of the New Zealand Stock Exchange, which allows investors in high risk but potentially high growth ventures to seek capital at a lower cost. The New Zealand Stock Exchange has announced that it will be making changes to the New Capital Market in the near future, but it is intended that there will still be a secondary board that will prepare companies for a full listing on the primary board of the New Zealand Stock Exchange. Second, legislation anticipated to be introduced to Parliament this year will relax the rules on pre-prospectus publicity, allowing small investors to test the water before committing to a public offer. In addition, this Bill will allow offers which are made only to wealthy and experienced investors to be exempted from the requirements of the Securities Act, reducing compliance costs for issuers making such offers. Third, the Securities Commission has made exemptions to venture capital schemes, allowing economic development agencies to provide a national electronic investment service to registered investors via the Internet.

Entrepreneurship

Empirical research suggests that although New Zealand is a community of highly entrepreneurial people, its society could do better at turning good ideas into profitable businesses. In particular, there is a perception that the level of entrepreneurial activity is not well supported by prevailing attitudes and culture. Policy initiatives are intended to recognise and support the efforts of entrepreneurs and celebrate their successes. In December 2001, an Industry New Zealand initiative that is aimed at celebrating and fostering entrepreneurial activity and business success was announced. It aims to foster: a culture in education where business is seen as a positive contributor to society and a

worthwhile career aspiration for students; students developing enterprising attitudes, and business-relevant skills; a climate which recognises and reinforces business success among existing and potential businesses; and a social culture which positively supports entrepreneurial activity and business success.

The Ministry for Research, Science and Technology funds a scheme entitled “Promoting an Innovation Culture” which supports activities that strengthen and encourage the culture of innovation in New Zealand. This includes promoting positive attitudes and forging international links for science and technology.

Financing

Possibly due to the limited nature of specialist managerial skills possessed by SMEs in New Zealand, some firms find it difficult to attract funds despite having sound business propositions. BIZ Investment Ready is a scheme aimed at innovative businesses and entrepreneurs seeking funds to expand, diversify or commercialise a new concept. It helps businesses and entrepreneurs to develop a greater understanding of the issues around funding and can provide assistance to seek and secure private investment of up to NZD 5 million. No direct funding is provided to businesses.

The New Zealand Venture Investment Fund (VIF) is an intervention aimed at stimulating investment at the seed and early stages of the business life cycle. VIF will co-invest with private sector investors into managed venture capital funds. These funds will have certain restrictions around how they can invest, to push more equity investment toward earlier stages of the business life cycle.

Technology and innovation

Enhancing technology transfer by enterprises and building the capability for technology uptake and commercialisation by them is one of the key business development objectives of the New Zealand government. This aspect of government policy is addressed by the Technology New Zealand (TNZ) and Grants for Private Sector R&D programmes, which provide grants-based assistance directly to SMEs to develop and adopt new technology in New Zealand. It provides both funding and information on technological matters to help businesses develop and grow. The scheme is administered by the Foundation for Research, Science and Technology, a statutory body with an independent board reporting to the Minister of Research, Science and Technology. Costs of various programmes under the scheme are either borne in total by the government (up to a pre-set limit) or shared by the government and individual enterprise.

Together with these technology assistance programmes, the government has programmes to support research and development to enhance the long-term economic competitiveness of New Zealand industry. These programmes have three target areas: infrastructure, manufacturing and food and fibre.

Industry New Zealand runs two initiatives that are particularly targeted towards supporting SMEs gain access to Technology and innovation. BIZ Enterprise Awards provides early stage financial assistance for well-defined business projects and concepts. Proposals must have commercial potential and be directed at the creation of a new business or the development of an existing one. The Incubator Support Programme offers annual or semi-annual cash rewards to participating New Zealand incubators. The Incubator Awards are merit-based with the objective of providing assistance to develop robust and sustainable incubator processes and practices. The programme also attempts to improve the sharing of best practice and collaboration amongst incubators in New Zealand.

Electronic commerce

In addition to other benefits, electronic commerce provides New Zealand with an opportunity to overcome its geographical separation from major export markets. The government launched its E-Commerce Strategy for New Zealand in November 2000, which outlined over 60 actions and

commitments under three headings: leadership and communication, building capacity, and an enabling regulatory environment. The actions outlined here are those of particular relevance to SMEs.

The E-Commerce Action Team (ECAT) was established in March 2001 to raise awareness of e-commerce issues and is made up largely of sector and industry representatives. It has developed a Web site (www.nzecommerce.co.nz) that is designed to be a key instrument to support business and the wider community to build e-commerce capability and develop support networks. ECAT has been instrumental in getting key sectors such as agriculture to focus on the benefits of e-commerce. An e-commerce guide for SMEs was published in November 2000. This has been well received and over 8 000 copies have been distributed. A number of e-commerce events have been held around the country to publicise the benefits of e-commerce to businesses, in particular SMEs. Industry New Zealand has developed an eight-module e-commerce training programme that is aimed at SMEs. Assistance for the development of e-commerce and e-business strategies is also available through Industry New Zealand.

As a specific instance of bridging the geographic gap between New Zealand and its markets, Trade New Zealand has built an e-business channel specifically targeted at exporters, most of whom are SMEs. Where necessary, firms are educated in the use of the Internet. Trade New Zealand has developed a range of services which will allow exporters and buyers online to match market opportunities with firms' domestic capabilities.

Management

Management capability enhancement is one of the primary goals of New Zealand SME assistance. The overarching goal for the BIZ programme is to improve the management capabilities of SMEs and therefore improve their performance in an increasingly dynamic and competitive business environment. In doing so, it aims to promote increased understanding of the value of seeking relevant external assistance. The programme has two components: *i*) a business development component contracting 16 regional providers nation-wide to deliver services aimed at improving SME management capabilities. General services include (but are not limited to) business diagnostics/assessments, business skills training, business mentoring, and business networking; and *ii*) an information and referral service, BIZinfo, to provide information on public and private enterprise assistance initiatives. This service is delivered through four call centres using a toll-free number and a Web site (along with 32 information centres throughout the country). The components of the BIZ scheme are delivered through contracts to private providers to allow programmes to be responsive to regional needs and to be able to adjust quickly to changes in needs over time.

Part of the funding for research, science and technology goes toward Supporting Promising Individuals, which supports the people needed to sustain the future development of the innovation system in New Zealand, through awards and fellowships. Some of the individuals targeted through particular fellowships are post-doctoral researchers and teachers in science, technology and mathematics. There is also specific funding targeted at encouraging Māori to enter science and also at researching Māori knowledge.

Export promotion

The mission of the New Zealand Trade Development Board (Trade New Zealand) is to use its global network to enhance the ability of New Zealand businesses to convert opportunities into sustainable and profitable foreign exchange earnings. Trade New Zealand is headed by a board of directors appointed by the Minister responsible for trade. Services are available to improve firms' preparedness for exporting – both firms looking to enter overseas markets and those wishing to expand their export operations. Trade New Zealand is a key agency for New Zealand SMEs, primarily because the size of the domestic market means that they often need to expand internationally earlier than their counterparts in other countries if they are seeking to grow.

Specific programmes have been developed for firms at the different stages of the exporting process, including SMEs who are new to exporting. These include the provision of free information and advice to prospective exporters. Firms that are ready to export can also purchase a range of services from Trade New Zealand providing more detailed information on specific markets and products. Trade New Zealand also promotes collaboration among SMEs through export networks. Funding for export networks takes the form of financial support for up to 50% of costs for approved initiatives aimed at developing specific market opportunities that are part of strategic business plans (*e.g.* trade fairs, trade missions, promotional events, visiting buyer programmes).

The Business Growth Service and Fast Forward Programme, run by Industry New Zealand, make specialist expertise, information and other selected inputs available as an integrated package to firms and groups of firms in order to improve their key competencies and accelerate their growth. The scheme targets businesses and groups of businesses with high growth potential. The firm, or firms, will typically be in a position where they can grow substantially if marketing, financial or other critical strategies can be developed and implemented. Grants are available on a 50:50 basis.

Norway

SMEs in the economy

In December 2001, SMEs accounted for 98% of all firms in Norway, and firms employing up to five employees represented approximately 80% of all firms. In construction, real estate, wholesale and retail trade and primary activities, SMEs accounted for over 99% of businesses – slightly more than the share of SMEs in transportation, storage and communications (98%), hotels and restaurants (98%), business activities (96%) and manufacturing (96%). In education and in the oil industry, SMEs accounted for about 89% and 94% of firms, respectively.

In terms of employment, SMEs account for 53% of employment. SMEs employ 17% and 36% of workers in the oil industry and in manufacturing, respectively, and much higher employment shares in some other activities, such as construction (66%), wholesale and retail trade (83%) and hotels and restaurants (71%).

Framework policies

In May 1998, a government white paper on industrial policy set out the guidelines and principles of future industrial policy, with implications for SMEs. A four-pronged industrial strategy was devised to: alleviate the administrative and regulatory burden affecting business operations; promote the acquisition of knowledge and competencies; achieve regional development through a diversified and environmentally sound industrial sector; and support industry to deal with the challenges and opportunities of globalisation.

Following the parliamentary elections in October 2001, both the 2002 state budget and public statements by the new coalition government indicate a stronger emphasis on general framework conditions policy instruments such as taxation and labour policy in preference to more specific industry policy instruments.

The Norwegian tax system is based on the principle of fiscal neutrality between different industries, sources of financing, forms of business organisation, etc., as fiscal neutrality is perceived as contributing to an effective allocation of resources. The principle of fiscal neutrality implies, as a principal rule, that regulation should not discriminate between enterprises of different size. Therefore, the Norwegian tax system consists of very few regulations specially designed for SMEs.

The following gives a summary of recent policy changes with particular relevance to SMEs:

- The abolition of tax on capital expenditure in October 2002 – affecting all enterprise size classes.
- From July 2001, the smallest enterprises (turnover less than NOK 1 million) may file their value-added tax returns annually instead of every two months.
- Duty on imports of manufactured goods will be gradually removed.
- Small firms (satisfying certain conditions) may use a simplified income statement procedure.
- A tax credit scheme for R&D expenditure was introduced in the 2002 budget. SMEs satisfying certain requirements can avail themselves of the tax credit.

Currently, there is a process underway to design a new system for the taxation of enterprises and capital. A possible phasing out of the “split taxation model”²⁶ could imply a simplified regime for many small enterprises, but would not necessarily imply reduced taxes.

SME policies and programmes

The Action Plan for Small Enterprises (1999-2002) is a multifaceted policy response considered to be in line with the EU Commission’s work to foster entrepreneurship in Europe and can be viewed as a first step to follow up the Business Environment Simplification Task Force (BEST) recommendations. It has a number of objectives including regulatory reform and administrative reform, fiscal reform, increased innovation and R&D, improved workforce skills, improved access to financing, and changes in cultural attitudes to small business. In addition to making important improvements in these areas, the action plan contributes significantly to raising the awareness of small enterprises both among the public and among policy-makers. Recent policy documents have, however, stressed the importance of entrepreneurship, and currently there is a shift in focus away from SME policies and towards an entrepreneurship policy. Specific elements of the action plan are presented below.

Regulatory reform

Better regulation is considered to be an important issue in Norway. In 2001, the government launched a programme for innovation and for the modernisation of the public sector. Simplification of regulations is a central part of the programme.

The work for better regulation is concentrated on the following main areas:

- Simplifying existing regulations, in close co-operation with the business community.
- Making regulations easily accessible and comprehensible, and available to everyone on the Internet (www.lovddata.no).
- Improving the quality of new/altered regulations by improving the decision basis (*i.e.* more use of impact analyses, business test panels and better procedures for law making).
- Reducing the administrative burden through the use of electronic filing solutions, co-ordination of the compilation of information by public agencies, and creating a data definition repository.
- Organisation of the public sector (*i.e.* co-ordination of the various public agencies).

In 1999 the government established a project for improving the quality of government regulation, requiring that within a period of 2½ years each ministry should establish, organise and complete a programme for simplifying secondary regulations. A final report was due in 2002. The simplification programme mainly concerns structural changes intended to make regulations more easily accessible and comprehensible, but the programme also covers regulatory amendments, when necessary. All regulations shall be published on the Internet. By the end of 2000, approximately 300 old regulations had been abolished and further reductions were expected.

Along with the Register of Business Enterprises,²⁷ the Register of Reporting Obligations of Enterprises is of special interest to the simplification agenda. Its main purpose is to maintain an up-to-date overview of the reporting obligations of enterprises with regard to the public administration, and to find opportunities for co-ordinating and simplifying the system. The intention is to prevent unnecessary collection and registration of data, in the interests of small enterprises, in particular. The register facilitates the interpretation of questions contained in public questionnaires, and has developed into a national database.

26. “The Split Taxation Model” is a set pattern designed to separate the revenue on labour from the revenue on capital for self-employed and active owners.

27. In Norway there are seven different registers relevant for the business sector. These are all closely co-ordinated, and they use a common nine-digit, unique organisation number. The existence of this number is essential for collaboration on the exchange of reported information. Business enterprises need only register at the Register of Business Enterprises, which co-ordinates the information with other relevant registers.

Facilitating immediate access to relevant, up-to-date information about regulatory frameworks and measures is another policy objective and in 1992 a telephone and fax-based one-stop-shop for business sector information was established (*Narviktelefonene*). More recently, the Internet has been providing opportunities for dissemination and effective customisation of information. The Ministry of Trade and Industry has undertaken efforts to:

- ensure that information from all government agencies will be accessible via the Internet by end of 2002;
- ensure that *Narviktelefonene* will continue to provide business sector information to existing and start-up enterprises; and
- develop a customised information service on the Internet for frequently asked questions and develop a database that can be accessed via the Internet containing formal obligations and rights for existing and start-up businesses.

Entrepreneurship

Attitudes to entrepreneurship and innovation are shaped at a young age, and with this in mind, the educational system introduces first grade pupils (six years old) to experience, investigate and conduct innovative research. Pupils are also encouraged to *produce* rather than *reproduce* and to *act* rather than *react*, recognised to be key elements in all innovative processes. Entrepreneurship, innovation and creative thinking are included throughout mandatory school, in vocational training and adult education (lifelong learning).

The planning document entitled “Entrepreneurship in Education and Training” has been succeeded by several projects and activities, among them the work of the association Young Enterprise Norway (organised as a nation-wide association with local divisions in each county). During the 2000/2001 academic year, almost 4 000 students in nearly 500 enterprises took part in the Company Programme in Norway. The number of participating students in Upper Secondary school has doubled every year since 1997, and within two to three years the number is expected to rise to 12 000 students (representing 20% of students in a given year). For 2002, Young Enterprise Norway has developed programmes for both universities and primary schools.

Female entrepreneurship

Helping women realise their potential will provide a vital stimulus to the economy. A number of initiatives have been taken in order to meet this challenge, the Norwegian Industrial and Regional Development Fund (SND) playing an instrumental role in this respect. SND provides grants and loans for industrial development, and has a leading role in public sector innovation and SME activities. Several programmes have been initiated that aim to encourage female entrepreneurship as well as the advancement of women in top management positions.

Financing

The SND manages a wide range of financial schemes to support SMEs and these include loans, grants and guarantees. A particular focus is on giving small enterprises access to sufficient capital in the early stages, particularly for projects involving new technology and knowledge-based businesses. Risk loans are used to “top” innovation, turnaround and development project funding, as well as investments in fixed assets. Guarantees may be given to reduce the risk factor in connection with loans and operating credits from other financing institutions. Grants are available in all parts of the country to finance development projects, such as product or process development, market development, as well as for quality and competence enhancement.

Since 1998, one national and five regional seed capital funds, with a total capital of EUR 98 million, have been established with the aim of providing capital and competence to projects involving high risk at an early stage. These funds are being financed from public and private sources on a 50/50 basis and three of the funds are already fully capitalised. To date, the seed capital funds have a portfolio of

80 projects, with an investment value of EUR 25 million. Although it is still too early to draw conclusions about the effect of the funds, it is clear, however, that the main challenge ahead is to provide a competent network around the administration of the funds.

Technology and innovation

Priority is given to improving SME resources for technology, innovation and skills acquisition through the programmes and activities of the Norwegian Industrial and Regional Development Fund (SND) and the Norwegian Research Council. Programmes implemented to date include:

- FRAM (leader and strategy programme);
- SMB-*kompetanse* (highly-educated workers are recruited for one-year development projects in enterprises);
- TEFT (a programme for co-operation between research institutes and SMEs);
- REGINN (a programme for regional innovation); and
- FORNY (a programme aiming to stimulate a research-based entrepreneurial culture).

Efforts are being made to encourage SMEs to use information technologies more extensively given their considerable advantages for SMEs. It is the government's intention, given the increasing importance of knowledge and skill acquisition, to strengthen efforts within education and research and introduce appropriate schemes relating to post-qualification training and further education.

Export promotion

The Norwegian Trade Council, a public agency with 40 offices in key markets around the world, has as a principal function the task to help businesses gain access to overseas markets. The Euro Info Centre network is used as a common gateway to information concerning opportunities offered by the European Economic Area Agreement. The government plays an active role in EU activities that promote network building and transfer of expertise between Norwegian and other European small businesses. Norway participates in the Multi-annual Programme on Enterprise and Entrepreneurship (2001-2005), implemented by the EU.

Poland

SMEs in the economy

The SME sector in Poland (firms with fewer than 250 employees) can be characterised as follows: small companies (employing up to 49 people) number almost 3 million, while the number of medium-sized companies is approximately 29 000. SMEs employ about 7 million persons (almost two-thirds of total employment), and services have the highest share of employees working for SMEs – in particular, services and repairs, hotels and restaurants and other service activities. The SME share in GDP is approximately 48%, and the SME share in total sales is over 60%.

Framework policies

The basic condition for the long-term development of enterprise is, in the view of the Polish government, the implementation of a stable macro-economic policy. Regulatory reform is expected to make a significant contribution to developing a more conducive business environment. During the past two years, government decisions have involved: strengthening the pro-investment character of the tax system; simplifying tax reporting, implementation of legal provisions aimed at making leasing more readily available; reductions in the administrative burden associated with employment; simplifying access to public procurement; and introducing simplifications in customs, transit and border procedures for Polish foreign business trade.

SMEs policies and programmes

The basis for government policies for SMEs is found in the Commercial Activities Law of November 1999, which states that government, respecting the ideas of equality and competition, will create favourable conditions for the development and functioning of SMEs. A detailed elaboration of this is contained in the document entitled “Government Policy Guidelines for Small and Medium-sized Enterprises until 2002”, approved by the Council of Ministers in May 1999. The principal goal of government SME policies is creating the conditions for the full development of the potential of the SME sector and a secondary goal is increasing SME competitiveness and increasing exports and investments for this sector. Legal, financial, organisational, information and educational tools are used to achieve these goals. The implementation of policies is monitored, and reports are prepared annually and presented to both the Council of Ministers as well as to the Parliamentary Committee on SMEs.

Entrepreneurship

During the past two years, the government has been making efforts to simplify the business environment, in particular through limiting social and administrative burdens associated with employment, allowing greater freedom to the concerned parties to negotiate and agree mutual obligations; simplifying access to public procurement; introducing simplifications in customs, transit and border procedures for Polish foreign business trade; strengthening the pro-investment character of the tax system; simplifying tax reporting, implementation of legal provisions aimed at making leasing more readily available.

Activities aimed at simplifying regulations are being co-ordinated by the Ministry of Economy and are being undertaken by the Debureaucratisation of the Economy Group as well as within the framework of work undertaken in conjunction with regulatory reforms following Poland's OECD membership. The law on commercial activities came into force at the beginning of 2001 and involves the streamlining of business formalities, in particular by withdrawing some of the commercial permits previously in place and limiting the number of commercial licenses.

In 2001, the Polish Agency for Enterprise Development was established as the result of the transformation of the Polish Foundation for Small and Medium Enterprise Promotion and Development. The Agency provides consultancy and expert services to entrepreneurs and to central and self-government administration, facilitates access by entrepreneurs to knowledge, training, economic information, and to financing, information provision, and marketing services. Grants are offered to assist entrepreneurs cover the costs of: management training, certification of quality, environment, and work safety and health management systems, and for preparing SMEs for their presence in the capital market. The Agency plans to increase loan and guarantee funds that are managed by institutions involved in entrepreneurship development. Funding will also be devoted to providing (free-of-charge) business counselling and information services for SME owners and for business start-ups. These services will be provided by consultants working in special consultancy and advisory points in locations throughout Poland.

The Agency also provides grants towards co-financing initiatives that support entrepreneurship development, in particular those which target young people. Grants can be awarded to schools, teacher training centres, and educational entities as well as associations, foundations, entrepreneurs' organisations, universities, and other legal entities.

Financing

The government's SME policy envisages various actions to increase SME access to external sources of finance: bank loans and credits, credit guarantee funds, leasing, and venture capital funds. Recently, a lease agreement was included in the Civil Code and the Investment Funds Bill was amended, foreseeing the opening of specialised closed investment funds whose operations are similar to those of venture capital funds. Amendments to the Law on Guarantees and Sureties Granted by the State Treasury and certain legal entities include: expanding the scope of sureties given from the *Bank Gospodarstwa Krajowego* (BGK) Credit Guarantee Fund and the introduction of new instruments that will allow the BGK to financially support regional and local guarantee institutions.

In January 2001, changes to the Public Securities Trading Law came into effect, making it easier for enterprises to be listed on regulated and non-regulated securities markets. To improve entrepreneur familiarity with the capital market, a national information and education campaign aimed at SMEs and regional institutions was started in 2000.

Apart from bank loans, SMEs also avail themselves of support instruments such as leasing, guarantees, sureties and factoring. Another option available to these companies are venture capital funds, although these are geared more to firms with high growth potential. Loans are granted by banks and various institutions such as regional development agencies, micro-loan institutions, saving and loan coops, loan funds and others.

A government priority is the development of loan guarantees involving advisory services and co-financing of local and regional credit guarantee funds. At the end of 2000, 17 local and regional loan guarantee funds were operational with funding at their disposal totalling approximately EUR 9.6 million. A total of 1 879 guarantees granted to SMEs and to unemployed persons starting a business, amounting to almost EUR 24 million, were granted between 1994 and 2000.

Currently three mutual guarantee funds operate at the local level. The *Fundusz Mikro* (created in 1994) is directed mostly towards small companies and start ups that do not fulfil the requirements imposed by banks. About EUR 85 million have been disbursed to almost 24 000 customers and has involved a failure rate below 5%.

The government implements schemes for various types of loans and preferential credits, with the aim of reducing unemployment and encouraging restructuring in various economic sectors, *e.g.* development of entrepreneurship in rural areas or assistance to coal-miners leaving mines or ex-metalworkers starting up their own companies. SMEs that create employment for ex-employees of restructuring industrial sectors and farmers can avail of low interest loans.

Technology and innovation

In order to overcome barriers to innovation, the government has approved a number of actions cited in a range of official documents.²⁸ Policies associated with innovation within the scope of these documents include the following: strengthening co-operation within the domestic innovation system; creating and strengthening innovation potential and realisation; maximising innovation to support economic growth and generate a steady increase in employment; technical, technological and quality changes in industry; and taking advantage of international co-operation and the processes of economic globalisation.

One of the important goals of Poland's innovation policies is the development of national and regional systems of innovation, *i.e.* a system of institutions, capabilities and incentives that will increase competitiveness and living standards, transform the R&D system and transform the economy to a knowledge-based economy, and strengthen linkages within the institutional infrastructure. The competent institutions are: the Committee for Scientific Research, the Ministry of Economy and the Agency of Technology. In addition to universities, Polish Academy of Science and other research institutions, a number of innovation-related institutions exist, among them 23 technology transfer and information centres, 49 business incubators and technology centres and three technological parks (in Krakow, Poznan and Lublin; others are planned in Torun, Wroclaw and Warsaw). They are based on local initiatives.

At both the national and regional level, tools and instruments are used in support of technology transfer. The Agency of Technology was created with responsibility for implementing state policy programmes in the field of the adoption of new technology and techniques in the economy and promoting and supporting innovation. One of its undertakings is to commission a system on the sources of new technology and potential contractors for such technology, to contain full information on innovative production, modern technologies and projects, companies and institutions seeking technology or partners. The Agency provides financial assistance in the form of loans, guarantees or co-financing of loans associated with the realisation of innovative products. In 2000, preferential loans were granted to entrepreneurs, totalling EUR 2.1 million. Other activities of the Agency are: participation in specialised trade fairs, organising various seminars and training courses as well as the annual competition entitled "Polish Product of the Future" directed at new innovative technical solutions that are ready to be phased into production, preferably by SMEs. In the interests of increased efficiency, efforts are underway to merge the Agency of Technology with the Polish Agency for Enterprise Development.

Since Poland joined the EU's Fifth RTD Programme, an active promotional campaign aimed at entrepreneurs, in particular those from the SME sector, was undertaken to disseminate information on the programme and encourage participation in it.

The Ministry of Economy launched the Quality Promotion Programme, in which 455 companies, including SMEs, currently participate along with 200 laboratories. To date, 256 companies and 93 laboratories have obtained quality system certificates.

28. "Support Programme for the Development of Regional Institutions for Technology Transfer", "Directions of National Innovation Policy until 2002", "Increasing the Innovativeness of Economy in Poland until 2006" and "Government Policy Guidelines for SMEs until 2002".

Regional programmes

Considered to be of the highest importance for overall regional development are: continued growth and the development of modern institutional infrastructure such as innovation centres and centres for technology transfer, technological and industrial parks, clusters and in particular, institutions supporting the development of highly innovative small companies. The Law on Regional Self-Government (1998) transferred the responsibility of defining regional development goals, including those associated with supporting technical advancement and innovation, to the regional governments. The Ministry of Economy works with regional institutions to promote the role of innovation in economic growth, through an assistance programme to be implemented in 2001-2002 according to the Law on Guidelines for Support Regional Growth. Regional projects associated with innovation and the transfer of technology can also be supported within the framework of this programme.

Electronic commerce

The Polish government holds the view that Poland has a good tradition in the field of information technology, has significant intellectual potential, highly skilled people and a substantial number of companies, in particular small ones, that produce at world-class level. An Electronic Data Interchange Centre has been established in Poland (*Centrum EDI – Polska*), its main purpose being to implement and promote electronic commerce procedures, with particular emphasis on SMEs. The EDI Centre Committee consists of representatives from government institutions, the business sector (industry, trade, transport, banks), non-government organisations, chamber of commerce and others, whose goal it is to co-operate on the rationalisation of business procedures using e-commerce solutions. The Committee for Rationalising Business Procedures (POLPRO) has been created within the Polish Chamber of Commerce (KIG), with the purpose of promoting e-commerce, e-business as well as EDI. The Committee also runs related advisory and educational services. The Ministry of Economy has prepared a partial strategy for the document approved by the Council of Ministers entitled “The Plan of Development of an Information Society in the Years 2001-2006”. One of the tasks defined in this strategy states that in order to generate employment from the development of the IT market, closer co-operation between research institutions and entrepreneurs is needed for the creation of SMEs operating in IT and telecommunication niches.

Management

One of the tasks of the Agency for Enterprise Development is facilitating entrepreneur access to knowledge regarding the management of enterprises and this is accomplished through co-financing training costs for small enterprises. The entrepreneur is free to choose the course subject and the training institution offering the course. Training Refunding Centres where entrepreneurs can file for a refund of the incurred costs were set-up across the country. Another task of the Agency is co-financing the costs of Advisory and Counselling Centres which provide, free of charge, basic advice to SMEs, and to persons starting a business. The programme beneficiaries (SMEs and start-ups) can avail of (free of charge) advisory services associated with the administrative and legal aspects of running commercial activities, along with information services on available sources of external finance.

Export promotion

A government priority is increasing SME exports, and government measures include support for participation in foreign fairs and exhibitions. Work is underway on the creation of an Internet platform – Tele-Information System of Export Promotion (TIPSE), which will enable entrepreneurs to have direct and immediate access to current economic and business information. A database on the legal regulations of the European Union was created to facilitate dissemination of information among entrepreneurs.

Other programmes

A special package entitled “Enterprise First of All” is planned to support SMEs, Polish crafts, commerce and services, and will involve: changes in legislation to lead to more transparency and stability in the legal environment in which enterprises operate; actions to lower non-wage labour costs; and means to limit the free interpretation of the law; actions to improve the quality of governance at all levels of administration (promoting cooperation instead of confrontation); improving information flow; and an overall improvement in the functioning of the business environment. The package will also contain proposals for improving the reliability of commercial relations, removing obstacles within the economy, making commercial courts more effective; and eliminating unfair competition.

Alongside Enterprise First of All package, a multi-annual programme for SME development will be elaborated and will include measures to adapt the SME sector to European Union conditions.

Portugal

SMEs in the economy

Accounting for over 99.5% of Portuguese businesses, SMEs generate 74% of employment and 58% of turnover. Micro and small companies are predominate in the Portuguese business population, representing more than 96% of the total number of Portuguese enterprises.

Framework policies

The challenges identified by the Lisbon Council of Europe and subsequent initiatives undertaken at EU level constitute a constructive framework for the implementation of reforms aiming at the development of a competitive economy with a large degree of social cohesion. Economic reforms are needed to take full advantage of macroeconomic stability, associated with the euro area policies. The opportunity exists for accelerating structural convergence towards the best standards of the EU and for focusing on the modernisation of the Portuguese economy and society.

Improving business competitiveness is key to achieving these goals. The Portuguese Operational Programme for Economic Activities was designed with the purpose of advancing modernisation projects, and promoting selectivity and excellence along the path of the “new economy”.

Taxation policy will also play a key role and one of the principles of Portuguese taxation policy is fostering improvement in firm productivity and firm modernisation. Tax incentives are directed at key areas such as technological innovation, environment protection, R&D, and investments that have structural effects in the economy.

Administrative simplification and facilitation continues to be another main priority of the Portuguese government. To this end, the recent period has seen consolidation of and improvement in the efficiency of the Portuguese Network of Business Formalities Centres.

SME policies and programmes

Several programmes under the 2nd Community Support Framework (CSF) designed to provide support to enterprises and other entities terminated in 1999 and the 3rd CSF came into force during 2000 and is will remain in effect until 2006. Eighteen operational measures are included, including sectoral and regional programmes. Among the programmes that provide support to enterprises, and in particular to SMEs, is the Operational Programme for Economic Activities (POE), the general aim of which is to increase the internationalisation potential of the Portuguese economy through productivity gains and increased competitiveness. This programme covers a broad range of areas in manufacturing, energy, construction, tourism, trade and services sectors. A number of medium-term economic instruments and policy measures were introduced to help achieve these goals, and involve direct and indirect support to enterprises as well as the establishment of public partnerships and initiatives. Support under the POE can take the form of grants, interest-rate subsidies, venture capital and mutual guarantee mechanisms.

Among the multi-sector company incentive schemes, two are particularly noteworthy: the Small Business Initiatives Incentive Scheme (SIPIE) and the Business Modernisation Incentive Scheme (SIME). SIPIE provides support to small scale projects that have a given minimum eligible investment and which are aimed at setting up or developing micro or small enterprises (up to 50 workers). Support

is used to strengthen technical and technological capacity, modernisation of the enterprise structure, and ultimately the development of the region in which they operate. Support takes the form of grants which may not exceed EUR 100 000 per promoter during a period of three years. Greater support is allowed for poorer regions. SIME encourages companies to take an integrated approach to investment, and the scheme requires that a strategic analysis of the company be made so as to justify the need for the project. The development and increased competitiveness of the company, particularly in terms of internationalisation, innovation and technology, quality certification, safety and environmental management, energy efficiency and human resource qualification. Support is provided to projects involving a minimum eligible investment of EUR 150 000 or EUR 600 000, for SMEs and non-SMEs respectively, with lower support for intangible investments only. Support is greater in less developed regions.

Sectoral support is offered through a number of programmes, *e.g.* the Commercial Urbanism Projects Incentive Scheme (URBCOM), the Incentive Scheme for Tourist Products with a Strategic Dimension (SIVETUR), and the Support Measure for the Use of Energy Potential and Streamlining Consumption (MAPE). These programmes promote investment in the areas of entrepreneurship, Technology and innovation, co-operation, financing, management and vocational training.

URBCOM provides support to commercial urbanisation projects that aim to modernise corporate activities and improve surrounding public areas within restricted urban centre zones. Micro, small and medium-sized enterprises may apply for support for investment projects of up to EUR 150 000. Benefits per promoter may not exceed EUR 100 000 during any three-year period. SIVETUR supports tourism projects of a strategic nature that have a potential for growth, innovation and excellence, and that can contribute to the sustained development of tourism. Projects involving the recuperation or adaptation of listed properties can apply for support as can nature tourism projects promoted by SMEs, sustainable tourism projects and projects having the aim to set up entertainment for tourists. MAPE supports electricity production based on renewable energy sources, rational use of energy, and renovation of highway passenger transport fleets with a view to the use of natural gas, and conversion to natural gas. Support may be given to projects involving a minimum eligible investment of EUR 25 000, or EUR 15 000 when supported equipment uses solar power.

The institutes responsible for implementing policies that provide support to Portuguese companies are: the *Instituto de Apoio às Pequenas e Médias Empresas e ao Investimento* (IAPMEI, Institute for the Support to SME and to Investment), which targets companies in manufacturing, construction, trade and services; the *Instituto de Financiamento e Apoio ao Turismo* (IFT, Institute for Tourism Funding and Support), which directs its assistance at companies in the tourism sector; and *ICEP Portugal – Investimento, Comércio e Turismo* (the Portuguese Institute for Investment, Trade and Tourism), which aims to promote the internationalisation of Portuguese companies.

Entrepreneurship

The POE includes measures to foster the acceleration of renewing the business structure by: providing stimulus and support to young entrepreneurs in setting up companies, particularly those with a technological base; fostering the search for innovative ideas with a high success potential by providing qualified support; and promoting financial products and services directed at nascent small companies.

Technology and innovation

The SIME programme supports investments directed at the development of new advanced products, services systems and processes or aiming at their significant improvement, preferably through linkages between Portuguese companies and the National Scientific and Technological System (SCTN). Other specific assistance for technology and innovation exists within the scope of the POE.

The Technological Development Mobilising Projects Incentive Scheme assists companies and entities included in the SCTN that, as a consortium, to undertake investment projects dedicated to the

creation of a new product, process or system with a large degree of technological innovation. Support is in the form of a grant. The Incentive Scheme for Industrial Property Utilisation (SIUPI) is designed to stimulate invention, creativity and innovation by companies, entrepreneurs, inventors and independent designers and those institutions engaged in research work, using the Industrial Property System as a fundamental element in the strengthening of Portuguese competitiveness.

The aim of the SME Digital Initiative is to allow SMEs to become a part of and take part in the digital economy, simplifying access to information, providing technical assistance in the implementation of action plans and strategies, while increasing their technical and technological skills.

The strategic objective of the Portuguese Project of Intelligence and Innovation for the Development of the Automotive Industry (INAUTO) is to increase the competitiveness of the Portuguese automotive industry through support to the development of the technical skills and strategic capabilities of the companies. The intention is to establish synergies at organisational, technical, economic and financial level in order to generate competitive advantages that will respond to market needs.

In 1999, Portugal joined the *BenchmarkIndex*, a European study involving nine EU countries with the purpose of building up a European Benchmarking Network, terminating in 2001. The study promotes the use of benchmarking and good practices, stimulating the involvement of technological infrastructures, the consolidation of skill centres and the development of capabilities within SMEs. The SME Technological Innovation Support Programme, also based on the benchmarking tool, was implemented until the end of 2000. Based on the use of an internationally accredited methodology involving the evaluation and comparison of states of development – benchmarking between companies in various sectors, the aim was to create synergies between organisational structures and to generate innovative behaviour within the selected companies. The project will be continued through similar measures to be implemented within the scope of the POE.

In the field of co-operation, recent emphasis was on the close of the Voluntary Programme for Vitalisation of co-operation between Enterprises which terminated in late 2000. Its principal measures are being reintroduced via support instruments within the scope of the POE. The main goals of these new measures include fostering the Integrated Corporate co-operation System, increasing competitiveness in the marketplace, developing new forms of management and promoting the clusters.

Financing

As a complement to the existing regular financial incentives and support, alternative means of financing business activity are being developed, such as increasing venture capital funds and mutual guarantees. The principal aim of these is to improve SME access to financial markets, to foster financial innovation among SMEs and, in particular, to make available financial services conceived for start-ups and for small companies.

Management

The Incentive System for the Revitalisation and Modernisation of the Business Structure (SIRME) continues to be implemented, supporting the government objective to revitalise Portuguese companies in difficulty, by increasing the use of alternative instruments in preference to the usual financial support available. The programme aims to help Portuguese companies to face globalisation, assists with the restoration of their competitiveness, for those companies that have experienced serious deterioration in their financial situation, and promotes the development of a mergers and acquisitions market to bring about change in some less dynamic areas. To this end, SIRME acts as a financial partner in the acquisition or merger operation through a holding in the equity capital of the acquiring party. This includes the acquisition of equity capital (management buy-in and management buy-out). Loans or guarantees may be extended to those companies in which it has a stake.

Created by IAPMEI in 1992, the SME Excellence Award continues to distinguish each year those companies that stand out for their performance and management skills in manufacturing, trade, construction, services and tourism. In addition to the visibility that is granted to the companies, the

award procures a number of benefits in areas fundamental to the activities of SME, especially in preferential financial conditions.

Vocational training in firms is supported by the POE through in-house training courses for companies that submit integrated investment projects within the scope of this programme.

Other programmes

A number of other programmes are implemented within the scope of the 3rd CSF.

The Operational Health Programme known as *Saúde XXI* includes a support measure called Creation and Adaptation of Health Care Provider Units. Its beneficiaries can include, among others, companies and co-operatives providing health care services, and which have up to 50 workers. Support takes the form of grants. Eligible projects should complement the Portuguese Health Service in specific areas of care and in geographic regions lacking in health care services.

Another programme within the Operational Agricultural and Rural Development Programme involves support for the transformation and commercialisation of agricultural products. Owing to the increasing importance of the agro-food industries in the agricultural field, this measure has been designed to increase the competitiveness of the sector, by fostering product quality, innovation and differentiation, and addressing the negative effects of the activity on the environment.

Portuguese SMEs can also benefit from technical and financial support for hiring staff, through the Job Creation Incentive Programme, and higher rates of support are given to small firms (fewer than 50 workers).

Slovak Republic

SMEs in the economy

In December 2001, there were 62 867 registered enterprises and 279 597 sole traders in the Slovak Republic. Enterprise numbers grew by 4.4% between 1999 and 2000 and by 3.2% between 2000 and 2001.

Framework policies

The business environment stabilised in 2000-2001, influenced by a number of measures taken by the government and the National Council of the Slovak Republic. The stabilisation of SME development conditions was reflected in improvements in SME financing although significant problems remain in this area, with banks still quite unwilling to extend credit to SMEs except after complex negotiations. One positive development in the business environment was the enacting of new tax legislation which reduced the corporate tax rate from 40% to 25% and also reduced personal income taxes. The Small Trade Act is being amended, and heretofore defines separately the small trade entrepreneur and the sole trader. The amended act will reduce the state's influence in the business sector. Communication has improved between the government and Parliament on one hand, and professional organisations of entrepreneurs on the other. Recent government measures include: a gradual elimination of the import surcharge; the abolition of mandatory levies paid to the Foreign Trade Support Fund; and the amendment of the Insurance Act, resulting in improved access to insurance for small businesses. Among recent successes, the Slovak Republic joined the OECD, and the launch of certain public works resulted in a temporary reduction in unemployment.

Apart from these changes, which had a marked positive impact on the business environment, a number of important changes in the legal environment having implications for business development were introduced during the last two years. Several important acts were harmonised with EU law (*e.g.* the Business Act and the Labour Act). These changes have so far not been reflected in any pronounced improvements to the business environment, but they have managed, in a once-off manner, to resolve some significant problems. A majority of the legal amendments introduced in 2000 and 2001 lacked a systemic approach to the removal of the remaining barriers to business development. The need for more radical legislative change remains, and will require input by the business community and relevant institutions.

The Slovak Republic's legal framework may be considered to incur negative impacts on SME development and competitiveness. According to various analyses, legislative barriers to SME development persist and impose a significant financial burden on entrepreneurs, which according to a survey of entrepreneurs in 2000, was continuing to grow. A total of 156 legal standards concerning SMEs were adopted in 2000, and another 153 in 2001. Generally, regulatory measures are implemented without any prior analysis of their impact on SMEs. One particular problem concerns levies that are calculated on the previous year's tax base, and which put SMEs at a serious disadvantage.

A number of other factors increase the financial burden in an indirect manner: capital expenditures may not be deducted from the taxable income base, inflation and price increases are not taken into account with respect to tangible and intangible fixed assets, and the depreciation regime does not take account of the need to upgrade investments and technologies.

Tax reform is currently in preparation, as the current tax system is considered to be too complex, costly to implement, and responsible for a heavy administrative burden on taxpayers. SMEs also consider laws to be insufficiently enforced, affording inappropriate protection to debtors and supportive of dishonest business practices. In particular, the implementation of the act on bankruptcy and settlement remains incomplete. Legislation governing employment support also needs to be amended in order to promote business development. Funds tend to be increasingly spent on the consequences of unemployment, *i.e.* on a passive labour market policy. Downsizing of state bureaucracy is also timely.

SME policies and programmes

The Slovak Ministry of the Economy is in charge of, and co-ordinates, numerous SME-related activities. Following the adoption of the Act on State Aid which came into force on 1 January 2000, the government launched 17 state aid programmes for SMEs. The government's programme declaration sets out the SME support objectives for 2000-2002: SME development is accompanied by programmes supporting SMEs in various ways, including in tourism, export promotion, improvement of product quality, etc. Through co-operation with international institutions, the Ministry of Economy participates in projects and programmes that support the private sector, transfer of technologies, the energy sector, trade co-operation etc.

The Ministry of the Economy has been building up the institutional environment to support SMEs, guiding the activities of the National Agency for Development of Small and Medium Enterprises (NADSME) as well as developing the regional counselling and information centres (RAIC) and business and innovation centres (BIC). The Ministry of Economy established the Slovak Agency for Development of Investments and Trade, which includes among its functions a one-stop shop providing investors with comprehensive services from consultancy to finalisation of business projects.

Important recent legislation and regulatory measures include: The act to support the establishment of industrial parks, adopted in 2000; draft measures to eliminate barriers to investment, geared to making the process of establishing and registering enterprises more efficient; speeding up the issuance of small trade licenses, visas and working permits to foreign nationals; adjustment of the inefficient institute of retention rights; improvement of the protection of minority shareholders; making the taxation system more efficient, the cadastre offices and arbitration courts.

State aid programmes launched for 2000-2005 are approved by the government and implemented by the NADSME and by the Slovak Guarantee and Development Bank, with the Slovak Agency for Promotion of Investments and Trade as professional guarantor of some programmes. The Minister of the Economy regularly submits progress reports on programme implementation to the government, and assessments are made of the benefits of state aid to the particular economic sector.

Financing

The Slovak Guarantee and Development Bank (SZRB), a state financial institution, implements seven guarantee and seven grant programmes to support business entities, in co-operation with the Ministries of the Economy, Agriculture, Transport, Posts and Telecommunications, and Environment. Working together with commercial banks, SZRB provides loan products under two loan-based programmes.

As concerns guarantee programmes, the new SZRB guarantee mechanism, applicable since 2000, allows for bank guarantees to be granted to cover up to 65% of eligible costs of tangible fixed assets, and up to 40% of costs of intangible fixed assets provided that state aid has been provided to SMEs operating in a specified district. The maximum loan amount is SKK 100 million. The maximum guarantee amount is SKK 65 million over a period of ten years.

The SZRB uses grants in the framework of government-launched development programmes, helping to reduce the interest rate burden on businesses in areas considered to be crucial with respect to economic stability.

The loans-based *Podpora* (Support) programme is implemented in co-operation with the Ministry of Finance, offering entrepreneurs loans up to a maximum of SKK 7 million over a duration of seven years with an annual interest rate of 10.5% and a one-year grace period.

The loans-based *Rozvoj* (Development) programme supports SME development and is funded by *Kreditanstalt für Wiederaufbau*. The programme provides investment and operational loans up to a maximum of SKK 58 million with a 13.5% interest rate and a one-year grace period.

The Direct loans-based programme for small enterprises, implemented since December 2000, provides investment and operational loans up to a maximum of SKK 3 million.

NADSME and the individual RAICs and BICs, in co-operation with commercial banks, administer the Support Loan Programme, which offers loans up to a maximum of SKK 5 million, intended for SMEs in manufacturing, crafts, services or tourism. The interest rate is 10.8%. A total of 1 114 loans amounting to SKK 3.6 billion have been granted since the programme was launched in 1994. As of 31 December 2001, a total of 508 loans had been paid off. The number of jobs newly created or maintained within the SME sector during the implementation of the Support Loan Programme was 38 183.

The Micro-Loans Scheme Programme, administered by NADSME and selected RAICs, is intended for small enterprises employing up to ten persons and has the objective to improve their access to finance in regions by providing loans. Loans intended for capital investment projects can range between SKK 50 000 and SKK 500 000, have a three-year repayment period and an interest rate of 11%. An interest rate of 17% is applied for projects other than capital investment projects. NADSME has been implementing the scheme since 1997 via the regional advisory and information centres and micro-loans are currently granted by seven centres covering the whole country. Funding for the scheme is provided by the European Union under the PHARE Programme. In 1997, the first year this financial scheme was implemented, all allocated funding was spent. New loans granted during the second half of 1998 were already based on repaid amounts, suggesting the viability of the programme.

The Micro-Loans scheme is greatly appreciated by entrepreneurs as it generally constitutes the only possible source of financing support coming from public funds intended for small enterprises.

The Seed Capital Company makes equity infusions into SMEs and promotes start-ups as well as the development of existing enterprises. Preference is given to projects in manufacturing industry, production services and tourism.

The Subcontracting Exchange of Slovakia (SES) programme provides foreign companies with information and services when they seek partners for manufacturing and commercial co-operation, as well as supporting presentation of price bids, organisation of visits of foreign purchasers to potential Slovak suppliers, selection of appropriate sites for construction of operations and establishment of joint ventures or new companies in Slovakia.

Tax concessions exemptions and/or special forms of taxation, include, mainly: concessions and exemptions from income tax, special forms of taxation, and tax exemptions.

Entrepreneurship

Regional centres organise workshops for individuals interested in starting a business. The workshops and training sessions are mainly concerned with preparing a variety of social groups (the unemployed, young people, graduates, women, etc.) for business operations. Included among the topics are the basics of computer technologies, drafting business plans, etc. The workshops enjoy a considerable success rate – approximately 40% – and about the same numbers of workshop attendees find employment as those who start up in business.

Technology and innovation

Technology Transfer is a new programme to help SMEs face the harsh competition from foreign companies. The programme aims to do the following:

- Create an information system about new technology developers, providers and consumers.

- Provide grants to companies willing to implement new technologies complying with environmental protection standards and providing a high added value.

Beneficiaries of state support are economically independent SMEs. Support takes the form of grants for transferring new technologies. Grants cover 50% of expenditure or SKK 1 million, whichever is less.

By the end of 2001, a total of EUR 30.4 million had been spent through the implementation of PHARE assistance programmes for SMEs. Funded by Phare was Professional and technical support for special-interest and SME organisations, principally through NADSME efforts in collaboration with institutions that associate business people and/or small trade licensees. These efforts helped set infrastructure and technical equipment for SME associations. In 2000, such projects were implemented together with the Slovak Chamber of Small Trade Licensees, and with the Guild of Toy Manufacturers.

The Spin-off Programme involves splitting off SMEs from large state and privatised, and generally industrial enterprises. In this way, the spun-off entities become independent legal entities, and thus have the opportunity to do business outside of direct commercial collaboration with the parent company.

Management programmes

Counselling and information services are covered by two state programmes carried out by NADSME: the SME Counselling Programme and the Training, Workshop and Counselling Programme for selected groups of individuals interested in starting a business. The counselling programme aims, above all, to increase the share of viable SMEs, and to make a contribution toward maintaining and creating employment.

NADSME also conducts another state programme focused on providing SMEs with the possibility to gain new theoretical knowledge and practical experience in the most important fields of the market economy: The Training and Education Programme for Entrepreneurs. The programme consists of a grant for workshops and training sessions amounting up to 50% of the expenditures actually spent on training, which NADSME refunds to the educational institutions. The workshop topics include: computer technologies in business, development and support for business activities, drafting of business plans, accounting, quality management systems, etc.

"Quality" is a state programme focused on quality management systems implementation. NADSME conducts this programme to help SMEs face the harsh competition from foreign companies. The programme aims to provide support for the implementation of quality management systems in accordance with the international standards ISO 9000, VDA, BS, QS, and ISO 14000 in the SME sector; and to ensure quality improvement of products and services, as well as raising the numbers of SMEs certified according to these international standards. Programme beneficiaries are economically independent SMEs. Support takes the form of a grant for training and counselling services provided to owners and employees of SMEs, amounting to 50% of actual expenditures or SKK 100 000, whichever is less, as well as for the process of certification, either 50% of actual expenditures or SKK 120 000, whichever is less.

Export promotion

The Ministry of the Economy provides support to help SMEs gain access to foreign markets, and in particular, to create conditions for the establishment of joint ventures and co-operation. Mixed commissions for co-operation in trade, economy, science and technology are also active in this area. Export promotion is also undertaken by the commercial sections at Diplomatic Missions abroad (OBEO). Since 1994, the Ministry of Economy has run annual competitions for the "Best Exporter of the Slovak Republic" in the SME category.

Regional programmes

At the regional level, programmes are implemented via an institutional support network comprising 12 regional counselling and information centres (RAICs) and four business and innovation centres (BICs)

located throughout the territory of the Slovak Republic. The principal objective of the activities of RAICs/BICs is to help set up an SME network in the individual regions, in particular through the provision of counselling, information and educational services. Moreover, BICs also provide assistance for incubator companies, in the form of counselling and training services, review of business plans, mediation between domestic and international business contacts, lease of space and assistance for using information technologies. RAICs/BICs also participate in other activities and projects. For example, they co-operate with various associations, self-governments, regional and/or district labour offices, financial institutions, and have also been involved in cross-border co-operation projects.

Spain

SMEs in the economy

SMEs in Spain represent 99.8% of all enterprises, while micro-enterprises (sole entrepreneurs and enterprises with fewer than ten employees) represent 94% of the total. SMEs account for about 80% of total employment, 62% of total sales and around 50% of exports. Compared with other European SMEs, Spanish SMEs are smaller in size and their participation rates in sales and foreign trade are lower, indicating a weaker competitive position and limited presence on foreign markets. Spanish SMEs employ a larger share of the workforce than their European counterparts.

Framework policies

Since 1996, the Spanish government has pursued a broad programme of liberalisation and structural reform, aimed at reducing basic imbalances, eliminating rigidities in the markets for goods and services, and creating a framework of stability and dialogue between the economic and social partners. In the context of these economy-wide policies, high priority has been given to the creation of a favourable framework, both in institutional and regulatory terms, for SME development in view of their importance to the Spanish economy and their contribution to wealth generation and employment. The new institutional framework is designed to respond to the need for policies, and in particular SME policies, based on horizontality, complementarity and dialogue criteria.

Against this backdrop, in June 2000 the government passed an ambitious package of measures to enhance competition in the goods and services markets, and to improve the mechanisms controlling restrictive practices. In addition, the government approved fiscal changes aimed at favouring SMEs, promoting efforts towards internationalisation, the incorporation of new technologies by Spanish enterprises, as well as the generation of long term savings. Through these measures, the government demonstrated its firm support for SMEs and for innovation and internationalisation initiatives as the means for improving business competitiveness and guaranteeing survival in a rapidly changing environment.

SME policies and programmes

Spain's SME policies and programmes are designed to address the difficulties confronting SMEs with regard to the business environment and competitiveness. These difficulties can be internal, external or finance-related: i) internal difficulties include entrepreneurial strategies, management systems, human resource qualifications, processes and products, location and the market segments in which they are positioned; ii) external difficulties include regulation, labour legislation, taxation matters, production support infrastructures, etc. In response, the Spanish government has implemented a variety of policy programmes and measures.

The institutional framework of SME policies works in response to a number of key principles: horizontality to facilitate access by all SMEs and favour greater interdepartmental co-ordination in the application of this system; dialogue and co-ordination with the most representative SME entrepreneurial organisations at the sectoral, regional and national levels; simplification of support instruments and administrative procedures to increase efficiency and simplify regulations and tax compliance procedures; management decentralisation through the signature of collaborative agreements with regional authorities

and encouragement of participation of intermediary agencies or SME service centres as the executive agents for public programmes; complementarity and subsidiarity in the design of SME support policies.

Among the political and administrative organisations supporting SMEs is the Directorate General of SME Policy (DGSME) within the State Secretariat for Economy, Energy and SMEs of the Ministry of Economy. Horizontal and integrated SME support policies are defined through this new organisation. The SME Observatory was created in 1997 to institutionalise advisory mechanisms and collaborative relations among the national and regional governments and experts of wide renown.

The resources assigned to SME support policies have been significantly strengthened. Credit instruments with an emphasis on reinforcing and applying medium-term and long-term credit are preferred to grants and equity capital infusions. Resources dedicated to the promotion of innovation and technological development have been significantly increased through various programme instruments designed to finance such projects. A new labour framework, based on dialogue with the social partners has improved the operation of the labour market, fostered job creation and promoted business initiative. Social benefits have been introduced to promote the employment of groups with special difficulties, new contractual formulas have been regulated and greater labour flexibility has been introduced. Businesses have seen their social costs reduced and, consequently, the unemployment rate has declined by ten points between 1996 and 2001.

Entrepreneurship

Important advances have taken place in promoting the entrepreneurial spirit in the Spanish educational system. This has been done especially through the introduction of the notion of enterprise and the promotion of entrepreneurial attitudes in compulsory secondary education, in the technological subjects studied during the final years of secondary education, and in the vocational training curriculum. A change of approach is also taking place in primary education (from objectives to skills), where it is intended that pupils be the protagonists of their learning. In the future there are plans to introduce business simulation programmes, both for young students and for the continuing education of adults. In some schools in the Basque Country and the Community of Madrid these kinds of initiatives already exist.

The Law on the General Organisation of the Educational System (LOGSE) significantly increased the offer available during middle and higher education as well as the number of schools, both private and state-run, of curricula related to business management and the promotion of the entrepreneurial spirit. Initiatives are underway to increase the number of both young and adult students taking this kind of training, to promote the entrepreneurial training of teachers and trainers, and to develop projects aimed at the creation of companies in the specific vocational training programmes.

LOGSE also established the requirement of completing a Professional Module of Training in the Workplace. The purpose of this module is to supplement the qualifications acquired at educational centres with knowledge of actual production processes, forming part of a business organisation, and the evaluation of the professional competence of young students in actual work situations, through participation in a company.

At the university level, the University Enterprise Foundation has implemented a number of initiatives intended to foster entrepreneurial interest, train future business leaders and improve business knowledge in the university world.

Following through with its commitment to the modernisation of public administration as a basic structural reform in order to improve the framework of entrepreneurial action, the government has adopted a number of measures aimed at reducing the burdens and costs associated with the development of business activities. These projects are still too recent for their effectiveness to be assessed, but they are based on increasing the awareness of the administrations involved and improving co-ordination between them.

The One-Stop Shop for Enterprises (VUE) is the first major attempt at rationalisation in this area. It is a joint initiative of the various public administrations and the chambers of commerce, the purpose of which is to support entrepreneurs in their efforts to undertake new business activities. This is to be

done through the creation, at the chambers of commerce, of one-stop integrated areas for the processing of administrative formalities and for consulting services.

The project is still underway and the aim is that each of the autonomous communities would have this service available. VUE operation takes place in three stages:

- Information and direction: the VUE officer directs entrepreneurs to the appropriate assistance area and provides information on request, about starting a business – this is the first filter of VUE visits.
- Consulting services: advisors inform entrepreneurs on the appropriate legal regimes, private financing sources and public assistance and subsidies. If the entrepreneur wishes to execute a project through the One-Stop Shop for Enterprises, an administrative file is opened, recording the project details.
- Processing: an officer co-ordinates the necessary administrative formalities, in close collaboration with personnel in the Tax Administration, Social Security, Regional Administration and Local Administration who are also present at the One-Stop Shop for Enterprises.

Since June 1999 – when the first VUE was inaugurated – the One-Stop Shop for Enterprises has facilitated the creation of over 4 300 enterprises (including companies fully set up, and those in the process of being set up) and it has to date attended to over 21 000 individuals interested in starting up a new business activity.

While acknowledging the importance of the referential role played by One-Stop Shops for Enterprises, a further step must be taken to truly simplify the setting up of an enterprise and to speed up the process via the use of new information and communication technologies (ICT). This is taking place through the Directorate General of SME Policy's New Enterprise Project, which will respond rationally, effectively, quickly and simply to Spain's current demand for the establishment of new enterprises. The New Enterprise (NE) is a project whose aim is to encourage the creation of enterprises, especially those of a smaller size, given their substantial weight in the Spanish economy.

For this purpose, the project provides for several stages of action: firstly, work is underway to create a legal status specially suited for small enterprises, in order to speed up the processing and requirements inherent to company life, adapting them to the special characteristics of small enterprises and their organisation methods. This will, due to the use of ICT, allow the new enterprise to be set up in much less time than currently required, the idea being to place the entrepreneurs in a very simple corporate legal regime which will enable them to grow as entrepreneurs within the framework of Company Law, providing a legal framework which assures entrepreneurs of the separation of personal assets from business assets. The project is also undertaking a process of administrative simplification and unified processing which may be performed telematically. To this end, an electronic document is being developed, which will be applicable to enterprises with a certain corporate regime. Also, a simplified accounting system is being defined, one which will take into account the characteristics of these small enterprises.

The information systems currently existing at the Directorate General of SME Policy will be strengthened, through an SME portal providing an information service via the Internet to enterprises. Furthermore, a financial and fiscal framework is being studied which would allow these enterprises to overcome the difficulties inherent in the early, crucial stages of their activity.

Financing

In light of the difficulties faced by SMEs in finding financing suited to their needs in terms of cost and time, the government's policy has been geared, first of all, to easing access to existing sources of financing (by reducing costs, extending terms and providing guarantees) and secondly, to promoting new financing facilities and instruments.

The ICO-PYME (Official Credit Institute-SME) facility is meant to provide financing, under preferential conditions, for investment projects undertaken by SMEs in Spain. This facility provides for repayment terms of five and seven years, with grace periods of one and two years, respectively, and

does not allow the charging of commissions. The cost for the SME is the six-month EURIBOR +0.50% (if a floating rate is chosen) or the ICO benchmark +0.50% (a fixed rate for the duration of the loan). Loans are granted through banks and savings banks and they are available to SMEs for investment in fixed assets, whether tangible or intangible, with a financing ceiling of 70% of the net investment project. This facility has made EUR 3 billion available to SMEs, of which EUR 2.1 billion correspond to ICO funds and EUR 901.5 million is from asset securitisation.

As part of the search for new financing instruments for SMEs, ENISA (*Empresa Nacional de Innovación*, S.A.), a shell company of the Directorate General of SME Policy, has been developing participatory loans since 1997. A participatory loan is a financing instrument that is halfway between venture capital and a traditional loan. The financing instrument can be characterised as follows: it is a subordinate loan, that is, it comes after ordinary creditors in terms of priority; it is a long-term loan with a long grace period; the interest rate is indexed to business profitability (financial returns), with an upper and a lower limit; no additional guarantees are required other than those provided by the business project itself and the preparation and experience of the management group promoting the enterprise.

The Spanish guarantee system comprises Mutual Guarantee Companies (SGRs), which are financial entities with a mutualist structure whose corporate object is to provide guarantees to lending entities for the loans requested by SMEs, and also comprises the public refinancing company, CERSA (*Compañía Española de Refianzamiento*, S.A.) which shares the risk in the loans that are granted. CERSA is a company with a majority of state capital, under the aegis of the Directorate General of SME Policy, and collaborates with SMEs to solve financial difficulties they experience for financing innovation projects. Special attention is paid to small enterprises and to recently created businesses. Refinancing is granted to SGRs by means of an agreement establishing different percentage coverage according to the characteristics of the SME and of the assets financed by means of the guarantee operations.

In 2001, special attention was given to micro-loans, such as loans backed without requiring supplementary counter-guarantees. These loans are granted to very small enterprises. The coverage provided for this type of guarantee amounts to 75%.

The operation of SME loan securitisation is based on credit entities assigning loans on their balance sheet to a securitisation fund (FTP) and then using the liquidity obtained to grant new loans to other SMEs. The fund issues bonds that provide the income needed to pay banks and savings banks for the assets they assign. In this way, the financial entities obtain increased liquidity with no need for further indebtedness, and they also generate liquidity with which to grant new loans with no need for increasing the assets on their balance sheet. This financing scheme has the advantage for SMEs of allowing them to access financing in capital markets, especially in the context of the euro area, where liquidity and depth of capital markets are major features.

The tax situation of SMEs has improved substantially since 1996, particularly for smaller enterprises, due to a number of measures: incentives for job creation and investment, simplification and co-ordination of the tax systems, reduction of corporate tax on small enterprises, the possibility of transmitting family enterprises with virtually no fiscal cost, and the promotion of innovation and development activities relating to the environment and internationalisation. These measures have resulted in a fiscal framework that is considered adequate by the Spanish authorities for the special characteristics of SMEs.

Technology and innovation

The Fostering of Technical Research Programme (PROFIT) 2000-2003 is the main instrument for the management of policies of the Ministry of Science and Technology within the framework of the National Plan for Scientific Research and Technological Development and Innovation. PROFIT is intended to promote the technological absorption capacity of enterprises, the strengthening of rapid growth sectors and markets, and the creation and development of technology-based enterprises.

The programme is structured upon national programmes catering to the scientific and technological areas which are to be strengthened: biotechnology, biomedicine, ICT, new materials, etc., and also to priority business sectors, whether industrial or service oriented (aeronautics, the automobile industry,

the information society, space, etc.). During 2000, the first year that the programme was underway, 2 218 entities presented 3 771 projects, and 47% of the applicants were selected. 41% of the projects were awarded PROFIT aid in 2000, representing investments totalling EUR 1.5 billion, reflecting the considerable interest generated and the results of the invitation to submit projects.

Within the framework of this programme, the government has created a financial support facility for technology-based SME projects. This facility is articulated by means of two instruments:

- venture capital for the capitalisation of technology-based enterprises, the purpose of which is to finance shareholdings by venture capital entities in the share capital of enterprises having a high technology content. For this purpose, the Ministry of Science and Technology will grant these entities seven-year loans (at zero interest) so that they can participate in the share capital of enterprises that are starting business or in capital increases of existing enterprises in operation for less than two years; and
- participatory loans for the capitalisation of technology-based enterprises, granted by ENISA.

In order to develop this mechanism in 2001, the Ministry of Economy, through ENISA, and the Ministry of Science and Technology, signed an agreement establishing conditions of the ENISA loans: access is restricted to SMEs that are technology-based, while the terms and conditions of the loans stipulate that they are subordinate, long term, have floating interest rates depending on the results of the investment and do not require any additional guarantees.

NEOTEC (New Technology Enterprises) Initiative: this initiative is managed by the Centre for the Development of Industrial Technology (CDTI) with the aim of creating 200 new technology-based enterprises in the 2000-2003 period. To do so, it uses venture capital funds from companies specialised in investing in technology-based enterprises in early stages; cash prizes are given to the best innovation projects and loans are granted by the CDTI for technology development projects. These loans are granted by the CDTI for business projects involving technology research and development. The submitted applications are evaluated, from a technical and financial standpoint, and those projects that display sufficient levels of quality are supported. CDTI in 2000 supported 370 technology development and innovation projects, through co-financing loans at very low interest rates, amounting to EUR 89.2 million. The total budget for these projects amounts to EUR 439.6 million.

The Official Credit Institute (ICO) has set up, in collaboration with the CDTI, a facility to provide financing for the development of investment projects involving technological innovation, and R&D. The loans are granted through banks and savings banks, and the CDTI pays a subsidy of EUR 222.37 for every EUR 6 010.12 of financing granted, applicable to early repayment of capital. These loans are available to any enterprise for investment in fixed assets, whether tangible or intangible, up to 70% of the net investment project costs, with a ceiling of EUR 1.5 million per beneficiary per year, in one or several operations.

The Plan for the Consolidation and Competitiveness of SMEs (PCCP) 2000-2006 is implemented by the Directorate General of SME Policy. The objectives of the plan, supported by funds totalling EUR 300.5 million for 2000-2006, are as follows:

- To foster the development and increased competitiveness of SMEs.
- To engage in fewer general actions, opting instead for a more direct business involvement in the preparation and carrying out of projects.
- To ensure that the projects submitted to the plan provide well-identified goods or services to SMEs.

The measures in the plan involve two major lines of action: the information society and innovation in business techniques. As regards the latter, the plan provides for four support programmes: design, quality systems, inter-enterprise co-operation networks, and process innovation, focusing mainly on the management and organisation of SMEs.

The *Empresa para el Desarrollo del diseño y la Innovación* (DDI, Agency for Development of Design and Innovation) works in collaboration with the Directorate General of SME Policy, offering support to SMEs

in fostering change and innovation, including technical assistance, information and the financing and marketing of innovation and product and service design projects.

Electronic commerce

The Info XXI Action Plan, presented in 1999, includes, among its aims, to boost ICT, and strengthen electronic administration and widespread access to the information society. Notable are the objectives related to the training of ICT professionals, digital literacy, training in telecommunications, and the access of SMEs and self-employed workers to ICT. The budget resources available for the plan for 2001-2003 amount to EUR 4.9 billion, with investments totalling EUR 1.7 billion. Of these funds, EUR 1.3 billion correspond to specific actions that will be carried out by the Ministry of Science and Technology.

The specific measures for enterprises are as follows:

- Establishment of an appropriate regulatory framework to guarantee security in the use of the Internet and electronic commerce.
- Technological innovation programmes to promote electronic commerce and the use of new technologies by companies.
- Programmes directed especially towards SMEs and sole entrepreneurs, for the development of the new economy and electronic commerce (co-financed using ERDF funds).
- Programmes for disseminating new technologies and for training users and professionals in the use of information technologies.

In terms of the security and legal coverage of the transactions carried out using telematic means, the Royal Decree Law 14/99 on the Electronic Signature is noteworthy. The Information Society and Electronic Commerce Services Act was submitted to Parliament in 2001.

Lastly, there is the CERES Project of the Ministry of Economy (National Mint), the purpose of which is to provide the technical and administrative services necessary to guarantee the protection, validity and effectiveness of communications concerning general government administration and public agencies, by means of electronic, computerised and telematic techniques and media.

The administration is working to ensure that many of the administrative formalities that enterprises must carry out may be performed electronically. For example:

- Telematic query of the data held by the Companies Registry regarding the company names of enterprises.
- Accessing Social Security services, and making Social Security contributions.
- Application for a company name via an online communication system.
- Possibility of transmitting tax returns forms electronically, with a section especially designed for SMEs.
- A trademarks act is being prepared which will mean easier processing and lower costs.

Management

The SME Centre Information Area, managed by the DGSME, acts as an information and advice centre for entrepreneurs, providing quality information on strategic business areas, administrative procedures and helpdesks. Problems arising in the daily management of SMEs are explored and solved through the most appropriate information channels. An array of IT and custom-made mechanisms are available to facilitate problem solving. The centre is designed to act as a communication channel between government and business, providing up-to-date information on assistance measure to facilitate start-up of new business initiatives. Since its implementation in 1997, expectations for the centre have been largely surpassed. More than half of all enquiries processed concerned the availability of various public assistance measures, followed by enquiries relating to starting a business.

The DGSME's SME portal (www.ipyme.org) holds a wide variety of topics relating to SMEs. In 2001, special attention was given to the euro, to assist SMEs in the transition to the new currency. The SME portal also allows entrepreneurs to consult and download many publications on topics of interest to them.

Export promotion

The internationalisation of Spanish SMEs is an important policy priority. The External Promotion Initiation Plan (PIPE 2000) enables a growing number of Spanish SMEs to engage in international trade and/or take part in the internationalisation process based on a rigorous analysis of their export capacity and potential. By the end of 2001, almost 2 500 SMEs, including, *inter alia*, manufacturers of industrial products, consumer goods, agricultural and food products and services, had benefited from the plan, which should meet its target of 5 000 SMEs by the end of 2006.

Since mid-1996, the creation and marketing, by the Spanish Export Credit Company (CESCE), of the 100 Policy for Small and Medium-Sized Enterprises, an export credit insurance policy specifically designed for SMEs, enabled a total of EUR 200 million in insurance to be provided by the end of 2001. The 100 Policy includes: low-cost global coverage of exports throughout the world; solvency examination of all customers with exemption from paying the costs of the study for the first ten classifications; advice on appropriate instruments for operating in different countries; simplification of administrative tasks. The risks covered are: commercial risks – covering both *de facto* insolvency (prolonged payment arrears) and *de jure* insolvency (bankruptcy or receivership) of national or foreign private debtors and their guarantors; political risks – risks involving failure to transfer exchange currency, lack of payment by government purchasers, catastrophic or extraordinary risks, war, revolution or similar events in the diverse countries covered by the policy. All SMEs with exports not exceeding EUR 1.2 million and which maintain a regular flow of sales to different markets may apply to the scheme.

The Self-Diagnosis for SMEs: Access to New Markets programme, which can be found on the Directorate General of SME Policy's Web site (www.ipyme.org), was implemented in December 2001 to make available to SMEs an instrument for examining their internationalisation potential. It is a fast and simple interactive tool that allows entrepreneurs, after completing a short questionnaire, to find out whether their business structure, management and even their attitudes correspond to those identified among enterprises that already have an international scope. Following assessment of the entrepreneurs' responses, the system offers a number of action recommendations to assist them in their forays abroad.

The Web site also offers, as an information resource, a selection of useful Web sites for internationalisation purposes, grouped by topics and following criteria of timeliness, relevance and effectiveness. Last of all, entrepreneurs may access four online training tools which allow them to analyse their strengths and weaknesses, select their target market, prepare a marketing plan and control the budgeting of their internationalisation process.

Regional programmes

Among the regional development programmes which have been implemented are the programmes of the autonomous communities. An important part of SME policy in Spain, which complements policies of the central government, originates at the level of the regional governments of the 17 autonomous communities. Two basic tendencies can be seen in autonomous community actions regarding SME policy: complementarity and additionality.

SME policies have a considerable input into regional development policies. National and autonomous community policies and programmes to support SMEs contribute significantly to the development of the Spanish regions by strengthening their business environment and reducing imbalances among zones with differing degrees of development. Less-developed autonomous communities have concentrated on managing national programmes, while the relatively more highly developed communities have implemented a wider range of SME support policies and programmes covering practically all productive sectors. The majority of the autonomous communities have chosen subsidies as their main support instrument, followed by loan mechanisms and other finance possibilities.

Sweden

SMEs in the economy

Entrepreneurship, the creation of new enterprises and expanding businesses are important for increasing economic growth and employment. The SME sector is a vital part of the business sector in Sweden in this respect. A slight increase in the enterprise total population has been observed during the 1990s and this increase has taken place exclusively in the SME sector. The number of large enterprises decreased somewhat during the first few years of the 1990s, recovering slightly after 1995.

More than 99% of all enterprises in Sweden are classified as SMEs, *i.e.* they have fewer than 250 employees. The majority of enterprises (94%) have up to nine employees while about 5% have between ten and 49 employees. Only 0.5% of firms have more than 100 employees and approximately 0.1% have more than 500 employees. Two-thirds of enterprises have no employees at all. In total, three out of five employees in the private sector were employed in SMEs in 2000, and about 35% were employed in firms with more than 500 employees. Approximately 50% of employment was located in firms having fewer than 50 employees. Within manufacturing, approximately 23% of employment was found in firms with fewer than 50 employees while those with fewer than 250 employees accounted for approximately 45% of the total. The importance of the SME sector is also reflected in their contribution to the economy. In terms of turnover, the SME sector accounts for approximately three-fifths of total turnover, while firms with under 50 employees generated over one-third of turnover. SMEs generated approximately 35% of manufacturing output with small firms (fewer than 50 employees) accounting for around 17% of the total. The SME share of the total value added in the Swedish economy is 57%. When it comes to investment, the SME sector accounted for 66% of net investments in 1998. The SME sector in Sweden is therefore of major importance both in terms of employment and economic contribution.

Framework policies

Recent economic policy and general economic developments have led to a balanced state budget, an important basic condition in Sweden's development of a proactive industrial policy, giving the government more room to manoeuvre in the domain of SME policy. Also, over the last few years, the emphasis in Swedish SME policy has shifted from selective, delimited policy measures to a more general and horizontal policy approach. The government's objective is to promote favourable institutional preconditions for SMEs, in general. During the last two years, a shift away from SME policy towards entrepreneurship policy has been discussed and some initiatives to promote entrepreneurship have been launched.

In June 2002, the Ministry of Industry, Employment and Communications presented a benchmarking report on industrial policy. Concerning the indicators on obstacles for entrepreneurship and new start-ups as well as access to risk capital, Sweden can show positive results compared with the average of the OECD countries included in the study. However, indicators for enterprise and entrepreneurship show that entrepreneurial activity in Sweden is lower than in other OECD countries.

To simplify and improve the clarity of the central organisation with respect to entrepreneurship and business development, a major change of the central structure was implemented on 1 January 2001. Three new public authorities were created with the following tasks:

- The Swedish Business Development Agency, NUTEK, together with ALMI Business Partner, form a national competence centre for enterprise development and for the fostering of entrepreneurship.

- The Swedish Agency for Innovation Systems, Vinnova, was given the mission to promote sustainable growth by financing RTD and developing effective innovation systems.
- The Swedish Institute for Growth Policy Studies, ITPS, was given the assignment to improve the knowledge and basis for Swedish growth policy by undertaking analyse of changes with respect to institutional and technological requirements, systematic evaluations of policy measures and by securing good and relevant statistical data.

A review of the government's enterprise policy measurements, especially at the regional level, is at present under investigation and will include a review of most of the government actors providing services to SMEs. The investigation is due to present a proposal to the government in November 2002.

SME policies and programmes

Sweden's industrial policy covers a wide range of measures, takes SMEs into account, and focuses on how to strengthen Sweden's industrial and international competitiveness by promoting good conditions for growth and renewal. This approach includes, *inter alia*, a consistent competition policy, easy access to information and advice, better legislation and regulations, good access to finance, and activities to stimulate entrepreneurship. There are also some specific measures for target groups such as young people, women and immigrants. In recent years, the awareness of the importance of networks and clusters has increased, and has resulted in new initiatives some of which are presented here.

National entrepreneurship programme

In order to improve attitudes towards entrepreneurship and to promote a more entrepreneurial society, the government decided on a national programme for entrepreneurship, due to be launched during 2002, and to be implemented over a three-year period. The programme's aim is to improve the entrepreneurial climate, stimulate positive attitudes towards entrepreneurs and to increase the numbers of start-ups. The main target group is young people. Several independent activities have already been tried within this field, but this programme will be the first strategic and coherent action for entrepreneurship in Sweden. The content of the programme and its different activities are currently being finalised.

The government has also initiated a project within the educational system aiming at developing an entrepreneurial way of thinking. An important part of the programme is to promote more co-operation between school and working life.

Cluster programme

The Swedish government introduced a national cluster programme in September 2001. One way of understanding industrial transformation and competitiveness is from the perspective of enterprises as parts of a system. This system perspective includes all relationships of importance to a single enterprise, *i.e.* other firms, competitors, private and public organisations and so forth. The outline of the cluster programme focuses on methods and analyses in order to identify and support existing, as well as potential, national and regional clusters. The programme will run from 2002 to 2004.

Environment-driven business development

The aim of the programme on environment-driven business development that started in 2001 is to strengthen the competitiveness of SMEs by stimulating them to develop their operations and their products from the perspective of sustainability. The projects are conducted in networks with active participation by SMEs. The programme takes into consideration that knowledge, maturity, and motives vary in the environmental work of companies. Applicants for project support can choose between two different themes:

- Environmentally sound products as a competitive device.
- Operational development focusing on continuous improvements.

The Design for Environment programme, a forerunner to this programme, carried out thirteen projects. In total, 122 SMEs took active part in the project. A final report has been published including results and case studies.

Regulatory reform

The SimpLex Unit ensures that authorities shall report yearly to the government on their work with small business impact analyses. The overall political aim is to significantly reduce the administrative burden of regulation on small business. The SimpLex Unit, created in 1999, works under the responsibility of the Ministry of Industry, Employment and Communications, but is also supported by state secretaries in other Ministries. One task of SimpLex is to provide support and training for the business impact analysis work of authorities and commissions. Another task is to be the contact point for entrepreneurs and businesses having views and comments on existing rules.

SimpLex focuses on three levels of the regulatory system: the committees of inquiry, the government and the independent public authorities and agencies. This work is carried out through two main operations:

- Analysing new and revised regulation proposed by the different ministries.
- Training and advising officials from the ministries, authorities and committees of inquiry, in better regulation from a small business perspective.

All new and revised regulation proposed by government, that may have effects on small businesses, must be preceded by a regulatory impact assessment. The impact assessment should be carried out according to a specific checklist, based on the OECD *Reference Checklist for Regulatory Decision-making*, 1995. Concerning laws, the assessments are included in the bills submitted to Parliament. Concerning government ordinances, the business impact assessment is filed as a public document. Ministries, authorities and committees are all obliged to carry out the same business impact assessment when new or revised regulations having potential effects on SMEs, are under consideration.

SimpLex has also recently started to examine existing legislation in order to identify regulation that represent administrative burdens for small businesses. The government has commissioned six authorities, whose fields of legislation have significant effect on small business, to present proposals for simplification in the laws and regulations of their respective areas of responsibility. The proposals for simplification were presented during the spring of 2002 and are now under discussion.

Financing

Access to finance is a prerequisite for growth, development and creation of enterprises. The role for the state is first and foremost to secure an effective legal system and a supporting environment, but also complement the market where there are market imperfections – such as by supporting new technology-based firms, particularly those in the early stage of an innovative process, or supporting start-ups by ethnic minorities or women.

ALMI Business Partner offers loans to existing SMEs having a potential and capacity for growth, as well as loans to start-ups in order to stimulate the creation of new enterprises. The terms of the loans may vary from case to case. In general, full collateral is not provided. ALMI credit is a complement to existing commercial financing. The company's business plan, together with ALMI funding, works to open the door to commercial financing.

Small loans involve relatively high handling costs for banks and the bank frequently has a lack of knowledge about the entrepreneur or the SME. To attenuate the effect of this market imperfection, the Swedish government decided to implement a small loan for all SMEs, a micro-loan. The maximum amount of a micro-loan will be SEK 250 000 to cover up to a maximum of 50% of the total investment. This loan will replace the small loans ALMI Business Partner currently offers women and young entrepreneurs. The current loan for women and young entrepreneurs can be given to start-ups as well as to already existing firms, independently of business sector and type of enterprise. The new micro-

loan should ease access to finance for women and young people. A study by NUTEK shows that women and young entrepreneurs do not want special loans or initiatives, but rather, improved measures.

The initial phase of a technology-based project is almost always combined with high costs and high risk, which explains the strong demand for government support in these projects. An important source of seed capital is provided by NUTEK in co-operation with the Swedish Industrial Development Fund. The financial support is limited to 50% of the total project cost during the initial stage, the remaining part is borne by banks or other investors. Apart from the financing, NUTEK performs the function of an advisor, which is considered extremely valuable for a project's development. When the product or service begins to generate a profit, the company must begin to reimburse the loan. If the project does not succeed commercially, the loan may be written off. There are also other organisations providing finance to SMEs, for example the Innovation Centre Foundation and the Norrland Fund.

SwedBAN, the Swedish Business Angel Network, was founded in September 2001. SwedBAN is organised as a co-operative economic association with a board of directors consisting of ten persons of whom a majority are business angels. The number of active business angels in Sweden is estimated to be 3 000. SwedBAN is currently building an appropriate infrastructure for the informal venture capital market, and for educating and activating potential business angels.

Technology and innovation

Technology and knowledge are frequently created as a result of interaction occurring between companies, and with institutes and universities. This is evident in regional development, where clusters and innovation systems are becoming more important as analytical tools for SME support. Examples are presented below of public support that is directly focused on SMEs. Further information about public actions can be found on the Cordis Web site (www.cordis.lu/trendchart).

The Technology Bridge Foundations place at the disposal of knowledge-intensive SMEs experienced mentors in order to give support, to act as speaking partners and door openers. The Technology Bridges act on the regional level to increase the exchange of knowledge and co-operation between universities and industry. The mentors are selected to suit knowledge-intensive companies, *i.e.* companies that have been created as a result of research and development, or to companies who offer advanced specialised services.

The Technopoles are centres for young, high technology companies with a desire to grow, and for researchers who want to see their ideas develop into new products. NUTEK is the national co-ordinator of the Technopoles and, in co-operation with them, organises seminars, entrepreneurship programmes, seed-financing etc.

The Industrial Competence Centres (IUC) is a project aimed at the development and growth of SMEs, through, *inter alia*, stronger co-operation with larger companies. The main objective is to stimulate the creation of new jobs and to develop the companies with regards to their products, processes and technical production systems. www.iuc.se

Technology Transfer for SMEs is a project which aims at creating a system that will give SMEs better opportunities to make use of technology in their business development. A well co-ordinated network makes it possible for SMEs to find adequate technological service and for technology providers to reach SMEs. The Innovation Relay Centres in Sweden are integrated in this network. The system facilitates trade in technological services between SMEs and the public R&D providers of such institutes and universities.

Management

The Entrepreneur's Guide (*Företagarguiden*) was launched in October 2001 and is a one-stop shop Web site with business relevant information from different authorities, aimed at users starting and running businesses. The aim of this Web site, www.foretagarguiden.gov.se, is to make it easier to access information and services from public authorities as well as present it in a user-friendly way. The project is a co-operation effort between NUTEK and more than 20 government agencies and other public

organisations in Sweden. The rationale of the project is that small, as well as newly started enterprises, are in need of quick and reliable information; as well as well-developed public administrative services and counselling.

Kontakt-N (www.kontakt-n.nu) is a Web site that provides a simplified registration process for enterprises. This is an example of future possibilities for individuals and entrepreneurs, using an Internet solution, to supply information to all relevant authorities on one single occasion. Kontakt-N is a joint project between the Swedish National Tax Board (RSV) and the Swedish Patent and Registration Office (PRV). The aim of the project is to make it easier to start a business.

The Database of Financing (*Finansieringsdatabasen*), www.nutek.se/finansieringsdatabasen, contains information about funding opportunities for SMEs. So far, the public, national and Nordic funding opportunities dominate database, but it is also possible to find information about funding opportunities from the European Union as well as where to find non-financial assistance, such as information and advice agencies.

Internationalisation/globalisation

The Swedish Trade Council provides information and support for Swedish enterprises in their business activities abroad, in an effort to lower the barriers to entering international markets. The Council has targeted programmes for SMEs. Information on doing business abroad is available at www.swedishtrade.se

The Euro Info Centre (EIC) network in Sweden provides information and advice to SMEs about the European Union and how to do business in the internal market and take part in European projects. Through the European EIC network, consisting of 270 offices, SMEs are assisted in finding business partners in the EU as well as in the candidate countries. In Sweden there are 20 offices or contact points which supply approximately 25 000 SMEs with information and advice each year (www.euroinfo.se).

Other programmes

Since 1993, NUTEK has promoted women entrepreneurship. One objective is to meet the demand for women consultants. Experience shows that many women prefer to turn to women when they require information, training and consultation in connection with starting a company. The Business Consultants for Women initiative caters for all business types and explores how family life may be combined with business ownership. NUTEK supplies training and exchange of experience for business advisors, and information is diffused by traditional means as well as via electronic networks. Researchers have tracked the programme and an extensive report on the project was presented in December 2000. In 1999, the project was chosen as one of 11 best practices within the Employment Pact.

The aim of the Entrepreneur and Technology Centres initiative is to inspire young people (ten years and older) to look upon themselves as the engineers and inventors of the future. Technology, a source of creative activities for young people, is the basis of the pedagogical methods to be used in municipal entrepreneurship and technology centres. The centres will also be open to adults, and will be meeting places for all categories of people interested in technology. These centres will be operational from the beginning of 2003.

NUTEK initiated the national IT.SME programme in September 2000. The objective is to improve the development conditions and enhanced competitiveness among small enterprises (0-10 employees) by demonstrating the potential of information technology, and to motivate them to improve their IT skills. The Swedish government finances this programme and it is run jointly with the Federation of Private Enterprises and other business organisations.

The Swedish Alliance for Electronic Commerce, GEA, is running a project called SVEA (www.svea.gea.nu). The objective of the project is to stimulate SMEs to use the Internet as an active tool in order to increase and improve their business. The goal is that more than 100 000 entrepreneurs should have an increased awareness of e-commerce, and the benefits of using e-commerce in their business, within a period of three years.

“Regional Growth Agreements” are a tool for economic growth and renewal in all regional counties in Sweden. The process with regional growth agreement started in 1998 and a result of this work is the Regional Growth Programmes, which will be launched in 2004. The underlying principle behind the regional growth agreements/programmes is the formation of regional partnerships with representatives of municipalities, authorities, local business associations and universities within each administrative region in Sweden. These regional partnerships have conducted analysis of the potential for and threats to economic growth and industrial development in their respective region. On the basis of these analyses, programmes of measures designed to take greater advantage of the opportunities identified have been formulated.

Switzerland

SMEs in the economy

SMEs (employing fewer than 250 employees) in Switzerland account for over 99% of all enterprises and over 99% of manufacturing firms. Small enterprises (fewer than 50 people) represent 97.9% of the total and 96% of manufacturing firms. About 88.4% of all firms provide employment for between one and ten persons. In terms of employment, SMEs account for 69.1% of total employment and 72.8% of manufacturing employment. Small enterprises employ 48.7% of the total and account for 45.6% of manufacturing employment.

Framework policies

Since 1999, the federal government continued to pursue a programme of structural reforms. At the beginning of 2002, the government reiterated its resolve to strengthen its efforts to liberalise the domestic market with a view to combating the high prices of Swiss products in international terms and to raise productivity in the economy, overall.

SME policies and programmes

Switzerland is continuing its efforts to improve the quality of the legal and regulatory environment for business. Up to now regulatory reform has focused on: *i*) speeding up procedures; *ii*) improved co-ordination between authorities; *iii*) increased transparency of legislation; *iv*) reducing the number of regulations; and *v*) greater customer focus. The majority of these measures came into force at the beginning of 2000. In particular, the Federal Council issued an administrative order specifying the time limits for processing applications. The authorities are now required to inform applicants in writing and within a reasonable time of the progress of their applications. The order leaves open the possibility, in sectoral legislation, of setting other time limits appropriate to specific conditions.

The SME Forum brings together SME owners/managers who scrutinise planned laws and orders from the standpoint of their compatibility with business efficiency. The Forum advises the administration and proposes simplifications to formalities for SMEs. It has adopted official positions on numerous issues, *inter alia*, the liberalisation of the electricity market, the revision of the law on foreigners, the revision of the law on cartels, and the draft reform of business taxation. Within the administration, an impact study of regulation was carried out to improve the quality of legislation, by submitting laws to prior scrutiny for their economic implications. In concrete terms, all bills and draft orders must contain a chapter on their economic consequences. The following five points, which are mentioned in the Federal Council's directives, are examined: the need for and possibility of state intervention, the consequences for the various categories of stakeholders, the implications for the economy as a whole, alternatives, and practical aspects of implementation.

The new law on value added tax (VAT) came into force at the start of 2001, the standard rate being raised to 7.6%. The amendments made to the law eased the administrative burden on SMEs, notably by raising the turnover thresholds up to which VAT can be settled on a simplified lump-sum basis. Another innovation is that new businesses can be awarded taxpayer status on the basis of a business plan, which enables them to deduct tax paid during the preliminary stages of start-up when they make heavy investments but do not have a high turnover. The tax authorities have also modified the rules so that

invoices issued solely in electronic form can be accepted. As regards income tax, the government has commissioned a group of experts to draw up proposals for a system of taxation independent of the firm's legal form. These proposals will be incorporated in the reform of business taxation to be submitted for consultation in 2002, the aim of which is to eliminate totally or partly the double taxation of companies and shareholders when profits are distributed.

Entrepreneurship

In September 2000 the Federal Council published a report on support for business creation. This report, which reviewed the various types of support in place or planned, was a response to numerous statements in parliament on the issue. Among these measures, mention may be made of the lowering of the minimum nominal share value of public companies from CHF 10 to CHF 0.01. Investment by pension funds in unlisted companies was made easier by a change in the rules of supervision, based on the "prudent investor" principle. A reform of the taxation of options was launched but has not yet been completed since it requires a revamping of tax law. Under the current system, options are taxed when they are granted, which disadvantages employees in new enterprises since they have to pay the tax when their earnings are low. There is also a high risk that the enterprise will disappear and that the option will lose all its value. Under the proposal prepared by an expert commission, firms would be free to choose when options would be taxed, notably when they are exercised.

As part of its e-government programme, the Federal Council instructed the administration to set up a business creation Internet site. The existing SME Task Force site of the Secretariat of State for the Economy (www.pmeinfo.ch) has been supplemented by a one-stop shop for entrepreneurs, and will be progressively expanded so as to constitute a portal for SMEs. These new means of communication now make it possible to reach a large majority of enterprises. A survey done for the third time since 1999 found that two out of three enterprises use the Internet to communicate. On the other hand, e-commerce is much less developed. Insofar as they constitute an important reservoir of productivity gains, the government is trying to encourage the use of these new technologies by offering itself the possibility of conducting transactions on line. An on-line basic business start-up form is in the process of being prepared. Similarly, each enterprise will be able to have a single identification number, which should facilitate their dealings with government departments. In the medium term, this project presupposes numerous changes at the administrative level.

Financing

The law on venture capital companies which came into force on 1 May 2000 aims to promote business creation by facilitating access to venture capital. It provides tax reliefs to venture capital companies and private investors (business angels). Of more than one hundred companies and structures in the risk capital business, ten venture capital companies have been recognised provisionally or definitively by the Federal Department of Economic Affairs, and have thus been able to benefit from the reduced rate of tax on new issues and the lower thresholds for exemption from tax on corporate participation. On the other hand, no business angel has applied for authorisation to date, probably because the tax reliefs are limited to loans and do not apply to other types of stakes in new companies. A review of the system is underway with a view to revising the law and making it more effective.

As elsewhere, in Switzerland there was a boom in the funding of start-ups at the end of the 1990s. The funds raised in 1999 by venture capital institutions were triple the amount the previous year, totalling CHF 1 billion, with the bulk of investment being made during the preliminary stages of start-up. The amount of funds raised in 2000 was even higher thanks to the capital gains made. However, the amounts invested in Switzerland were sharply down on 1999. The share of replacement investment was again higher, the share of investment in start-ups dipping markedly. There were also signs of euphoria on the Swiss stock market, which created a new market segment for start-ups in mid-1999. The new market grew by about 30% in 2002 before falling back sharply by about 50%. However, it resisted slightly better than other markets due to the fact it is specialised in the life sciences. By the end of 2001, 15 firms were listed on the new market, with a market value of nearly CHF 6 billion.

The *Cautionnement des arts et métiers* is a credit guarantee system aimed primarily at traditional SMEs. It involves a network with a central office and ten independent regional co-operatives linked by co-operation agreements. Credit guarantees (up to CHF 150 000) are provided by the regional co-operatives. In cases where higher credit is needed, the regional co-operative can apply to the central office for a further CHF 300 000 (CHF 500 000 in mountainous areas). The government covers 50% to 60% of losses (90% in mountainous areas). The heavy losses incurred in the second half of the 1990s made an overhaul of the system necessary. Commitments fell to about SF 200 million, and were limited to regional and cantonal banks. The federal government decided to refocus the various mechanisms. As regards other regional policy instruments, in spring 2002, Parliament extended the federal decree on redevelopment areas for a further five years. This instrument, which can be used in about a quarter of the country, is aimed at SMEs and is designed to help them diversify. Inter-firm assistance has been added to the existing range of instruments (guarantees, soft interest rates, tax reliefs), which makes it possible, for example, to support institutions that provide assistance to start-ups.

Technology and innovation

The Technology and Innovation Commission (KTI) is a federal agency responsible for encouraging research, applied research and development with commercial applications. It comprises 27 members, over half of whom are senior executives in the private sector. Its other members are scientists in higher education institutions with business experience. For 2000-2003, the KTI has appropriation commitments totalling CHF 320 million. It is planned to develop and strengthen the KTI to make it a policy instrument for promoting sustainable innovation. The primary aim of the KTI is to speed up the process of translating findings into commercial products, processes and services. It encourages collaborative projects between industry and higher education institutions. Its assistance can take the form of financial support or the provision of services and innovation management know-how. KTI support is provided on the basis of the following criteria: *i*) the key element is the bottom-up principle, whereby it is the promoters themselves that formulate their projects and these projects must have a clear market application; *ii*) assistance for innovation is open to all disciplines, the KTI taking an all-round approach; *iii*) support is provided subject to a commitment by a private sector partner to bear at least 50% of the costs of the project, such a commitment being proof of market interest – the Confederation disburses the funds to higher education institutions; *iv*) the KTI works actively in promising areas by launching thematic initiatives and programmes of fixed duration, such as the Start-Up Initiative to promote business creation.

KTI's budget for 2000-2003 covers ten areas:

1. KTI's core activity, *i.e.* to provide support for non-thematic projects which are neither for a specific period of time nor funded by institutions specialised in aid to research: the target is SMEs.
2. KTI specialised higher education institutions: development of applied R&D competencies, and support for the creation of national skill networks linking up those institutions.
3. KTI Start-up: to encourage transfers of knowledge and skills via the creation of high-tech firms.
4. MedTech: to enhance the competitiveness of Swiss firms specialised in medical technology.
5. EUREKA: participation in the European Research Initiative with a view to stepping up European co-operation in R&D.
6. Intelligent Manufacturing Systems (IMS): strengthening R&D co-operation between firms and research centres world-wide.
7. Soft[net] programme: development, marketing and use of "Swiss-made" software.
8. DOREsearch: joint initiative by the KTI and Swiss National Scientific Research Fund to develop R&D competencies in the fields of social work, health, arts, teaching, psychology and applied linguistics, in cantonal higher education institutions.

9. Energy technology: promotion of innovation to reduce CO₂ emissions and curb energy consumption.
10. Top NANO 21: implementation of the technology programme of the Federal Polytechnic Schools Council – “The nanometer in 21st century science and technology”.

Some 3 300 projects have been supported since 1986, generating R&D activities worth about CHF 2 billion. Over 60% of the costs were borne by the private sector, the Confederation financing the remainder. Over 5 000 companies, 80% of which were SMEs, have taken part. In 2001, 700 project applications were filed. By 2007, the annual number of application should exceed 1 000.

Management

The Federal Law on Vocational Training of 1978, regulates training in industry, small crafts and trade. A revised Law will come into force in 2000 with the following elements: an extension of its applicability to all trades (including health and social care); a form of basic training that provides for a lifelong-learning process; better interaction between vocational and general knowledge; co-ordination of basic training and continued training; a more active role for the federal authorities; launch and encouragement of innovative measures, and alignment of training with measures in the labour market. These efforts primarily concern SMEs as almost three-quarters of all trainees receive their training in SMEs. It may be noted that two-thirds of young people choose vocational courses. During the period under review, specialised higher education institutions (HES) continued to be set up. To begin with, vocational schools were grouped together into seven regional networks so as to co-ordinate courses better and to open up new possibilities for sandwich training (especially in the field of research). 17 000 students are currently enrolled in HES on 220 courses. The development of research in these practically oriented schools is very important for SMEs. The HES have a clear role to play in working closely with companies, supplementing academic research with training that is more relevant to SMEs.

Export promotion

A new law on export promotion came into force on 1 March 2001. The Confederation mandates one or several export promoters. The Swiss Office for the Expansion of Commerce (OSEC), since rebaptised OSEC Business Network Switzerland, was given a mandate to the end of 2003. The OSEC must meet its objectives in four areas: information, consultancy, foreign marketing and training of partners in the export promotion area. The cornerstone of the system is Business Network Switzerland. The OSEC acts as co-ordinator in this network and as a platform between the national network, foreign networks and firms. The State Secretariat for Economic Affairs has drawn up a list of twenty priority countries for Swiss exporters. Resources are concentrated on these countries, where Swiss Business hubs have been set up. The present aim is to promote dialogue and to exploit skills where they exist, and thereby enhance the efficiency of the system by networking actors and information.

Other programmes

Within Switzerland's federal structure, the cantons are autonomous in certain respects, and federal law provides them with the authority to issue decrees which they may draw up within federal regulations. Their initiatives with respect to SMEs follow the pattern of developments in federal programmes and can be summarised as follows: services for SMEs in the fields of information, brokerage and consultation; reduction in interest rates (for investments), interest subsidies and concessions; tax relief; special, usually non-recurring contributions towards studies, pilot projects, subsidised purchases of real estate, etc.; credit guarantees; co-operation with the private sector (research institutes, consultants, accountants, insurance, companies, foundations, etc.). These measures are aimed principally at new and export-oriented companies. In addition to measures targeted at individual firms, financial contributions may be made to institutions and projects aimed at enhancing regional development potential.

Turkey

SMEs in the economy

SMEs play an important role in the Turkish economy, accounting for 99.5% of establishments, 61.1% of employment, and 27.3% of value added in the manufacturing sector. A major priority of the Turkish government is to enhance the competitiveness of the SME sector.

SME policies and programmes

The Turkish Small and Medium Industry Development Organisation (KOSGEB) was established in 1990 to encourage entrepreneurship and generally assist and promote smaller enterprises. KOSGEB has more than 38 extension service centres and three institutes with professional staff, and provides diverse technical and managerial consulting services to SMEs. KOSGEB is responsible for implementing all SME development and support programmes for: *i*) promoting the use of new technologies; *ii*) improving training and information levels; *iii*) providing appropriate financial mechanisms, and *iv*) improving management. In addition, elimination of obstacles that SMEs might confront while competing in domestic and foreign markets is included in KOSGEB's mission.

The EU Multiannual Programme for Enterprises and Entrepreneurship for 2001-2005 will start in Turkey by the year 2002 and nine different MEDA²⁹ co-financed projects are underway.

Recent Turkish measures considered to have an important impact on SMEs include the establishment of the Competition Council which should protect SMEs from unfair competition practices on the part of large firms. Reform of the tax system has involved a complete revision of tax policy. According to the new system, the calculation and payment of tax can be made on a three-monthly basis representing a significant improvement on the former method, which was based on the previous year's income. Twenty per cent of taxes due can be deferred for up to three years without interest, when R&D expenditures of equivalent amounts are made. Generally the tax burden has been reduced through a decrease both in rates and in the number of tax bands. Business start-ups can benefit from tax exemptions amounting to 40%-60% depending on the number of workers employed. Also, measures have been taken to remove those factors contributing to the numbers of undeclared workers. Value-added tax rates declined by eight percentage points.

Financing

There has been no significant change in Turkish SME policies during the last five years, and assistance to investment has remained the preferred type of SME support in Turkey. Highest priority is attached to relieving the problem of access to capital which remains the most important problem faced by SMEs. A number of important financing programmes for SMEs have been developed, mostly administered by the Ministry of Finance. The government issues a list of state aids to investment annually. In order for firms to take advantage of such state aid, a special "state aid certificate" must be obtained together with investment approval from the Undersecretary of the Treasury. Typical state aid programmes are tax allowances, deferrals and exemptions depending on the location and type of investment, VAT refunds for locally purchased machinery (an additional 10% repayment for special

29. The MEDA programmes of the European Commission are the principal financial instruments for the implementation of the Euro-Mediterranean Partnership. These programmes offer technical and financial support measures to accompany the reform of economic and social structures.

sectors), customs exemptions on imported machinery and raw materials, VAT deferral on imported machinery and equipment, and special credits. In addition, corporations can defer up to 20% of their annual corporate tax amounts provided that this sum does not exceed the R&D expenditure of the corporation during the same year.

There is no financial institution established for the purpose of financial support to SMEs, however the Halkbank bears this function at the present time. Loans are made available at low interest rates by the bank to small traders and craftsmen mainly through Small Traders' and Craftsmen's Security Co-operatives. Craftsmen are eligible for working capital and investment credit from this programme. Industrial investments are assisted through medium and long term credits given to industrial corporations. Depending on the size of the firm, the limits and terms of the credit vary. Credits for young entrepreneurs and woman entrepreneurs also exist, the latter designed to be used by women entrepreneurs wishing to engage in economic activity in the home without opening a workshop, and by young people wishing to set up a new business. Small traders, artisans and SMEs across a wide range of activities have traditionally been supported by the Halkbank through commercial credits, *i.e.* short term cash and non-cash credits.

Halkbank also provides loans from the funds emanating from international agreements between Turkey and other countries. Sources for these loans include the KSF-I Special Loan Fund obtained from Germany and arising from the voluntary return of Turkish citizens from Germany, having worked in Germany and who wish to set up businesses in Turkey; the KFW (*Kreditanstalt für Wiederaufbau*) Incentive Fund which is also German in origin and used for promoting industrial SMEs in Turkey; the Industrialisation Fund which aims to strengthen and modernise the structure of the Turkish economy through SMEs by increasing capacity utilisation rates in existing industrial enterprises; and the World Bank Fund which aims to SMEs with a view to improving the quality of products. Loans given to organised industrial zones and small industrial estates are funded by the European Community Social Development Fund. The Organised Industrial Zone Fund aims to prepare land with the appropriate infrastructure for industries. On the other hand, the Small Industrial Estates Fund aims to improve the work environment of small scale industries, artisans and technicians to increase their efficiency and expand their businesses.

A guarantee liability fund with the Bank constitutes the provision for guarantees issued by the Credit Guarantee Fund. The Credit Guarantee Fund Company (KGF A.Ş.) is a non-profit organisation and it adds its income to the guarantee liability fund. The Credit Guarantee Fund defines SMEs as firms employing up to 250 workers. The Credit Guarantee Fund provides a guarantee for 70% or 80% of the loan, depending on the loan size. The Credit Guarantee Fund Company provides guarantees only for all types of loans lent by Halkbank to craftsmen, and tradesmen and SMEs. These loans include cash loans such as working capital credits, investment and export credits and non-cash loans in the form of bank guarantee letters, letters of credit or aval credits.

The Credit Guarantee Fund Company provided guarantees and loans in 988 cases involving 606 enterprises between 1994 and 2001. The Industrial Investment and Credit Bank (*Snai Yatrm ve Kredi Bankas*) supports exporter firms with Eximbank origin credits and provides loans to SMEs (up to 200 employees) in manufacturing, at a cost below the current interest rate. *Snai Yatrm ve Kredi Bankas* also uses financing instruments such as leasing and factoring and supports enterprises wishing to be listed on the stock exchange. In addition to export-oriented schemes, *Snai Yatrm ve Kredi Bankas* administers the Risk Capital Company Project which targets the provision of long-term loans and capital support for entrepreneurs having an eligible project but lacking the necessary capital. The European Union-Turkish SMEs Joint Investment Projects operate, in a number of sectors, through the consulting contract signed with KOSGEB.

A government priority is to facilitate the provision of capital by institutional investors especially for long-term financing for SMEs. Steps have been taken for the establishment of Special Retirement Funds, and Risk Capital Investment Partnership arrangements will be made with institutional investors. Measures taken to facilitate the participation of SMEs in stock exchange markets include exemptions from obligations such as independent audits, announcements, and profit distribution. As part of the

project on Turkish Exchange of Stocks and Bonds, studies are being carried out to provide firms in the regions, especially SMEs, with the possibility of obtaining finance from the stock markets and to provide the Istanbul Stock Exchange Market (IMKB) with the possibility, through the use of information technologies, of accessing those firms submitting and requesting funds in all regions. Regional markets have been established in order to facilitate the shares transaction of SMEs operating in various regions of the country. The conditions for acceptance in the regional markets are easier compared to the IMKB National Market. The Market for New Companies has been established to allow the transaction of shares of young companies having expansion potential.

Technology and innovation

KOSGEB offers a range of different support measures aimed at enhancing the innovative capacities of small firms and supports R&D efforts through the Technological Development Centres (10 TEKMER). Schemes include *i*) support for production sites for innovative firms with new production processes and new products; *ii*) support for supplies and equipment providing up to USD 25 000 per firm as a soft loan; *iii*) support for participation in domestic fairs in the case of exhibition and commercialisation of prototype production; *iv*) support for attending international exhibitions; *v*) support for the supply of software and publications; *vi*) support for publication of R&D results; *vii*) support for promotion costs; subsidy for hiring specialised personnel; *viii*) training grants; *ix*) assistance provided towards costs of patent applications and protection, and industrial design; and *x*) support for the preparation of electronic commerce Web sites. A firm may avail of a total of USD 35 000 in grants under the measures listed above.

KOSGEB established a number of laboratory facilities to carry out quality tests and analyses on products being introduced to the market, used usually by the metal and foundry sector. KOSGEB uses laboratory facilities in universities to test products from other sectors thereby promoting linkages and agreements between industrialists and universities. Support is provided for small enterprises in manufacturing (up to 50 employees) and medium enterprises (51 to 150 employees) with rates of assistance varying by enterprise size. In addition, firms bearing the certificates: (TSE, TSEK, and ISO 9000) receive preferential treatment and may benefit from higher rates of support.

TUBITAK (The Scientific and Technical Research Council of Turkey) launched the R&D Incentives Programme for private companies and TUBITAK also launched the University-Industry Joint Research Centre scheme in order to foster university-industry relations. The R&D Assistance Programme is being carried out by TUBITAK and the Undersecretariat of Foreign Trade. TUBITAK performs a review to determine whether applicant projects can be classified as a R&D project.

Turkey's innovation policy was developed during the 1990s. A project was started in 1998 with the participation of experts from various institutions related to the National Innovation System. The project was completed in 2001 and the project result have been published.

The Technology Development Foundation of Turkey (TTGV), established in 1991, provides soft loans with longer repayment terms to all companies for their innovation activities, and for the training and consultancy needs of SMEs. TTGV contributes up to 50% of the total project budget, up to a maximum of USD 2 million. TTGV has supported 244 projects by private sector firms and has secured a national industrial R&D volume of USD 200 million. TTGV also provided assistance to beneficiary firm with their patent application. TTGV acts as a catalyst in the establishment of technology parks in Turkey and has responsibility for the establishment of technoparks intended for the creation and development of new businesses that will: exploit the results of R&D work undertaken in universities and research centres; increase the technological infrastructure and income level in the regions where they are located; create employment opportunities for highly skilled employees; and attract foreign investors.

TUBITAK Marmara Research Centre (MRC) Technopark started out as a technology incubator in 1992 to enable the start and growth of high technology companies, in an environment suitable for the accumulation and transfer of knowledge and technology. Also, a pre-feasibility study was conducted for the METU Technopolis project in 1987 and in 1995 the feasibility of creating a Business and Science Park in Ankara was analysed jointly with the World Bank. Finance and establishment work has been started with the aim of upgrading the core of national industry by stimulating innovation in target sectors and firms.

The total number of applications filed by SMEs for patents and utility models accounted for 29% of the total local applications in 1996, when the industrial property system was reformed in Turkey, and it rose to 42% in 2000 and 39% in 2001. The total number of local applications rose by 122% between 1996 and 2001 and the total number of applications submitted by SMEs increased by 204% during the same period. The number of SME applications was 1 264 while the total number of local applications was 3 406 between 1996 and 2001.

Management

KOSGEB signed a convention with DG XXIII of the European Commission and acts as the Euro Info Centre contact point in Turkey as part of the network operating in 35 countries called Value-Added Network Services (VANS). In order to reach more SMEs throughout the country, a special sub-network in Internet operations has been set up, where each node functions as the local business consultant and is composed of various NGOs or sectoral representative organisations serving SMEs. Within the scope of the agreement signed with KOSGEB, SMEs now have the possibility to access EU centres such as BCNET (Co-operation Network among Enterprises), BRE (*Bureau de Rapprochement des Entreprises*), EIC (European Information Centre), as well as the BFAI (German Federal Foreign Trade Office). The number of EICs will be increased from one to 13 by 2005 through the EU Multiannual Programme for Enterprises and Entrepreneurship.

Electronic commerce

The Electronic Commerce Support Programme was established by KOSGEB to help SMEs open up to the global market place through the use of information technologies, and ultimately to assist their internationalisation. The main goals of the programme are to increase foreign trade, assist SMEs in the operation of electronic commerce, contribute to the abolition of the technical and legislative barriers to SME electronic commerce, follow-up on developments in electronic commerce regulations, and contribute to the national legislation regarding electronic commerce. In practice, the programme increases the use of information technologies in SMEs, assists SMEs in the use of the Internet, familiarises SMEs with the idea of Internet and the global marketplace, and contributes to the changes affecting product distribution channels and marketing. The Electronic Commerce Support Programme is composed of four phases: *i*) development of the trade information system model; *ii*) supports for using Internet and information technologies *iii*) KOBI-NET SMEs information network; *iv*) establishment of a centre (30 Internet cafes) to develop and promote electronic commerce services.

Export promotion

In 1994 the Turkish Eximbank started the Export Credit Programme for SMEs to meet SME exporting needs, in particular, manufacturers employing fewer than 150 workers. SME export credits are now provided under the framework of the Pre-Transportation Exportation Credit. SMEs have priority in making use of these credits as well as other short-term credit programmes of the Eximbank. Interest rates are determined in light of developments in Turkish economy and the mediator banks are allowed to add a maximum of three points on this interest rate as commission. Nevertheless, SMEs cite a number of problems they experience in relation to the Turkish Eximbank Credits which may be insufficient for their needs and are generally costly. Modifications are now being made in the credit application principles, the framework legislation and banking procedures. The share of SMEs making use of the credits is around 64%.

Seminar programmes on financing exports are organised by the Trade and Industry Chambers and Export Promotion Centres (IGEME) in many regions and provinces. Foreign Trade Companies (FTCs) constitute a new approach for encouraging direct export by SMEs. Sectoral Foreign Trade Organisations (SFTOs) have a legal status similar to private companies. In these SFTOs, groups of SMEs (minimum ten) working in the same branch of manufacturing industry are requested to co-operate under a professional management system and are allocated export revenue targets to be reached annually if they are to be allowed to claim support for the following year. SME participation at both domestic and international fairs is also supported.

Other programmes

In Turkey, the Industrial Zones Project started in 1962 and aims at industrial and regional development. These zones help organise urban-industry relations and offer low-cost infrastructure services, as well as control of environmental pollution, and provides a favourable environment for the emergence and growth of SMEs. Funding from the Small Scale Industrial Estates scheme covers car repair workshops (39%), metal manufacturing (30%), wood industry (23%) and other (8%). Apprenticeship schools included in diverse activity plants offer apprenticeships through the joint action of the Ministry of National Education and the Ministry of Industry and Commerce.

United Kingdom

SMEs in the economy

The United Kingdom has approximately 3.7 million businesses (including the self-employed). They provide 44% of non-government employment and 37% of turnover outside the financial sector, and 99% of them employ fewer than 50 people. About 92% of firms in manufacturing employ fewer than 50 and around 96% employ fewer than 100. Less than 1% of manufacturing firms employ more than 500. About 25% of manufacturing employment is accounted for by firms with fewer than 250 employees, and about one-third by firms with more than 500 employees. SMEs generate just under 40% of manufacturing output, while firms with more than 500 employees generate almost half.

In 2000, over 408 000 businesses started up and over 397 000 ceased trading. In general, SMEs are the main creators of new jobs, but only a small percentage grow. SMEs play an equally important economic role in the different constituent parts of the United Kingdom.

Framework policies

The DTI's overall aim is to increase prosperity for all by driving up productivity and competitiveness through successful business, world-class science and innovation and fair markets. All the work of the Department on these objectives is relevant to SMEs, but in recognition the key contribution that an active small business sector can make to them, the DTI also has specific targets to help to build an enterprise society in which small firms of all kinds thrive and achieve their potential:

- An increase in the number of people considering going into business.
- An improvement in the overall productivity of small firms.
- More enterprise in disadvantaged communities.

The DTI and the Small Business Service (SBS), an agency of the DTI, are central to the delivery of the UK government's SME policy and the promotion of "Think Small First" across all government activities. The SBS, through its contracted management of the Business Links Service, is recognised as the centre of excellence for SME knowledge and understanding in the UK government and a prime route for service delivery to SMEs in the UK.

SME policies and programmes

The Small Business Council (SBC) is an independent UK advisory non-departmental public body, appointed by the government in May 2000, and its main aim is to report to the Secretary of State for Trade and Industry on the needs of existing and potential small businesses. It further reports on the effects on small businesses of the activities and potential activities of government.

The Council consists of 20 members (most of them small business owners) who represent a wide range of business sectors and ethnic groups and all regions in the UK. Through the work of its sub-groups the Council explores the areas such as access to finance, workforce development, regulation, rural issues and Europe. In its first annual report the Council put forward 22 recommendations for the UK government to consider, with the aim of improving the small business environment.

As part of the UK government's intention to improve the support given to small businesses, in April 2002 the Chairman of the SBC took on the role of "the independent voice for small and medium

sized businesses across Whitehall". This is a non-executive role with a wide remit including the ability to publicly question government policy when it is prejudicial to small businesses. The Chairman will attend relevant Cabinet Committees and has direct access to the Prime Minister.

The Small Business Service (SBS), an agency of the DTI, was launched in 2000, to provide a strong voice for small business at the heart of government (now a role for the SBC). The main objectives of the SBS are to:

- Help all small businesses in England realise their potential.
- Provide world class business support services to enhance the performance of small businesses with growth potential.
- Promote enterprise across society and particularly in under-represented areas and disadvantaged groups.
- Help mitigate the impact of regulations on smaller businesses.
- Encourage greater use of the internet and e-commerce by smaller businesses.

The SBS offers assistance to a wide range of customers, acting as a single gateway, for those wishing to become self-employed or start up their own business and for employers with up to 250 staff. The SBS is responsible for the network of 45 Business Links that provide information, advice and access to experts on all issues relating to running your own business. It also runs national services to help small firms such as the Benchmarking Service, the Small Firms Loan Guarantee Scheme, the High Technology Fund and the Smart scheme to encourage innovation.

Since devolution legislation in 1999, which established the Scottish Executive, the Welsh Assembly and the Northern Ireland Assembly, increased responsibility for economic development has devolved to these institutions and more regional-specific programmes have been implemented.

In England, eight new Regional Development Agencies (RDAs) were created in 1999, covering all regions except London, to provide a regional focus, including for small firm programmes, and co-ordination of economic activity. Wales, Scotland and Northern Ireland all have their own arrangements, pre-dating devolution. In Scotland, the Small Business Gateway was launched in 2000 and provides support to new and start-up small businesses in the Scottish Enterprise area. The Gateway provides five basic programmes covering business information, start-up support, business growth, high-growth starts and women into the network. Highlands and Islands Enterprise provides similar access to information and advice to businesses in the HIE area through its Business Information Service.

In Northern Ireland, government support to small businesses is provided mainly through the Local Enterprise Development Unit (LEDU). This operates directly and through an extensive network of some 100 Economic Development Partnerships, which include Councils, Peace and Reconciliation Partnerships and Local Enterprise Agencies. LEDU services are accessible via the Internet. Business Connect Wales Ltd is the gateway for Business Support in Wales, bringing together in partnership agencies that provide support to SMEs in Wales (including the Welsh Development Agency, Education and Learning Wales (ELWa), the Local Enterprise Agencies and Local Authorities as well as private sector organisations such as the chambers of commerce).

Regulatory reform

The Better Regulation Task Force of the Cabinet Office assesses the need for improving the regulatory framework for SMEs according to five principles: transparency, accountability, targeting, consistency and proportionality. The UK government has significantly strengthened its systems to control the regulatory burden in the UK. It has, for example:

- Established the Ministerial Panel for Regulatory Accountability to take a strategic overview of the regulatory system and to call Ministers to account for new regulation and their performance in addressing the burden of existing regulation.
- Issued a revised guide to regulatory impact assessment, building on the lessons learned since the launch of the previous guide.

- Appointed Ministers for Regulatory Reform to drive forward the better regulation agenda throughout government.
- Enacted the Regulatory Reform Act, giving the government a powerful tool to simplify or get rid of over-burdensome, overlapping, over-complex or outdated legislation.
- Compiled a Regulatory Reform Action Plan, of over 260 proposals for improving existing regulatory regimes and reforming the public sector.
- Introduced the Enforcement Concordat, promoting a business friendly, balanced and consistent approach to enforcement. 96% of local authorities have adopted the Concordat voluntarily.

Other actions include: simplifying rules and assisting business compliance by transferring the Contributions Agency to the Inland Revenue and introducing a payroll assistance scheme; working with European partners to ensure simpler, more effective EU regulations. The SBS is also fully funding “smallbusinessleurope” until July 2003 (and thereafter lowering financial support until it becomes financially independent of SBS in 2006) to help influence the policy process at the earliest stage in Europe.

The SBS, working with regulators, produces guidance giving small firms practical advice on how to comply with regulations. It has introduced a requirement that departments must issue guidance on all new legislation which impacts on business and to do so at least 12 weeks before it comes into force. In support of this the SBS has provided extensive best practice advice to regulators on how to produce guidance which meets the needs of small firms, including the pamphlet *How to Get the Message Across – Guidance on Legislation that Affects Small Businesses*. In addition, the SBS is developing an Electronic Regulation Service as part of its National Information and Advice Centre. This service includes online authoritative regulatory guidance and a new service will guide SMEs to regulatory information tailored to their circumstances. A pilot online change of address service is also available in order that businesses may notify a change of address to several departments simultaneously.

The Regulation and Small Business Policy Directorate (RSBP) of SBS is at the forefront of driving forward the principles of the government’s “Think Small First” philosophy. It is addressing this challenge by:

- Identifying proposals that have an effect on small business at the earliest stages of policy making.
- Assisting government departments to consult small business prior to formulating policy and producing Regulatory Impact Assessments.
- Working in partnership with small businesses and their representative bodies to ensure that their concerns about regulatory proposals are considered.

RSBP has established customer consultation mechanisms that seek evidence for regulatory burdens and priorities for their reform, in partnership with small businesses and their representatives, the Better Regulation Task Force, the Regulatory Impact Unit at the Cabinet Office and regulatory departments and agencies. RSBP also works closely with various departments, local authorities and businesses so that sensible national and local enforcement regimes are adopted. SBS works closely with a network of Local Business Partnerships (LBPs) that complement the advisory role of Business Links by providing a forum for discussion on a range of regulatory and enforcement issues.

In Scotland, the Improving Regulation in Scotland (IRIS) Unit, available on the Internet, continues to offer an open door for businesses. The Unit has worked closely with the Scottish Executive in the strategic review of planning and the reviews of associated National Planning Policy Guidelines leading to a more efficient and modern planning system. The establishment of the Small Business Gateway will also assist SMEs by offering advice and guidance on a number of relevant regulations. The Unit continues to improve the use of Regulatory Impact Assessments. The introduction of a Review Regulatory Impact Assessment requiring a review of the original regulations within ten years of its introduction should ensure they remain fit-for-purpose and proportionate to the issue. Furthermore, the introduction of the Micro Business Test is intended to ensure that the specific needs of very small businesses are taken into account in the development of Scottish policy. The IRIS Unit continues to

develop its dialogue with the business community, both through face-to-face meetings, seminars and its promotion of the Enforcement Concordat and publishes a summary of its work on the Internet.

In Wales, the National Assembly for Wales is also contributing to the government's Better Regulation Initiative and is obliged to both consult with business and to consider the costs to business of any secondary legislation it proposes. Regulatory information is published on the Internet. The *Pathway to Prosperity – A New Economic Agenda for Wales* was published in July 1998 containing, among other goals, regulatory actions of benefit to smaller firms.

Financing

The UK government is working to improve relationships between banks and small businesses and to enhance access to financing through setting up business angel networks and providing tax relief to investors in smaller companies through the Enterprise Investment Scheme and Venture Capital Trusts. An Enterprise Fund will provide GBP 180 million over the next three years and incorporate the existing Small Firms Loan Guarantee Scheme, the UK High Technology Fund and regional venture capital funds.

The Small Firms Loan Guarantee Scheme (SFLGS) was created in 1981 to facilitate the supply of finance to small firms with viable projects but which are unable to obtain conventional finance because of lack of assets to offer as security against a loan or overdraft. The programme provides guarantees for loans to small businesses, in return for which the DTI charges the borrower a premium. There are currently 21 participating lenders including High Street banks and other financial institutions. In 2001-2002, 4 269 loans were guaranteed with a value of around GBP 255 million. The loan guarantee is set at 70% for start-ups and young businesses and 85% for established firms with a minimum of two years trading at the time of application. Eligibility for the programme applies to small firms (up to 200 employees and turnover of GBP 5 million or less in manufacturing and GBP 1.5 million or less in other eligible sectors). Loans are available for business development purposes and the scheme is open to a wide range of sectors. Certain sectors are excluded on the grounds of high displacement – retailing, catering and motor vehicle maintenance activities – or because of European state aid rules (coal, steel and transport sectors).

The UK High Technology Fund (UKHTF) was developed to encourage institutional investment in predominantly early stage high technology venture capital funds, and to increase the finance available for investment into technology-focused businesses. Managed by a professional fund manager, Westport Private Equity, the Fund was established on a “fund of funds” basis. This means it will not invest directly into small businesses but will invest in existing venture capital funds that have experience in early stage technology investments. Alongside GBP 20 million of government cornerstone investment, GBP 106.1 million has been raised by the fund manager from private sector investors, exceeding the original fund raising target of GBP 105 million from private sector sources. Over GBP 117 million of this has, to date, been committed to 8 specialist venture capital funds and, of this, almost GBP 35 million was used by the underlying funds to invest in 72 UK technology-based businesses. Technologies being supported include software, pharmaceuticals, bio-sciences and Internet technologies.

The regional venture capital funds (RVCFs) are being set up to address a national market weakness in risk capital provision for investment within the “equity gap”. There will be at least one RVCF in each of the nine English regions specialising in the provision of small-scale equity (less than GBP 500 000) on a strictly commercial basis to SME businesses with growth potential. The aim of RVCFs is to provide SMEs with growth potential, access to risk finance at the right time. Finance markets provide billions of GBP for SMEs, but not all needs are being met to the same extent. It is acknowledged that there is an “equity gap” at the lower end of the market. The government's intervention is designed to be the minimum necessary to stimulate private sector investors to provide small-scale risk finance for SMEs with growth potential. Long-term objectives are to:

- Increase the amount of equity finance available to growing SMEs to enable them to realise their full growth potential.

- Ensure that each region in England has access to at least one viable, regionally based venture capital fund, making equity based investments in smaller amounts in SMEs.
- Demonstrate to potential investors that commercial returns can be made by funds investing in the “equity gap” and so promote the increased involvement of the private sector venture capital industry.
- Increase the supply of quality fund managers operating in the “equity gap”.

As at the end of July 2002, five regional venture capital funds, covering the East Midlands, North East, North West, Yorkshire and The Humber and London became operational. These five funds have between them GBP 155 million of risk capital – available for investments below GBP 500 000 – in SMEs with growth potential. Investments have already commenced. The remaining four regional capital funds are expected to become operational by April 2003.

The government has been working with the main banks and others since 1998 to bring the informal investment market to full operation in order that business angels can become a mainstream source of finance for SMEs. Together they jointly support the National Business Angels Network (NBAN) in England, launched in 1999 and designed to act as a resource for the whole industry, operating as a national conduit through which any company seeking investment can be put in touch with investors. The equivalent organisation in Scotland, LINC (Scotland), was established in 1996.

SBS and social inclusion

The government, committed to creating in the UK a society in which everyone has the opportunity to develop his or her potential and in which the vulnerable will be protected, established in 1997 a Social Exclusion Unit within the Cabinet Office. In 1998, 18 Policy Action Teams were set up to examine various aspects of social exclusion, the Policy Action Team 3 (PAT 3) being asked to look at the role of “Enterprise and Social Exclusion’ and this group had “as part of its wider remit to promote small business, the SBS should encourage enterprise and business growth in disadvantaged communities”. In England, Business Link Operators (BLOs) play a key role in ensuring that everyone in their area, regardless of background, has access to the business support that they need.

Phoenix Fund

The Phoenix Fund was announced by the Secretary of State for Trade and Industry in November 1999 in response to the PAT3 report. It aims to promote enterprise in deprived areas and amongst groups under-represented in terms of business ownership. The Fund is managed by the SBS and has a budget of GBP 96 million up until March 2004. In the 2002 Competitiveness Spending Review an additional GBP 50 million was allocated to the Fund for the period from April 2004 to March 2006. The Fund currently consists of the following elements:

- A Development Fund to promote innovative ways of supporting enterprise in and among disadvantaged communities in England. Two bidding rounds have resulted in 96 projects.
- Financial support for Community Development Finance Institutions (CDFIs). This comprises two elements: a Challenge Fund to help resource CDFIs (available in England only) and loan guarantees to encourage commercial and charitable lending to CDFIs (UK-wide). Two bidding rounds have resulted in 42 CDFIs receiving funding.
- These tend to be not-for-profit organisations, run locally, which lend to businesses in disadvantaged areas.
- A national network of volunteer mentors to early stage businesses through the Business Volunteer Mentoring Association (BVMA). Following the successful completion of a pilot project in March 2001, the BVMA is being rolled-out across England. The initiative is being co-ordinated by the National Federation of Enterprise Agencies (NFEA) for delivery through Business Link local partnerships;

- City Growth Strategies (CGS) is designed to encourage towns and cities to develop and implement inner city strategies that put enterprise and business at the heart of regeneration. Pilot projects are running in Nottingham, Plymouth, St. Helens and London.
- The Development Fund for Rural Renewal, announced in November 2001, is managed by the SBS and aims to promote innovative ways of promoting enterprises in business communities in England adversely affected by Foot and Mouth. There are 20 projects being funded at a total of GBP 3.1 million up until March 2004.

In the November 2001 Pre-Budget report, the Chancellor made reference to the Early Growth Funding Programme, which will be administered by the SBS. The programme is being developed to encourage risk funding of start-ups and growth firms. The objective is to increase the availability of small amounts of risk capital for innovative and knowledge intensive businesses, as well as for smaller manufacturers needing fresh investment to pursue new opportunities. The SBS will target businesses seeking to raise up to GBP 50 000, and aims to help 1 000 businesses over the next three years. Bids are currently being evaluated from organisations and partnerships that can demonstrate innovative approaches towards developing funding streams to assist small businesses requiring small amounts of risk capital.

To complement these supply-side measures, and to ensure that as many SMEs with growth potential as possible are in a position to seek equity finance, the government is taking measures aimed at helping SMEs become “investment ready”. There is evidence that many SMEs who would otherwise benefit from an equity investment are missing out because they do not understand how such investments work and are not able to make their business proposals into attractive investment propositions. The UK government will fund a number of demonstration projects aimed at identifying best practice in providing investment readiness help and advice with the aim of making this available to many more SMEs.

Successive budgets have announced new taxation measures of benefit to small firms. The November 1999 budget announced: changes to the capital gains tax (CGT) to strengthen incentives for entrepreneurial investment; an Enterprise Management Incentive scheme to allow small high-risk companies to offer up to GBP 1 million of share options to help them recruit and retain high calibre staff; a tax-advantageous share plan for all employees; tax incentives to boost corporate venturing relationships; an SME R&D tax credit; reduced rates of corporation tax for the smallest companies (10% and 20% on certain conditions); and extension for a further year of the 40% first year capital allowances for SMEs. Other support includes a new unified Enterprise Investment Scheme and CGT reinvestment relief to stimulate the supply of equity capital for smaller higher-risk trading companies; a new University Challenge Fund to help universities turn good ideas into good business by creating GBP 50 million in venture capital; and a scheme whereby Inland Revenue provides new employers with one-to-one assistance with payroll/tax compliance.

Measures to address the issues of late payment and credit management include: the Late Payment of Commercial Debts (Interest) Act 1998 which provides small suppliers with a statutory right to claim interest on late paid invoices and which became effective in November 1998; transposing the European Directive 2000/35/EC on combating late payment in commercial transactions, working in partnership with the private sector through the Better Payment Practice Group (BPPG) to help small businesses tackle late payment and improve credit management practices; tough payment targets for government departments and their agencies and local authorities; publication of payment performance tables for central and local government; support for the publication, by the Federation of Small Businesses, of league tables showing average payment times of public limited companies and their large private subsidiaries; ensuring that credit management information is readily available on the Internet; and working with the Credit Management Research Centre at the University of Leeds to identify and disseminate best practice among small businesses.

Technology and innovation

The Competitiveness White Paper outlined a number of commitments with the intent of aiding innovative start-ups: a large increase in the number of SMEs wired up to the digital market place

by 2002; a 50% increase in the number of companies spun-out by universities by 2001-2002; to maximise the return from the EU's fifth framework programme for R&D; and an increase in the DTI innovation budget by more than 20% over three years to nearly GBP 230 million. The Information Society Initiative has run since 1996 as a partnership between industry and government with the aim of improving the competitiveness of businesses through effective and innovative use of information and communication technologies and helping to develop an environment in which multimedia and other advanced ICTs can thrive.

The Smart Scheme in England provides grants to individuals and small businesses to help them review their use and exploitation of technology or develop technologically innovative products and processes. The LINK Collaborative Research Scheme is the government's principal mechanism for supporting pre-competitive research partnerships between UK industry and the research base. It provides a framework for collaboration between the public and private sectors in areas of strategic importance for the UK economy. TCS aims to strengthen competitiveness by stimulating innovation in industry through collaborative partnerships between the knowledge base and industry. High quality graduates work in companies, normally for two years, on technology transfer projects jointly supervised by personnel in the knowledge base and industry.

In Scotland, the Scottish Executive's SMART, SPUR and SPUR^{plus} Programmes and Scottish Enterprise and Highland and Islands Enterprise Small Company Innovation Scheme (SCIS) assist SMEs to develop new products and processes. The Scottish Executive also sponsors the Innovators Counselling and Advisory Service for Scotland (ICASS), an initiative that provides specialist counselling and advice for Scotland's inventors and small innovative companies.

In Wales, Smart Wales is the banner under which the four main innovation grant schemes – SMART, SPUR, SPUR^{plus} and RIN – are grouped, providing a single point of entry into all four schemes using a common Registration of Interest form. SMART is run as a biannual competition. Welsh Design Advisory Services (WDAS), funded by the National Assembly for Wales, provide free independent design and material selection advice to Welsh businesses delivered throughout Wales via four dedicated design advisors. The Regional Technology Plan is a framework for innovation activities in Wales that is underpinned by over 60 key projects which are either completed or ongoing. This continually evolving plan has been the subject of detailed application for EU financial support for RTP2000. Know-How Wales aims to encourage partnerships between industry and academia in Wales for commercialisation of academic research. Innovation and Technology Counsellor Services provide free innovation and technology advice to Welsh SMEs through Connect Wales.

Management

Business Link is the national network of local partnerships between the business community and the government that provides a simple route to information and advice for small business through a single point of access. The network comprises 45 operators throughout England and can be accessed nationally via a contact centre (0845 600 9006) and complementary Web site developed specifically to meet the needs of small business customers (www.businesslink.org). The Business Link network delivers Business Link branded services, including pre-starts, start-up and micro businesses together with established and growth potential businesses. It is also committed to tackling social inclusion issues and assisting in reaching the untapped entrepreneurial potential within the economy. Business Link services are delivered through Personal Business Advisers (PBAs) who analyse and diagnose the needs of the SME customer and encourage business owner managers to take a longer-term view. They work with the SMEs to develop solutions that meet their needs by brokering access to the appropriate services delivered by other individuals and organisations. In brokering access to services the PBA acts as account manager for their SME client. Where services are not otherwise available the Business Link Operator may deliver these directly.

Work-based training is encouraged through Modern Apprenticeships and National Vocational Qualifications. Small Firms Training Loans are designed to help businesses with up to 50 employees pay for training consultancy, vocational education and education related to business objectives. The

Business Volunteer Mentoring Association has been established to provide free mentoring advice to pre- and early start up businesses from a force of volunteers from the business world. The University for Industry has been established to stimulate demand for learning among businesses and individuals and to provide high quality on-line learning programmes. The University for Industry also has responsibility for managing the Learndirect Helpline, a national learning information helpline that gives impartial advice on post-16 learning. The National Training Awards encourage excellence in training and development. Small firms are also supported to achieve the Investors in People standard, this support includes encouraging the development of “training champions” and the establishment of learning networks.

In Scotland, work-based training is provided through Skillseekers and Modern Apprenticeships which are delivered by the network of local enterprise companies. Activity is underway with the Federation of Small Businesses to raise awareness of work-based training and to help ensure that it is relevant and accessible to SMEs. The Enterprise and Lifelong Learning Department (ELLD) formulates policy on matters devolved to the Scottish Executive under the Scotland Act 1998. The Enterprise Network, consisting of Scottish Enterprise (SEn), Highlands and Islands Enterprise (HIE) and their network of 22 private sector-led Local Enterprise Companies (LECs) deliver Ministers’ objectives for economic development and skills development. The Minister of Enterprise and Lifelong Learning set out strategic direction in *A Smart Successful Scotland* published on 30 January 2001. This sets out three key organising themes for the Network activities:

- Growing Businesses – Scotland: a fast learning, high earning nation.
- Global Connections – Scotland: a globally connected European nation.
- Learning and skills- an emphasis on employability with every Scot ready for tomorrow’s jobs. The strategic framework provides focus for the Networks over a medium term timeframe and replaces guidance previously issued on an annual basis.

The LECs Network works within the policy and strategic framework set by SEn and HIE but they have flexibility to adapt their approach in response to local need. Recent emphasis on a network-wide approach, whilst retaining a balance, local flexibility and accountability, is developing consistency in the range and quality of support services offered and making the network activities transparent.

In Wales, the reconstituted Wales Management Council was given the responsibility to draw up a co-ordinated management and enterprise strategy with the key priorities of encouraging small firms to train and to become Investors in People; assisting SMEs to find ways to address common training needs, including a shared approach scheme for modern apprenticeships; and helping higher education institutions to develop closer links with SMEs. Business Connect is an advice and support service for Welsh business, launched in 1996, having similar aims to the Business Link service in England and the Enterprise Networks in Scotland. The Wales-wide telephone number (0345 96 97 98) puts businesses directly in touch with their local business centre, through which all of the main business support services can be swiftly accessed. A new business-led management Board has been set up, which operates as a limited company Business Connect Wales Limited, aiming to provide better strategic direction and co-ordination of business support. Management training is supported under the Action Plan for Management Training in Wales. The New Deal scheme provides support for firms that recruit unemployed people. A new entrepreneurial action plan for Wales is being developed to help strengthen the enterprise culture.

In Northern Ireland, LEDU, which has an annual programme budget of GBP 21 million, provides managerial and training assistance to small manufacturing firms through a wide range of schemes. In liaison with the District Councils and Local Enterprise Agency Network, it gives support to individuals wishing to become self-employed and to start new businesses. Services include business advice, training, ongoing counselling and financial support to businesses that already sell or have the potential to sell their products outside Northern Ireland. Training programmes are supported through Economic Development Partnerships and are delivered primarily through Local Enterprise Agencies. In 1998-1999, full-time employment among LEDU clients increased by 2 616 (net) or 8%; 99 export-focused start-ups were established; almost 40% of jobs created by new LEDU clients were located in disadvantaged areas; the volume of sales generated by LEDU clients increased by 5% and sales made to markets outside Northern Ireland increased by 12.5%.

Export promotion

Trade Partners UK is the lead government trade support service for British companies trading in world markets. It brings together teams in over 200 embassies and diplomatic posts overseas, the 45 Business Links in England and at least nine government departments, as well as representatives in chambers of commerce and the devolved administrations. The principal role of Trade Partners UK is to seek out and help UK exporters who wish to develop new opportunities in overseas markets. Trade Partners UK has a strategic objective to encourage new exporters, focusing on the development of the capacity to export amongst non- and inexperienced exporters. Particular attention will be paid to SMEs. Trade Partners UK's international service network enables it to provide a range of services including sales leads, market information, consultancy services, contacts and sponsorship of trade fairs, missions and seminars. Further information is available from local international trade teams situated at Business Links throughout England; from trade teams in the devolved administrations of Scotland, Wales and Northern Ireland; from the Trade Partners UK Web site at www.tradepartners.gov.uk and by telephone on 020 7215 5444/5.

The Action Single Market team, which is located within the DTI, was set up in 1996 to assist businesses that encounter barriers to trade in the single market and citizens who are prevented from exercising their single market rights. The majority of problems are successfully resolved through bilateral discussions with counterparts in other member states, but if necessary, complaints can be referred to the European Commission in Brussels. The service is free and all enquiries are treated as commercially confidential. Contact: Action Single Market, tel.: +44 20 7215 4459.

Scottish Development International was established in October 2001 and brings together the activities of Scottish Trade International and Locate in Scotland. It is a joint venture between the Scottish Executive and Scottish Enterprise and aims to ensure that companies are able to realise the full benefits of trading in international markets. Scottish Development International provides generic and custom market research and knowledge to Scottish companies and delivers customised strategic market entry support. This covers a wide range of activities including the delivery of all government trade services in Scotland, tailored market assistance programmes and assistance for companies on outward missions and attendance at exhibitions. In addition over 60 export support organisations operate as members of a network of 13 local export partnerships set up across Scotland. Partnerships include chambers of commerce, local authorities, local enterprise companies and the enterprise networks, all of which aim to provide more effective support to local companies and ensure maximum impact from available resources.

The Overseas Trade Unit of the National Assembly for Wales is the major provider of export development and promotional services to all sectors of the industry, commerce and service providers. In addition to the provision of the government's national export services (provided by British Trade International) the unit provides a dedicated annual programme of trade missions to target markets appropriate to the Welsh economy. Other local initiatives include an *Export Awards* scheme, an induction scheme for new exporters and a programme of services, clinics and workshops. In Northern Ireland, export promotion is undertaken through LEDU.

United States

SMEs in the economy

The United States has a very robust small business sector, and the share of output of small business (firms employing fewer than 500), as defined by the private non-farm economy, has reached 52%. On the basis of the total US economy, which includes the government share of GDP, small business represents nearly 40% of total economic activity. Small business is a vital part of the formal economy and can be among the most sophisticated businesses in an industry. Small business generates USD 4 trillion of annual economic output, 68 million jobs, one-third of foreign trade and as much as one-half of innovations. It is also a creative outlet for millions of small-business owners. While economic growth slowed in 2001, small business was able to benefit did from growth of 4% in 2000 after the longest economic expansion in modern US history.

Most new jobs in the United States are created by small businesses, which are responsible for between two-thirds and three-quarters of net new jobs, depending on the year studied. From 1997 to 1998 employment in the US increased by 2.8 million; 1.7 million of these jobs were realised in firms with fewer than 500 employees, and 1.4 million jobs were created in firms with fewer than 20 employees.

Approximately 97% of US firms employ fewer than 100 persons while around 88% have fewer than 19 employees. More than one-half of private-sector workers are engaged by small business, and three out of four net new jobs are created by small business. Over one-third of employment is accounted for by firms with fewer than 100 employees while firms with fewer than 20 employees represent around 18% of employment. Within manufacturing, firms with over 500 employees account for nearly 60% of employment while those firms having fewer than 20 employees generate employment for approximately one-quarter of manufacturing workforce. By 1999, SMEs accounted for nearly 97% of all US exporting firms.

Framework policies

During the last two years, the United States has implemented tax reform that has been beneficial to small business. At the urging of the President, the US Congress enacted the largest tax reduction package in a generation, totalling USD 1.35 trillion. The package included two provisions of importance for small business, including reduction in the marginal income tax rates and phased-in elimination of the inheritance tax. In addition, a number of programmes have been implemented at the federal level to assist small businesses that were adversely affected by the 11 September 2001 terrorist attacks on New York City and Washington, DC. The federal government has put in place grants, loans, loan guarantees, and outreach programmes to assist small business and has also provided some tax relief to those affected by the attacks. President Bush in early 2002 announced his Small Business Plan which includes numerous legislative initiatives, including: tax reduction and simplification; enabling small businesses to form groups to offer employee health insurance; increasing resources dedicated for analysis under the Regulatory Flexibility Act; enhancing access by small business to government procurement; and banking reforms.

By a law dating back to 1981, the Regulatory Flexibility Act (RFA), federal agencies must perform analysis of how proposed regulations may impact small business and publish this information. For the year 2000, SBA estimated that USD 3.6 billion in compliance costs were saved for small business, and for 1997-2000, actions taken in compliance with RFA saved small business an estimated USD 20 billion. SBA also has an active research programme on the role of small business in the economy and the economic effects of regulation on small business.

SME policies and programmes

The Small Business Administration has long been the US government's principal instrument for the design and implementation of policies for small business. The SBA was founded in 1953 and has the mission to aid, counsel, and protect the interests of small business, in order to help maintain and strengthen the US economy. A unique feature of the US small business system is the role played within government by the Small Business Administration. It actively urges government officials to consider the impact on small business of regulation and taxes and when necessary advocates or takes positions on issues. SBA analysts follow developments in economic, environmental, food and drug, health, industrial safety, government procurement, tax, and telecommunications regulations.

Entrepreneurship and management

The United States has an extensive network of non-financial services for small businesses designed to encourage entrepreneurship and enhance management skills. More importantly, the United States has a pro-business culture that encourages risk taking and innovation, rewards success, and provides for the ability to recover from business failure. Training for business careers is a common pursuit of university students, and many of the world's pre-eminent business schools are located in the United States. An array of assistance is provided at the local level through a large number of government and private-sector sources.

On the national level the federal government provides a comprehensive system of services for small business. Almost 1 000 Small Business Development Centres, often run in conjunction with local universities and business schools, provide management assistance to current and prospective small business owners by delivering counselling, training and technical assistance to over 620 000 clients annually. Small Business Information Centres (BICs) provide the latest in computer hardware, software, and telecommunications together with counselling to assist small business as they get started and grow. BICs serve 130 000 clients each year. Comprised entirely of volunteers, 11 500 counsellors of the Service Corps of Retired Executives provide free expert problem-solving assistance to almost 400 000 small businesses and sponsors hundreds of pre-business workshops annually. Eighty Women's Business Centres provide financial management, marketing, and technical assistance to current and potential women business owners, who comprise the fastest growing segment of US small business.

Pro-Net is an electronic gateway of government procurement information – for and about small businesses. It is a search engine for contracting officers, a marketing tool for small firms and a “link” to procurement opportunities and important information. It is designed to be a “virtual” one-stop-procurement-shop.

Financing

While many small businesses are self-financed or borrow from friends and relatives, those that enter financial markets typically turn to commercial banks. Banks are leading suppliers of credit to small businesses, accounting for 54% of total traditional small firm credit used, according to the 1993 National Survey of Small Business Finances. In June 2000, commercial banks had USD 1.3 trillion in business loans outstanding (commercial and industrial loans and commercial mortgage loans), of which 34% or USD 437 billion were to small businesses (defined as loans of less than USD 1 million). Total business loans outstanding increased by USD 158 billion or 14% in 2000, while small firm lending increased by USD 38.5 billion or 10%.

Venture capital differs from conventional debt financing in that it is an arrangement by which private investors take ownership or equity positions in young, growing and typically small firms. The National Venture Capital Association, a non-governmental organisation, estimates that the value of venture capital financing zoomed from USD 20 billion to USD 100 billion between 1998 and 2000.

In 2001, however, with the general slowdown in the US economy, venture financing fell to USD 38 billion. Much of this money went to small businesses.

One source of venture capital is made available exclusively to small businesses through private companies licensed by SBA. Called Small Business Investment Companies, these take investment positions in small business. In 2001, 4 000 financing operations were made with a value totalling USD 4.4 billion. The average financing amount was slightly over USD 1 million. The dollar value of financings was down 18% compared with 2000. Since 1960, this SBA programme has made 100 000 financings worth USD 30 billion. Past recipients of financing include many well-known large firms – which started out as small businesses – and include Apple Computer, Federal Express, Harman International, Intel, Octel, Peoplesoft, Staples and Sun Microsystems.

In addition, SBA has a large number of loan and loan guarantee programmes to assist small business in their financing needs. The 7A Loan Guarantee Program was established to provide guarantees that will facilitate lending to small business unable to secure financing on reasonable terms through normal lending channels. In terms of US government small business lending in 2001, private commercial lenders using the Small Business Administration loan guarantee made almost 43 000 loans worth nearly USD 10 billion. The Micro-loan Program aims to increase the availability of very small loans to prospective small-business borrowers. The 504 Certified Development Company (CDC) Program provides growing businesses with long-term, fixed-rate financing for major fixed assets, such as land and buildings. The Disaster Loan Program offers financial assistance to those who are trying to rebuild their homes and businesses in the aftermath of a disaster.

Technology and innovation

The research and innovation community of the United States has evolved from one traditionally dominated by research universities and large companies, to a continuum of research universities, federal laboratories, small and large businesses, and states supporting technology-based economic development. There is a growing importance of entrepreneurial small businesses for the rapid introduction of new, innovative products to the marketplace. Small businesses are creating not only new markets, but also new jobs, and are a vital element of US economic growth. Research shows that small businesses are often the most productive sector in bringing new innovations to the market. A study from the US National Science Foundation (*Research and Development in Industry*: 1997) shows the small business role in innovation and in the US economy to be growing.

While the above information shows a favourable trend for small business, one concern is that the many advantages and efficiencies of small innovative firms may not be fully realised because of obstacles faced in raising capital. For example, capital markets may not have the information needed to make sufficient investments in the high-quality but risky small-firm projects that can lead to significant and socially beneficial innovations. US government policies attempt to compensate for this shortcoming through programmes such as the US Department of Commerce's Advance Technology Program (ATP) and the Small Business Administration's Small Business Innovation Research (SBIR) Program. The ATP awards demonstration grants to target emerging technologies that are not yet commercially feasible. SBIR channels US government contracts for research and development to small businesses. The Small Business Technology Transfer Program (STTR) aims to expand funding opportunities in the Federal innovation research and development arena, reserving a specific percentage of Federal R&D funding for award to small business and NGO research partners.

The Manufacturing Extension Partnership (MEP) supports smaller manufacturing firms in becoming globally competitive, with services that are defined by industry, and delivered using both private and public sector expertise. The broad mission of the MEP is to provide information, decision support, and implementation assistance to smaller manufacturing firms in adopting new, more advanced technologies, techniques, and business best practices.

Electronic commerce

A study was carried out in 2000 on the extent to which US small business takes advantage of e-commerce.³⁰ It indicated that while nearly all small businesses have computers, only 40% use them for business purposes. The nature of use ranged from obtaining general information from the Internet (nearly all firms) to using e-mail (90%) to taking orders online (12%). Even fewer businesses used it for business-to-business transactions. The Katz report also identified what it calls “inadvertent internationalisation” via the Internet. Many small firms, that normally consider themselves local businesses, are often surprised to find customers outside the US contacting them.

Another report, published in 2001,³¹ revealed that one-quarter of small businesses surveyed intended to invest in developing a Web site or Internet marketing during the year. 70% said they were using Internet for business research, and one-quarter were using Internet to find new customers and sell online. 44% said they made business purchases online. 60% believed their use of Internet would increase in the following year. Of those businesses with Web sites, 17% attributed total firm sales of more than 10% to their business Web site.

SBA co-sponsored a national e-commerce summit with the Department of Commerce in 2000. Since then, SBA has been planning an e-business institute through an Internet portal for SME training and courses on e-commerce applications for small business. An emerging policy issue is whether sales through e-commerce should be subject to taxes. SBA-sponsored *Tech-Net* is an electronic gateway of technology information and resources for and about small high-tech businesses. It is a search engine for researchers, scientists, state, Federal, and local government officials; a marketing tool for small firms; and a potential “link” to investment opportunities for investors and other sources of capital.

The federal government views e-commerce as a growth engine for exports and international expansion, particularly among small and medium-sized enterprises. The US government has developed several outreach tools to help SMEs that wish to expand in international e-commerce, including: on-line market research; informational seminars on e-commerce related topics, including compliance with the Safe Harbour Agreement; and an on-line educational tool on how to use e-commerce to go global for industry. The Department of Commerce has also developed an IT Management Planning Tool, which is a CD-ROM-based, interactive database that helps SME managers to evaluate their IT assets and plan for upgrades into such applications as e-business and e-commerce.

Export promotion

From 1992 to 1999, there was a 107% increase in the number of SME exporters, from about 108 000 to over 224 000 firms. By 1999, SMEs accounted for nearly 97% of all US exporting firms. Two-thirds of all companies that exported in 1999 were firms with fewer than 20 employees. SMEs accounted for nearly one-third or USD 300 billion of US exports in 1999. 225 000 small businesses (SMEs) exported that year, of which 60 000 were manufacturers. All but 3% of exporters are considered to be small business.

The Trade Promotion Co-ordinating Committee (TPCC) is chaired by the US Secretary of Commerce and has participation from the 20 US government departments and agencies that provide export promotion services. The TPCC develops an annual “National Export Strategy” which provides an outline of the US government’s plans for promotion of US business exports, with a strong focus on the needs of small business. The current National Export Strategy puts an emphasis on improving customer service to smaller exporters and increasing the awareness of government programmes by smaller exporters.

Government assistance to small businesses (SMEs) involved in international trade is widespread. Many state governments provide export assistance, including financing provided at market rates, as well as non-financial assistance. At the Federal or central government level, 20 federal agencies and

30. This study was conducted by the private-sector small business association, the National Federation of Independent Business, and authored by Jerome Katz using 1999 data.

31. Dun and Bradstreet’s “20th Annual Small Business Survey”.

departments, including the Department of Commerce, Export-Import Bank, and Small Business Administration (SBA), make available export promotion services. ExIm Bank and SBA make loans available at market rates for both short-term and long-term purposes related to small-business export.

The US Export Assistance Centres (USEACs) provide expert counselling and advice, information on markets abroad, international contacts, and advocacy services in over 100 offices in the United States and over 70 countries worldwide on exporting. Seminars on electronic commerce are offered that are designed to educate the export community on the Internet-based marketing and technology tools available. The Trade Information Centre (TIC) serves as the first stop in the federal government for all export information and assistance; it is planned to expand the assistance available from the TIC to include country-specific information such as tariffs, taxes, and sectoral and business regulations.

SBA's Export Working Capital Program helps small-business exports by providing guarantees to transaction-specific loans of USD 1 million or less. Its International Trade Loan Program helps small business engaged or preparing to engage in international trade as well as small businesses adversely affected by competition from imports. The SBA and the ExIm Bank have a number of measures that provide both working capital and insurance to support small-business exporters. SBA's Export Express is intended for companies that are new to exporting and intended for companies that need only small amounts of money. It enables financial institutions to make decisions more easily about risks in export transactions.

The Export-Import Bank is launching a pilot programme to assist small businesses that have not been able to obtain financing. Small businesses that meet specific criteria (minority-owned, women-owned, located in depressed urban or rural areas, or in the environmental sector) may be able to obtain coverage for 100% of their export working capital needs. The Department of Commerce holds export financing seminar programmes, with the aim of educating small businesses on the types of export financing vehicles available but also teaching them to use export financing to win more sales.

Other programmes

The Office of Small and Disadvantaged Business Utilisation promotes the use of small, minority, and women-owned small businesses in compliance with federal laws, regulations and policies in every federal agency and assists such firms in obtaining contracts and subcontracts with the agency and its contractors.

European Commission

SMEs in the economy

There are no less than 20 million SMEs (defined as enterprises with less than 250 employees) in the EU, providing employment to 65 million people. They account for 99% of all businesses and provide 53% of jobs.³² SMEs represent two-thirds of total employment, a significantly greater share in the EU than in either the United States or Japan, both of which find a much higher share of jobs in large companies. Within SMEs, total employment is split up roughly equally between micro (employing less than ten employees), small (up to 50 employees) and medium-sized enterprises (up to 250 employees). On average, an enterprise provides employment to six persons. The average for micro-enterprises is two persons. Turnover per enterprise is around EUR 600 000 in SMEs, compared to a turnover of around EUR 255 million in large enterprises.

In 2000, at Feira (Portugal), the European Council endorsed a Charter for Small Enterprises, a statement both of the reasons why it gave central importance to small business and of its commitment to act in their support. The Charter has become a pillar of the European Commission's enterprise policy and a cornerstone of the policy of the member states. *Think Small First* sums up the essence of the EU's enterprise policy, and the Charter is in the mainstream of that approach.³³

Framework policies

In the European Union, much of the policy environment of small business is determined under the competence of the member states. The Commission has an important, if secondary, role to play in helping member states improve their performance, through making use of its Treaty powers and through the so-called open method of co-ordination. Further, through the intervention of the structural funds, the EIB and other financial instruments managed by the European Investment Fund, the Community dimension can bring direct support. Finally, in the exercise of Community competence, the Commission can usefully influence the environment of small business in fields such as the regulatory environment and access to the market.

Among the various Community policies recording synergies from work carried out within the framework of the Charter, the cohesion policy is of high importance. The underlying reason for this is that SMEs, and notably small enterprises, are particularly important in regions that are lagging behind in terms of development. Therefore, progress made according to the provisions of the Charter is of utmost importance for the added value that the Community is able to achieve based on synergies with cohesion policy.

Economic and monetary union also provides a boost to small enterprises by setting up a stable macro-economic environment and contributing to the full completion of the internal market, giving companies the opportunity to engage in cross-border trade on a much safer and more transparent basis than before. This is particularly true for small businesses.

32. Source: Observatory of European SMEs (forthcoming report).

33. See in particular the 2001 Charter Report: "Report on the Implementation of the European Charter for Small Enterprises", COM (2002) 68.

SME policies and programmes

The implementation of the Charter is an essential pillar in the Commission's "think small first" policy. In each of the ten fields highlighted by the Charter, action has been taken through a variety of different measures. These include the Multi-annual Programme for Enterprise and Entrepreneurship³⁴ which comprises of support to SMEs through the Euro Info Centre Network, financial instruments and a number of policy-related Best Procedure projects being carried out jointly with the member states.³⁵ In addition, the Joint Employment Report³⁶ presents an annual overview, based on national reports, of member states' measures in favour of entrepreneurship.

The objective pursued by the Commission has been actually to encourage member states to take measures aimed at promoting entrepreneurship and improving the business environment throughout the SME life cycle. This was achieved in particular through the *Best* procedure, which consists of preparatory analysis and benchmarking exercises in a limited number of specific areas involving co-operation with experts from national governments.

Entrepreneurship

As regards the improvement of the conditions for creating a business, the Commission has applied the *Best* methodology to the following issues: education and training for entrepreneurship, benchmarking the administration of start-ups, benchmarking the management of incubators, business support services and the promotion of entrepreneurship amongst women.

Concerning business start-ups, one can note the efforts to simplify regulatory requirements and the creation of single access points for companies. A lot of improvements have also been achieved in the field of support services.

The Commission also took initiatives aimed at overcoming barriers to firm exit, first examining member states' attitudes towards business failure and bankruptcy, and expressing the need for a clear legal framework in this area. In addition, it addressed the issue of the transfer of business, by continuing its follow-up of measures taken by member states to facilitate business transfers and identifying transfer-related support measures.

Results in these various fields are intended to provide guidance to member states on future policy development. Meanwhile, several seminars were organised during 2001 with the member states to deepen the reflection on some issues, namely entrepreneurship for the future, business failure and top-class business support services. Reflections for a Green Paper on entrepreneurship have also started with the objective to further develop the entrepreneurial spirit in Europe.

Moreover, the Commission has been keen to introduce entrepreneurship concerns within EU programmes. One can mention the European Social Fund (ESF) which has made the promotion of entrepreneurship one of its objectives, including for example the development of entrepreneurial skills or the transfer of technology to SMEs. The Commission has also examined the situation of target groups regarding entrepreneurship, *i.e.* young people, immigrants, women and specific forms of enterprises (crafts and small businesses, co-operatives, mutuals, etc.).

Following these projects, the Commission has set up several databases containing more than 2 000 business support measures targeted at SMEs as well as good practices in business support initiatives. These cover the 15 EU member states, six candidate countries and the four EFTA countries, thus providing a large and systematic overview of business support measures throughout Europe.

Finally, an SME Envoy of the European Commission has been appointed at the end of 2001. This new function has been created to step up exchanges with SMEs and their representative bodies,

34. Council Decision of 20.12.2000 on a multiannual programme for enterprise and entrepreneurship, and in particular for small and medium-sized enterprises (SMEs) (2001-2005) (2000/819/EC).

35. 2001 Best Procedure Report, SEC(2001) 1704, 29.10.2001.

36. COM(2001) 438 final, 12.9.2001.

providing for a visible contact point for SMEs and ensuring that SMEs' concerns are better taken into consideration in EU programmes and policies.

Financing

The overall issue of access to finance is dealt with in the framework of the Financial Services Action Plan, which aims at removing any unnecessary administrative or legal barriers to the raising of capital on a cross-border basis. This is for instance the intention behind the proposed Directive on a Single Prospectus, which aims to ensure that a prospectus or offer document approved in one Member State will be accepted in all member states. In addition, financial reporting will be enhanced by removing national variances in accounting standards through the introduction of International Accounting Standards across the EU.

In October 2001, the Commission issued its mid-term evaluation of progress under the Risk Capital Action Plan (RCAP). Adopted by the Cardiff European Council, the RCAP sets out a series of actions to break down the barriers to the establishment of a well-functioning risk capital market in the EU. The evaluation emphasises the positive development of venture capital in Europe in recent years and the growth of finance for seed capital and start-up ventures. It also points out that the European venture capital industry has become more sophisticated and better organised. However, the depth of markets continues to vary significantly between member states. Particular attention needs to be given to ways and means of stimulating the emergence of potential new growth companies, including improving the links between the world of scientific research and that of business.

The European Commission also has a number of different measures to facilitate SMEs' access to financing. These measures are targeted at all the stages of the business cycle. They include improving the access to seed financing, support of increasingly specialised venture capital funds, and measures to facilitate SMEs' relations with the banking sector.

On seed capital, the aim is to stimulate the supply of capital for the creation of innovative new businesses. Support is provided to seed funds, incubators and similar organisations. The objective is to support the long-term recruitment of additional investment managers, thereby reinforcing the capacity of the venture capital industry to cater for investments in seed capital. The ETF Start-up Scheme is also targeted at innovative SMEs and the availability of risk capital for start-up and early-stage phases. The EIF invests on equal terms with other equity investors in specialised venture capital funds. The focus is on smaller or newly established funds. These specialised funds tend to be operating at a regional level, focusing on specific industries or technologies and aimed at financing the exploitation of R&D results.

To facilitate the contacts between SMEs and banks and other financial institutions, the European Union has recently begun to develop a code of good practice. Part of the work is dedicated to identifying good practices in the simplification of procedures. These actions followed the suggestions made by the Fourth Round Table of Banks and SMEs, which was concluded in December 2001. The SME Guarantee Facility aims to stimulate job creation by supporting SMEs' investment activities, through increased availability of loan finance. This is achieved by increasing the capacity of guarantee schemes and relates to both new and existing portfolios. The Guarantee Facility provides four different "windows" for (traditional) loan finance, micro-loans, loans for ICT investments and equity investments.

Technology and innovation

The Framework Programme for Research, Technology and Development (RTD)D has been, and continues to be an important tool for the European Union's Technology and innovation policies. SMEs are an important target group of the Sixth Framework Programme for RTD, with 15% of the budget for the seven thematic priority areas reserved for SMEs. This amounts to around EUR 1.7 billion, making the Framework Programme one of the largest support instruments in the world for SMEs in the field of research and innovation.

Under the Fifth Framework Programme for RTD, the Pilot Action of Excellence for Innovative Start-ups (PAXIS) offers a network for economic areas that provide exemplary conditions for start-ups and spin-offs. PAXIS regions are expected to become European "showcases" of regional excellence in

fostering innovation. "CORDIS", the Community Research and Development Information Service, is hosting a new service to help SMEs participate in and benefit from European research funding. It will be of particular value to innovative SMEs that apply for research funding through the SME Specific Measures of the Fifth Framework Programme for RTD, and for those interested in applying.

The Regional Innovation Measures aim to encourage regions to act in an international context by facilitating the exchange of experience between those regions that are involved in innovation actions. The new generation of innovative actions for 2000-2006, financed under the Structural Funds, is particularly relevant for small enterprises. Three themes have been chosen for this period: a regional economy founded on knowledge and technological innovation, *eEurope-regio*: the Information Society and regional policy, and regional identity and sustainable development. A total budget of EUR 400 million is available for these programmes.

To help improve the ability of public research organisations, notably universities, to co-operate with industry and to facilitate the transfer of knowledge and technologies, the "gate2growth" initiative supports the "Proton Europe" network. This is a network of industrial liaison offices (ILOs) in public research organisations that facilitates interaction and exchange of good practices between ILO and IPR (intellectual property rights) managers.

In the Education and Training action area of the IST Programme, there is a cluster of projects that pilot and develop best practice for advanced on-the-job training solutions in SMEs. The objective is to foster the adoption of technology-based solutions and services that enable a complete life cycle of on-the-job training in SMEs, including the development of sustainable business models.

Electronic commerce

In March 2001, the Commission adopted a Communication on "Helping SMEs to GoDigital (*eEurope GoDigital*)".³⁷ In the *eEurope* Action, SMEs were identified as being critically important for promoting eEurope. Member states and the Commission are invited to encourage SMEs to "GoDigital" through co-ordinated networking activities for the exchange of best practices, e-commerce readiness and benchmarking. A grant theme of EUR 750 000 has been made available for organising GoDigital workshops and seminars, and a Euro Info Centre GoDigital campaign in 18 countries started in September 2001.

In its Communication on "The impact of the e-Economy on European enterprises: economic analysis and policy implications" of November 2001,³⁸ the Commission further underlined the need for public administrations to be at the leading edge of online service delivery and to provide incentives for SMEs to access such services. The need to strengthen ongoing initiatives at all levels to help SMEs acquire ICT and e-business skills, is also emphasised.

Management

The "Trend Chart on Innovation in Europe" pursues the collection, regular updating and analysis of information on innovation policies at national and Community level. It focuses on innovation finance, the establishment and development of innovative businesses, the protection of intellectual property rights and the transfer of technology between research and industry. It also provides a European forum for benchmarking and the exchange of good practices.

In a *Best Procedure* project on business support services, fifteen guidelines for best practice³⁹ were set out. These included a re-affirmation of the fundamental importance of client-orientation in support service provision and an emphasis on the need for more coherent services. The aim should be to help enterprises build their own management capacity. Emphasis was also put on providing services tailored to the individual needs of clients and the need to create an evaluation culture that feeds back into the design and operation of support services.

37. COM(2001) 136 final, 13.3.2001.

38. COM(2001) 711 final, 29.11.2001.

39. "Creating Top-class Business Support Services", SEC(2001) 1937, 28.11.2001.

Other programmes

Other programmes of importance include simplification of regulatory environments, further advantages from the single market and making skills available to SMEs. The Commission works with a number of projects aimed at simplifying the regulatory environment for business and to introduce legislation impact assessment systems both in member states and within the European institutions. To enable SMEs to get more out of the single market, the Commission tries to simplify existing public procurement regulations and to support the introduction of e-commerce in procurement.

SPECIAL FOCUS ON TRANSITION ECONOMIES: ROMANIA

Introduction

This chapter places special emphasis on a non-OECD transition economy. Romania was selected because it is the largest country in south-east Europe (SEE), with a population of 22.4 million inhabitants, and has made substantial progress across a range of different areas of SME policy, as discussed below.

Over the past ten years, the Romanian economy has been characterised by a series of stop-and-go reform attempts resulting in a highly cyclical growth pattern. Like most transition countries, Romania experienced a sharp recession during the early 1990s, followed by a period of steady growth and declining inflation from 1993 to 1996. This first phase of economic stability was short-lived as it was built at the expense of large subsidies to state-owned enterprises, rising fiscal and current account deficits, and the rapid accumulation of foreign debt. These imbalances became unsustainable by the end of 1997 when inflation reached a peak of over 150%, prompting sharply tighter monetary and fiscal policies. Inflation declined rapidly to around 40% at the end of 1998, but economic growth was brought to a sudden halt and the economy plunged into a deep recession.

Subsequently, policy measures to stabilise the economy as part of a stand-by loan arrangement with the IMF succeeded in reducing the current account deficit to sustainable levels, restoring the stock of foreign reserves to more than two months of imports at the end of 2000 and containing the budget deficit. Moreover, after three years of negative growth and rising unemployment, the economy stabilised and as wide range rate devaluation stimulated exports, enjoyed positive growth in 2000.

More recently, domestic demand has rebounded, contributing to strong growth (over 5% in 2001), and putting renewed strains on the current account. The government has announced policy measures to contain the trade deficit and against the background of the global slowdown, real GDP growth is forecast to slow to 3.5% in 2002.

In the last decade or so, and in comparison with a number of other countries in the region, Romania has developed an extensive policy framework for small and medium-sized enterprise (SME) development thus making it particularly interesting as a focus for this chapter.

SMEs in the economy

The emerging private sector is responsible for a significant share of the economy. Its contribution to GDP was only 15% in 1989 but was estimated to be 65% in 2001 (EBRD, 2001b). The SME sector grew rapidly during the initial years of transition, however, the recession of 1997 to 1999 affected this sector and the pace of new registrations slowed during 1997-2000 (see Table 4.1). The economic recovery of 2001-2002 is probably helping to reverse this trend; however, relevant data are not yet available.

In line with other countries, an analysis of the composition of registrations based on Chamber of Commerce and Industry data shows that micro enterprises dominate the SME sector (92.8%). There is a high concentration of SMEs in the trade sector (66.9%) reflecting the fragmentation of the distribution and retailing industry in Romania (see Appendix Table A4.2). The data also suggest that the service sector (14.5%), although still relatively underdeveloped, has a good deal of potential for development.

Table 4.1. Decline in SME growth rate (1997-2000)

	1997	1998	1999	2000
SMEs active at year end	367 301	383 931	391 288	395 146
SMEs becoming active during the year	–	57 265	47 659	44 152
SMEs becoming inactive during the year	–	41 387	40 838	40 645
Annual growth rate of the private SME sector	–	4.5%	1.9%	1.0%

Source: Romanian Ministry for SMEs and Co-operatives, 2001a, Table 4.3.

Policy framework for SMEs

As with many other European transition economies, the two main policy goals in Romania have been to gain entry to NATO and to accelerate the process of accession to the European Union.

These goals will require macroeconomic stabilisation and further progress in the transition to a well-functioning market economy. During 2001-2004 the government aims to reduce inflation to single digits (from 30.2% at the end of 2001), while still achieving high annual economic growth rates (of 4.5% to 6% *per annum*).

To facilitate achievement of these goals, the government's strategy has been to generate an environment that is more conducive to enterprise development and growth. The government has attempted to streamline and accelerate the process of privatisation. Most privatisations have already taken place in the SME sector (see OECD-EBRD, 2002) and the focus has now shifted to the large state-owned enterprises (SOEs). The new government has acknowledged that restructuring the SOEs means that the economy will rely even more heavily on growth of the SME sector to absorb the resulting employment loss and generate greater dynamism. The government has underlined its commitment to the SME sector by creating a Ministry for SMEs and Co-operatives, to develop and co-ordinate SME policy and strategy (see section on SME Policies and Programmes below).

Important elements of the main framework for SME policy, *e.g.* those associated with tax incentives for SMEs, are expected to be abolished shortly, to help balance the national budget and create a level playing field in relation to the fiscal issues for SMEs and larger enterprises. There is a need for greater clarity, simplicity and stability in the fiscal system – this is especially important to the SME sector.

The Ministry for SMEs and Co-operatives, established in January 2001, has set ambitious targets for the SME sector for the period 2001-2004, such as:

- Creating 760 000 new jobs.
- Increasing SME exports by 10% per year.
- Increasing the SME sector's contribution to GDP.

The main tasks and functions of the Ministry for SMEs and Co-operatives are to:

- Develop SME policy and strategy in Romania.
- Draw up legislation relating to SMEs.
- Elaborate, implement and monitor programmes for SMEs.
- Assist in improving services to, and performance of, SMEs.
- Assist in improving access to finance.
- Improve international collaboration to enable the Ministry itself to benefit from international experience.

Since its creation, the Ministry for SMEs and Co-operatives has focused on:

- Preparation of a national strategy for SMEs.
- Elaboration of an action plan to remove regulatory barriers (which is presented to the government every six months), including a network of one-stop shops for the registration of new and existing businesses.
- The creation of a national credit guarantee fund for SMEs.

A national strategy for SME development has been adopted and highlights the following priorities:

- Improve the business environment for the stimulation of the SME sector.
- Develop economic activities and increase the competitiveness of SMEs.
- Improve SMEs' access to external markets.
- Promote an entrepreneurial culture and stimulate new SMEs.

This is an ambitious programme, and experience in SEE transition countries suggests that such SME strategies need to be attainable, realistic, specific, costed and endowed with a clear timeline. The latter two elements are critical for accountability and evaluation purposes; however, there is little evidence that these issues have yet been tackled in the national strategy for SMEs.

A budget to implement the strategy for 2002 has recently been approved but it does not appear consistent with the ambitions of the strategy. The Ministry does not manage directly the substantive SME-oriented programmes financed by external donors such as the EC and the World Bank. This is the remit of the Ministry of Development and Prognosis, since it is the contracting and payment authority for the PHARE-accession monies. The separation of national policy and strategy from the programming and sourcing does not have to be problematic, so long as close collaboration exists between the two ministries.

One of the noteworthy features in Romania is the absence of an SME implementation agency. The Ministry of SMEs and Co-operatives thus must determine policy and strategy, as well as manage its implementation. This is not necessarily a weakness, as long as the Ministry for SMEs and Co-operatives is able to operate effectively through the network of existing organisations engaged in the SME field; and has the human resources to carry out both activities effectively. With respect to human resources, the Ministry for SMEs and Co-operatives recognises the need for measures to attract and retain quality staff, preferably with private sector experience.

Given the budgetary and human resource constraints, the Ministry for SMEs and Co-operatives has focused on improving the business environment in order to stimulate the SME sector. This can have a significant impact on stimulating economic development without engaging significant amounts of resources. This can also be achieved by working with existing SME organisations, *e.g.* the collaboration between the Ministry for SMEs and Co-operatives and the Chamber of Commerce and Industry to introduce one-stop shops for the registration of new enterprises.

Mechanisms for ensuring effective consultation with the SME community are an important issue. Currently, the main mechanism for consultation and dialogue is through the Tripartite Council which consists of seven representatives from the Ministry for SMEs and Co-operatives, seven employers' organisations and five trade unions. This is a constitutional requirement that can be a useful vehicle for dialogue both in terms of existing and new legislation and developments affecting the SME sector. The composition of the Tripartite Council needs to be reviewed and further progress in building an effective two-way partnership and dialogue between government and the SME policy community would be beneficial.

Regional development

The key organisation responsible for regional development is the Ministry of Development and Prognosis (MDP), created in January 2001. The MDP is central to the government's economic strategy and has a strong influence on SME development through its role with respect to the National Development Plan, part of which concerns SMEs. It also has an operational and programming role as the contracting and payment authority for the Phare funds, about EUR 20-30 million of which is devoted to

SME support. Through its other activities, such as liaison with the independent network of regional development agencies and the centrally funded programmes for assisted areas such as industrial parks and disadvantaged zones, the MDP exerts a strong influence on the SME sector. It is therefore essential that the Ministry for SMEs and Co-operatives and the MDP co-ordinate their activities for the development of the SME sector in Romania.

Entrepreneurship

Promotion of entrepreneurship

The attitude of the general public to entrepreneurs is generally negative in transition economies such as Romania, reflecting an inheritance from the communist regimes which discouraged such activity. Combined with recent experiences such as the uneven effectiveness of the privatisation process, entrepreneurs and entrepreneurship are often equated with opportunism and dishonesty by the general public. In addition, the private sector often perceives the attitude of the public administration, whose mandate is to assist entrepreneurial activities, as indifferent.

The Ministry for SMEs and Co-operatives is working to cultivate a more entrepreneurial culture in Romania. In its SME strategy, it highlights the need to support the improvement of the business culture by generating a more positive attitude towards businesses and entrepreneurs, for example through focusing on:

- Information campaigns: government-led information campaigns (TV, press and radio) designed to generate a more positive attitude towards entrepreneurship;
- Media reporting: the Ministry requires a long-term strategy, in co-operation with the SME policy community, to highlight positive developments and success stories.
- Publications for entrepreneurs: publications focusing on enterprise activities are an important source of information for business people, especially those running small firms. Currently, the most significant publication is "Revista IMM", which only reaches a small proportion of entrepreneurs.

Training initiatives

The globalisation of the world economy, technological innovation and increasing competition call for better, on-going professional training and qualifications to underpin business success (OECD, 2002). This is particularly the case for SMEs, which often operate in specialist or niche markets and need to stay at the "cutting edge" of developments. Short training courses are also required, on such issues as: business planning, starting businesses, taxation, marketing, applications for credit, etc. A range of target groups exists: small entrepreneurs, women entrepreneurs, the unemployed, pre-start-ups, etc. Training is typically provided by private sector firms, business support centres, universities, Chambers of Commerce and Industry offices.

Financing

Banking sector

The private enterprise sector is inadequately served by the banking system, but banking reforms bode well for the future. Following the 2001 privatisation of Banca Agricola, more than two-thirds of total assets of the banking system are in private hands and about 55% are foreign owned. Of the three remaining state-owned banks, Banca Comerciala Romana is preparing for privatisation in 2002. The cleaning up of the bad loans of two large state-owned banks (Bancorex and Banca Agricola), enhancements of banking supervision and tightening of regulation, as well as substantial injections of capital, have helped strengthen the banks' financial position and improve the quality of their loan portfolios. These are necessary but not sufficient pre-conditions for banks to engage in lending to the enterprise sector.

In October 2001, the Romanian banking system comprised 41 banks, and total banking assets amounted to over EUR 11.9 billion. The first banks to enter the SME sector in the 1990s were Banca Romanesca, Banca Transilvania and Banca Ion Tiriac. They suffered, however, from lack of specific experience in lending to SMEs and their efforts mostly consisted of administering funds received from donors and international financial institutions (IFIs), with the bank bearing the project risk and offering the credit at market rates. The experience of Romanian banks with foreign credit lines is very mixed, with the under-utilisation of funds granted being due in some cases to very specific targeting of the credit lines, and in others to poor project design or implementation. There are at least 13 banks engaged in lending to SMEs (OECD-EBRD, 2002) but lack of access to credit remains one of the top five difficulties encountered by SMEs, due to, *inter alia*, lack of information about sources of finance, perceived high levels of collateral required by banks, high transaction costs, lack of business planning skills, and high interest rates.

Guarantee funds

In order to deal with the high collateral demanded by commercial banks when lending to SMEs, the government of Romania has set up two guarantee funds:

- The Rural Guarantee Fund, set up in 1994 with funding from Phare (EUR 9 million), has a capital of EUR 90 000. Shareholders are the Ministry of Agriculture and five commercial banks. Its mandate is to facilitate access to credit for enterprises in the agribusiness sector by providing guarantees (70% of amount of loan for long-term loans (with a maximum of EUR 175 000), 50% for short-term loans and 30% for leasing contracts).
- The Romanian Loan Guarantee Fund was set up by the government in 1993, and is funded by Canada and Austria. Its founders were Bancorex, BRD, BCR, Banca Agricola and the National Agency for Privatisation. It is now completely privately owned and operates as a joint stock company. Its mandate is to provide guarantees for loans extended by commercial banks to privately owned enterprises (up to 70% of loan value, capped at EUR 500 000).

Through Ordinance 23 (1999), the government introduced the legal basis to set up regional guarantee funds, with capital provided by private investors to be matched by the government. However, following the initial investment from the private sector in these regional guarantee funds, funds from the state budget were not released and the regional funds were never operational. The introduction of a new law in January 2001 (Law 133), paved the way for the National Credit Guarantee Fund for SMEs, expected to start operating mid-2002. An initial budgetary allocation of EUR 1.7 million has been made and subsequent budgetary allocations will bring its social capital to EUR 6.5 million at the end of 2002 and EUR 30 million by 2006. The Fund will have branches in each county and it is expected to guarantee credits obtained by SMEs. Advisors at the Ministry for SMEs and Co-operatives have recommended that the guarantees be issued for up to 75% of the credit for investments and letters of guarantee, 60% of the credit granted for working capital, and 80% of the credit provided to start-ups.

The Fund offers the prospect of assisting start-ups and SMEs in need of capital; however, there is an inherent risk in state-run structures that the allocation of guarantees will not be market determined. International experience has shown that the delegation of the allocation of guarantees to the private sector can minimise state interference in the allocation of funds, and distortions linked to what is, *de facto*, a subsidy. The Ministry for SMEs has indicated that minority participation in the Fund will be offered to the private sector, but this will not suffice for the market mechanism to fully function without government intervention.

Leasing

The current legislation has been in place since 1997 and was amended in 1998. In addition to the leasing activity of some commercial banks, some dedicated leasing organisations exist under the aegis of the National Union of Leasing Companies, an independent NGO founded in 1996. There are about ten

main organisations in the field and the perception of businesses engaged in leasing activities is that the legislation works reasonably well and should play an increasingly important role in the future.

Equity funds

The venture capital market is still in its infancy. Private equity funds operating in Romania are estimated at around EUR 325 million and the six main equity funds operating in Romania are discussed in a recent report (OECD-EBRC, 2002). The capital available for private equity investment is raised abroad either privately or through IFIs. The market is heavily dependent on the perception of western institutional investors of the country's risk and outlook. Due to high transaction and monitoring costs, equity funds tend to be attracted by medium and large size enterprises, thus only marginally responding to the long-term finance needs of SMEs. Few regional equity funds operate in Romania, and they are generally attracted by large investments and tend to consider only joint projects with other strategic investors. Exit from equity funds is mainly limited to sales to strategic investors, given the very early stage of development of the capital market and the lack of interest of portfolio investors in Romania. Competition is virtually non-existent, as equity funds are, *de facto*, the only providers of long-term finance to the enterprise sector in Romania.

Microfinance

Commercial banks are not active in this sector: the average loan amount for the Romanian banking system is about EUR 250 000. It is only through dedicated donor programmes providing a substantial financial incentive for the commercial banks that the financial needs of micro enterprises have been addressed. Credit co-operatives offer an alternative to bank lending for micro enterprises but following the collapse of Bank Co-op and of the largest and best known Romanian Investment Fund (FNI), they have significantly slowed their lending activities. Finally, pawnshops offer loans with maturity between five and 30 days at 1% rate per day. Micro enterprises thus have to resort mainly to family/friends and savings as a source of finance. Only the best-established micro enterprises can use suppliers' credit.

There are a number of foreign NGOs that extend relatively small loans – from EUR 300 to EUR 9 000 – to small entrepreneurs and low-income households. Their activity was hampered in the past by unclear legislation, which impeded lending activities outside the banking sector with the exception of non-interest bearing loans. These NGOs circumvented the legal constraint by requiring clients to pay administrative fees for loans received.

In 1999 MCR SA was established to test this segment of the market for a group of international investors interested in setting up a microfinance bank along the lines of similar institutions in the Balkans, *e.g.* in Albania. The group of investors (Kommerzbank, IFC, EBRD, DEG and IMI) decided to transform MCR into a fully-fledged dedicated microfinance bank, with initial capital of about EUR 10 million, which would acquire the existing portfolio of MCR. After 18 months, performance has been very good and demonstrated that there is a real market for micro credit in Romania. In May 2001, the average credit extended to micro enterprises was EUR 6 500, and only 0.5% of the loans were in arrears over 30 days.

Technology and innovation

The level of resources available for research and development has been declining, both at state level (less than 0.5% of GDP in 1998 and about 0.25% in 2001) and private sector level (where business expenditure on R&D was estimated to be less than 0.4% of GDP in 1998). Nevertheless, there is a policy to change this situation, as exemplified by the government's National Plan for Research, Technology Development and Innovation, for the period to 2005. Innovative products, upgrading technology and quality standards, scientific and technical co-operation at international level, and sectoral foci such as developing the biotechnology sector and building an information society are among the priority goals. The Plan also provides research and innovation support to SMEs through, for example, the RELANSIN programme (with a budget of EUR 330 million until 2003), which seeks to promote innovative activities such as the implementation of advanced technologies and development of new technologies, services and products.

It is important to encourage the development of education-enterprise links (as well as business-business links) in order to generate new productive opportunities, and to assist technology transfer and innovation in general. The Ministry of Education and Research also stresses the need for greater cooperation between universities and enterprises. Several university-enterprise links have already been established and progress has been made. They are important to enable graduates to gain first-hand experience, to find solutions to technological problems, to enable research and practice to interact, thereby resulting in innovation and technology transfer.

Additional measures are being implemented, which are designed to generate commercial opportunities, which are also accessible to new, small and growing firms, *e.g.* through the EU's Fifth Framework Programme. This includes specific measures designed to benefit SMEs, such as: assistance in product and process development; access to foreign partners and markets; help in sharing the risks and costs of research; creation of new contacts and networks and experience of European R&D.

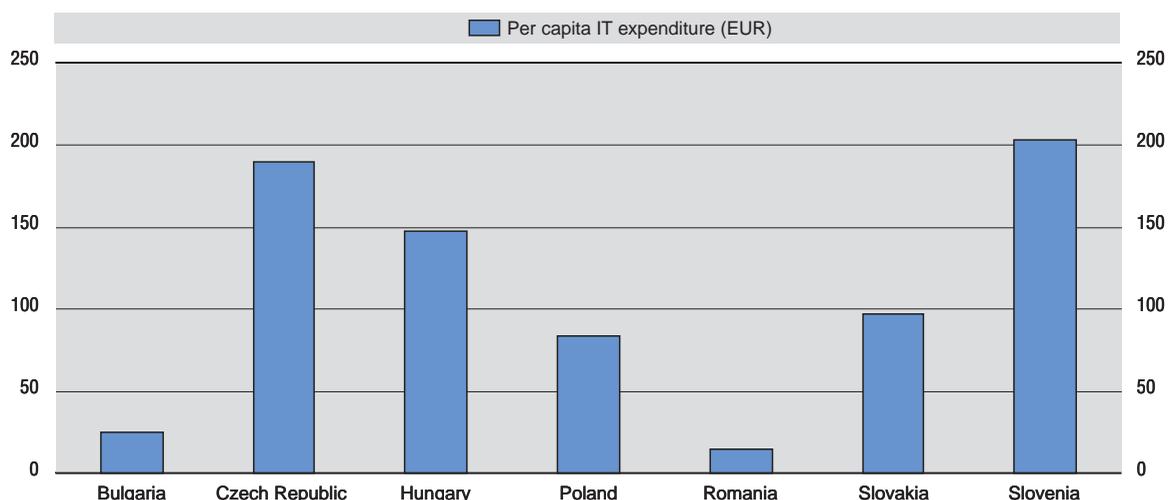
Finally, a national Contact Point Network has been created in Romanian universities, research organisations and businesses. It is supplemented by over 50 business innovation centres and a network of innovation relay centres based in seven universities throughout the country. These centres specialise in promoting innovation, encouraging exchange and providing advice, training and consultancy services (EC, 2001b) and they will help to stimulate opportunities for research and innovation in Romania, along with the Ministry for SMEs and Co-operatives' plan to promote the creation of more business incubators in the country.

Electronic commerce

Electronic commerce has been developing slowly in Romania due to obstacles such as the absence of legislation on electronic payments, lack of credit cards and a low proportion of people with access to the Internet. The situation is evolving rapidly: the number of Romanians with access to the Internet rose from 500 000 in 1998 to about 800 000 in 2000 (Ministry of Communications and IT Technology, 2002, p. 2), and the number of people owning credit cards, a prerequisite for electronic payment, is also increasing.

Other barriers remain significant. Figure 4.1 highlights the low levels of IT expenditure in Romania in comparison to other Central and Eastern European countries.

Figure 4.1. Levels of IT expenditure in Romania and selected transition economies (2000)



Source: Eurostat, 2001.

To address these issues, the government has undertaken a number of policy initiatives. The generation of an “information-oriented” society is one of the strategic objectives of the Ministry of Communications and Information Technology, whose programmes focus on institutional and legislative initiatives such as:

- Establishing a National Communication Authority, responsible for regulating the industry.
- Further liberalisation of the postal and IT services.
- Ensuring free flow of information as well as defining rules in relation to electronic documents, signatures, databases and commerce; and ensuring protection against electronic fraud.
- Enhancing the public telephone network by extending the telephone lines.
- Regulating FM radio broadcasting and VHF television bands while promoting multi-service technologies in the field of broadband communications.
- Encouraging production of IT components for multinational companies by Romanian SMEs.

Furthermore, the Ministry aims to attract foreign investors, thus creating new jobs and increasing the value of exported IT products and services through programmes such as:

- Establishing electronic communication between ministries and sub-national administrations.
- Improving Internet access to information on legislation, statistics and property registration.
- Facilitating the electronic supply of goods and services in healthcare, banking, telephony and public transport.
- Facilitating co-operation among associations, trade unions and NGOs, as well as installing Internet access in education and training establishments, thereby recognising the need for development of university education and research by Internet.

In addition, a new system entitled eProcurement has been introduced, partly as a tool to reduce the relatively high levels of corruption. By using the eProcurement system, it is estimated that ministries and other government agencies will be able to save up to 30% of their expenditure on goods.

Export promotion

Two organisations are responsible for export promotion in Romania: the Romanian Foreign Trade Centre (FTC), reporting to the Ministry of Foreign Affairs and the National Association of Romanian Exporters and Importers (ANEIR), a non-governmental organisation financed by contributions of member companies. The main activities of the FTC are export and foreign direct investment promotion. The FTC provides information about incentives, commercial and comparative statistics, market studies, economic surveys, and also identifies business opportunities and distributes promotional material and periodicals. It has implemented several projects, *e.g.* the diversification of exports of textiles and wooden furniture and provision of training to consultancy companies to improve access of SMEs to the global market. The ANEIR also seeks to assist SMEs by creating so-called export consultancy centres to foster their trade activities. Promotional activities of ANEIR include feasibility studies and market surveys for foreign investors, fairs, exhibitions, missions and seminars.

Conclusions

This chapter has focused on presenting a policy review of the entrepreneurship and enterprise development situation in Romania, the only non-OECD country featured in this publication. The picture that emerges is that Romania has made considerable progress over the past decade in setting up an extensive policy framework to support the SME sector. A range of institutions, policy instruments, territorial tools, programmes and resources exist, all of which assist small enterprise development in Romania. The overall policy assessment is that Romania is moving in the right direction in the key policy areas affecting the SME sector.

What is urgently required is a period of macroeconomic stability in order to focus on policy implementation and make the existing system work more effectively. The real challenge for the future is to ensure that the institutions deliver policies in an effective and consistent manner with international good practice. OECD member countries' experience could be of great value to Romania in the future, in at least four areas:

- Consolidation and co-ordination of the institutional framework for SME policy-making.
- Improvement of the regulatory environment.
- Improvement of tax policy for small businesses.
- Strengthening the financial structure for small businesses.

APPENDIX TABLES

Table A4.1. **SME definitions**

Definitions	Micro	Small	Medium
Romania			
Maximum number of employees	< 10	< 50	< 250
Maximum total turnover in millions of euros	< 8	< 8	< 8
Maximum capital/voting rights held by non-SME enterprises	25%	25%	25%
EC			
Maximum number of employees	< 10	< 50	< 250
Maximum total turnover in millions of euros	n.a.	7	40
Maximum total assets in millions of euros	n.a.	5	27
Maximum capital/voting rights held by non-SME enterprises	n.a.	25%	25%

Source: OECD-EBRD (2002).

Table A4.2. **SME industries and size categories (1999)**

Sector	SME distribution (%)	Micro	Small	Medium
Industry	10.9	79.9	15.8	4.3
Agriculture	1.8	74.1	17.1	8.8
Construction	2.7	71.5	20.5	8.0
Trade	66.9	96.1	3.5	0.4
Tourism	0.5	81.5	12.1	5.4
Transport	2.7	91.9	5.0	3.0
Services	14.5	94.3	4.7	1.0
Total SMEs	100	92.8	5.8	1.4

Source: NARD (2000, Table 9).

Table A4.3. **Distribution of SMEs by region (1999)**

Region	Share of SMEs	Small	Micro	Medium	Share of SMEs in total employment	Share of SMEs with foreign capital
Northeast	11.6	11.5	13.0	13.6	46.1	4.6
Southeast	13.5	13.6	11.8	13.5	50.7	6.0
South Muntenia	12.1	12.1	11.0	12.8	36.0	4.4
Southwest Oltenia	9.8	9.9	7.4	8.1	47.7	3.4
West	8.0	7.9	9.7	9.0	45.0	10.0
Northwest	13.4	13.4	14.2	12.0	50.2	11.5
Centre	11.7	11.6	13.6	12.6	37.1	11.0
Bucharest and Ilfov	19.9	20.0	19.1	18.5	29.3	49.0
Total	100	100	100	100	40.2	–

Source: NARD (2000, Table 11; 13; 23; 79).

REFERENCES

- European Bank for Reconstruction and Development (2001a),
Romania Investment Profile 2001, EBRD, London.
- European Bank of Reconstruction and Development (2001b),
Transition Report 2001, EBRD, London.
- European Commission (2001a),
2001 Regular Report from the Commission on Romania's Progress Towards Accession, Brussels.
- European Commission (2001b),
Report on the Candidate Countries' Measures to Promote Entrepreneurship and Competitiveness, Volume II, Commission Staff Working Paper, Brussels.
- Eurostat (2001),
Statistics in Focus – Theme 4 – 37/2001. IT expenditure: EITO; GDP and population data: Eurostat – NewCronos database.
- Ministry of Communications and Information Technology (2002),
eBusiness and SMEs in Romania, Bucharest.
- Ministry for SMEs and Co-operatives (2001a),
Statistics on the SME Sector During the Period 1998-2000, Bucharest.
- National Agency for Regional Development (2000),
The Private Sector of Small and Medium-Sized Enterprises in Romania: Report 1997-1999, Bucharest.
- OECD (2002),
Management Training in SMEs: Synthesis Report, Paris.
- OECD-EBRD (2002),
Entrepreneurship and Enterprise Development Romania: Policy Review, joint OECD-EBRD report, Paris, www.oecd.org/pdf/M00034000/M00034095.pdf

STATISTICAL ANNEX

Table A1. Distribution of enterprises in the economy, by size class (<500)

1999 or nearest year

Country	0-9	10-49	50-99	100-499	500+	Total
United States	56.8%	15.8%	20.7%	5.2%	1.5%	100%
Austria	69.8%	22.4%	3.3%	3.9%	0.6%	100%
United Kingdom	72.0%	20.5%	3.3%	3.5%	0.7%	100%
Portugal	80.6%	16.3%	2.0%	1.1%	0.1%	100%
France	82.4%	13.5%	2.0%	1.8%	0.4%	100%
Italy	83.7%	14.3%	1.1%	0.8%	0.1%	100%
Belgium	84.1%	12.0%	1.9%	1.6%	0.4%	100%
Finland	85.3%	10.7%	1.8%	1.8%	0.4%	100%
Turkey	95.0%	3.2%	0.8%	0.9%	0.2%	100%
Mexico	90.3%	6.5%	1.3%	1.5%	0.4%	100%
	1-9	10-49	50-99	100-499	500+	Total
Norway	63.0%	27.6%	4.6%	3.9%	0.8%	100%
Germany	67.5%	23.7%	4.0%	4.0%	0.8%	100%
Spain	68.7%	27.1%	2.4%	1.5%	0.2%	100%
Denmark	71.4%	21.3%	3.4%	3.3%	0.6%	100%
Australia	72.6%	21.8%	2.8%	2.2%	0.6%	100%
Switzerland	79.1%	15.5%	2.6%	2.4%	0.3%	100%
New Zealand	81.7%	15.0%	1.6%	1.4%	0.3%	100%
Sweden	84.7%	11.4%	1.8%	1.6%	0.4%	100%
Czech Republic	88.8%	8.1%	1.5%	1.4%	0.3%	100%
Poland	90.3%	7.3%	1.0%	1.2%	0.3%	100%

Notes: Number of salaried employees for Belgium, Czech Republic, Italy; persons engaged for other countries. For size class exceptions, see Box A1.

Source: OECD, SEC (Statistical Database on Enterprises, by size class) and Eurostat (New Cronos).

Box A1. Data note

In some tables and figures contained in this annex, enterprise size classes differ from the usual size classes for a number of countries, as follows: 100-199 and 200-499 for Australia; 200-499 for Belgium; 1-4 and 5-9 for Canada; 10-99 for Hungary; 100-199 and 200+ for Iceland; 3-9 and 10-99 for Ireland; 4-9 for Japan; 5-9 and 10-99 for Korea; 11-50 for Mexico; 10-19 and 20-99 for the United States.

Table A2. Distribution of employment in manufacturing by size class (<500)

1999 or nearest year						
Country	0-9	10-49	50-99	100-499	500+	Total
United States	3.6%	4.1%	16.0%	17.4%	58.9%	100%
Ireland	3.8%	32.2%		39.3%	24.8%	100%
Canada	4.1%	17.8%	8.8%	24.2%	45.0%	100%
Hungary	7.4%	24.1%		30.4%	38.0%	100%
Belgium	8.1%	19.7%	10.1%	24.8%	37.3%	100%
United Kingdom	9.4%	17.9%	9.5%	29.5%	33.6%	100%
Finland	10.3%	14.1%	8.0%	25.0%	42.7%	100%
France	10.7%	19.4%	9.1%	24.3%	36.5%	100%
Austria	11.0%	18.7%	9.2%	32.7%	28.4%	100%
Italy	12.8%	36.3%	10.8%	19.8%	20.3%	100%
Mexico	18.9%	12.0%	7.5%	27.6%	34.0%	100%
Iceland	20.3%	33.5%	14.4%	31.8%	0.0%	100%
Portugal	27.5%	32.4%	12.9%	19.3%	7.9%	100%
Turkey	34.0%	10.5%	6.9%	23.9%	24.8%	100%
	1-9	10-49	50-99	100-499	500+	Total
Czech Republic	5.3%	16.1%	10.5%	30.7%	37.5%	100%
Germany	7.4%	14.9%	8.8%	25.6%	43.2%	100%
Denmark	7.8%	19.2%	10.1%	28.6%	34.2%	100%
Sweden	7.9%	15.5%	8.4%	21.9%	46.3%	100%
Norway	9.1%	21.1%	11.5%	28.4%	29.9%	100%
Korea	10.5%	29.9%	12.3%	22.0%	25.3%	100%
Japan	10.8%	28.3%	13.5%	26.2%	21.2%	100%
Netherlands	11.7%	27.1%	14.8%	29.9%	16.5%	100%
Australia	14.1%	20.5%	8.8%	22.5%	34.2%	100%
Switzerland	15.4%	21.3%	11.7%	29.6%	22.0%	100%
New Zealand	18.3%	24.2%	9.5%	23.2%	24.9%	100%
Spain	18.5%	33.5%	10.6%	19.1%	18.2%	100%

Notes: Number of salaried employees for Belgium, Czech Republic, Italy; persons engaged for other countries. For size class exceptions, see Box A1.

Source: OECD, SEC (Statistical Database on Enterprises, by size class) and Eurostat (New Cronos).

Table A3. Distribution of employment in manufacturing by size class (<250)

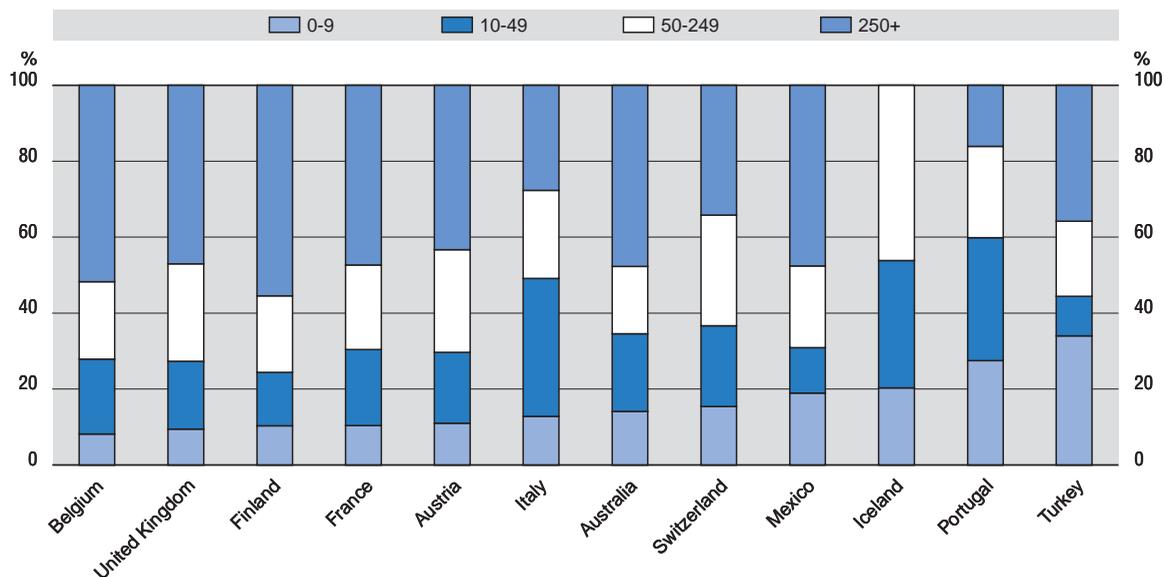
1999 or nearest year

Country	0-9	10-49	50-249	250+	Total
Belgium	8.1%	19.7%	20.4%	51.7%	100%
United Kingdom	9.4%	17.9%	25.7%	47.0%	100%
Finland	10.3%	14.1%	20.2%	55.4%	100%
France	10.3%	20.1%	22.3%	47.3%	100%
Austria	11.0%	18.7%	27.0%	43.3%	100%
Italy	12.8%	36.3%	23.2%	27.7%	100%
Australia	14.1%	20.5%	17.8%	47.7%	100%
Switzerland	15.4%	21.3%	29.2%	34.1%	100%
Mexico	18.9%	12.0%	21.5%	47.6%	100%
Iceland	20.3%	33.5%	46.2%		100%
Portugal	27.5%	32.4%	24.1%	16.1%	100%
Turkey	34.0%	10.5%	19.8%	35.8%	100%
	1-9	10-49	50-249	250+	Total
Czech Republic	5.3%	16.1%	26.8%	51.8%	100%
Germany	7.4%	15.1%	23.2%	54.5%	100%
Denmark	7.8%	19.2%	26.3%	46.6%	100%
Sweden	7.9%	15.5%	21.2%	55.5%	100%
Norway	9.1%	21.1%	28.3%	41.6%	100%
Korea	10.5%	29.9%	26.4%	33.3%	100%
Japan	11.1%	28.3%	29.8%	30.7%	100%
Netherlands	11.7%	27.1%	28.1%	33.1%	100%
New Zealand	18.3%	24.2%	22.9%	34.7%	100%
Spain	18.5%	33.5%	21.4%	26.6%	100%

Notes: Number of salaried employees for Belgium, Czech Republic, Italy; persons engaged for other countries. For size class exceptions, see Box A1.

Source: OECD, SEC (Statistical Database on Enterprises, by size class) and Eurostat (New Cronos).

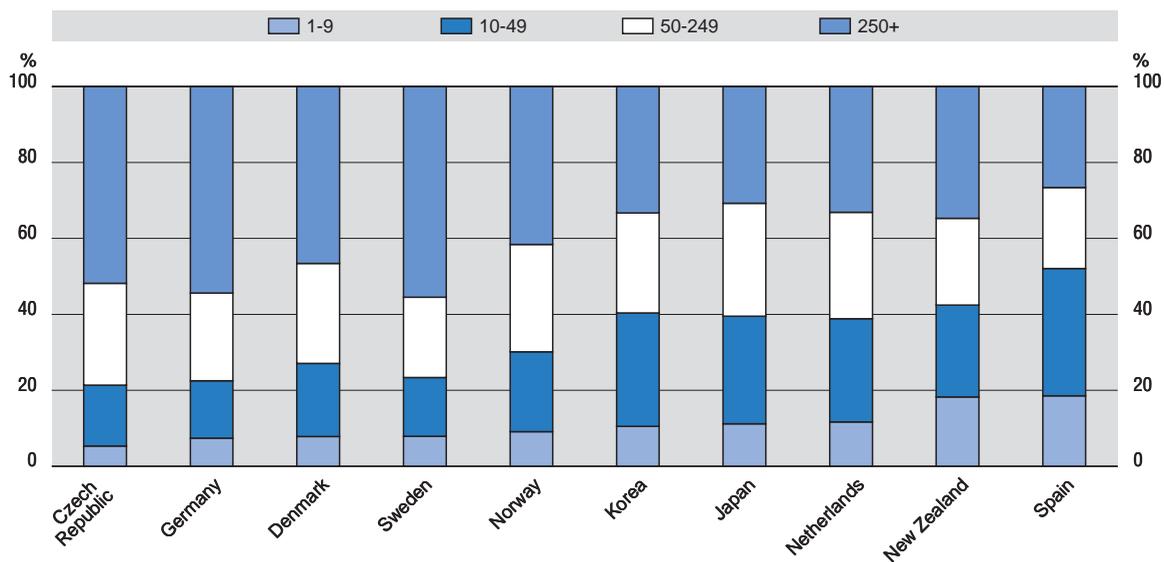
Figure A1. **Distribution of employment in the manufacturing sector by size class**
1999 or nearest year



Note: Note: For size class exceptions, see Box A1.

Source: OECD, SEC (Statistical Database on Enterprises, by size class) and Eurostat (New Cronos).

Figure A2. **Distribution of employment in the manufacturing sector by size class**
1999 or nearest year



Note: Note: For size class exceptions, see Box A1.

Source: OECD, SEC (Statistical Database on Enterprises, by size class) and Eurostat (New Cronos).

Table A4. Distribution of output* in manufacturing, by size class (<250, <500)

1999 or nearest year

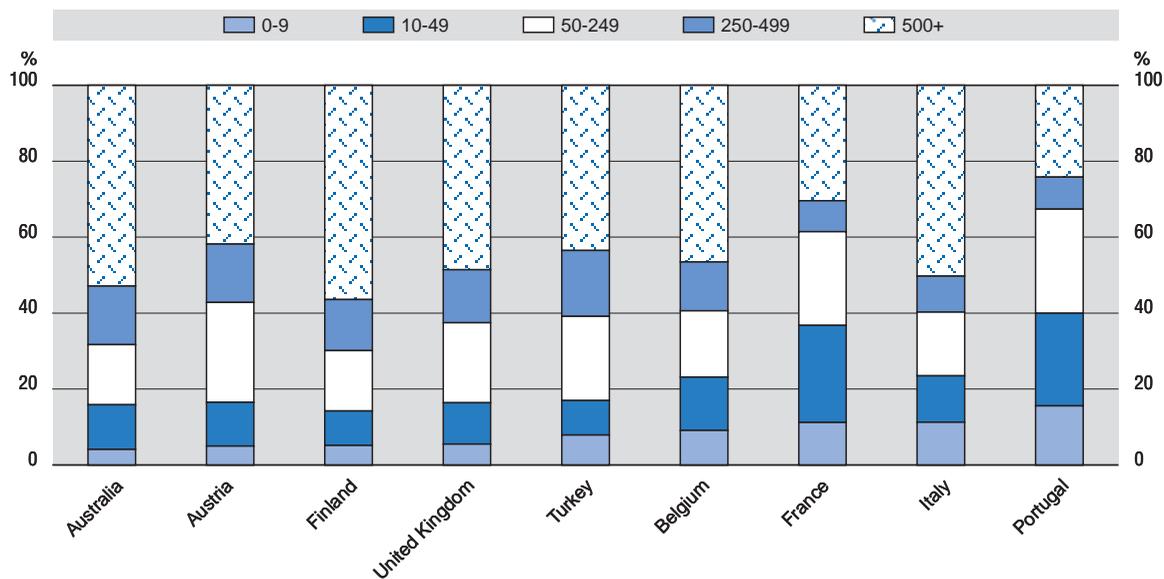
Country	0-9	10-49	50-249	250-499	500+	Total
Australia	4.1%	11.8%	15.8%	15.4%	52.9%	100%
Austria	4.9%	11.5%	26.3%	15.4%	41.8%	100%
Finland	5.1%	9.1%	15.9%	13.4%	56.4%	100%
United Kingdom	5.5%	10.9%	21.1%	14.0%	48.6%	100%
Turkey	7.8%	9.1%	22.2%	17.3%	43.5%	100%
Belgium	9.1%	14.0%	17.5%	12.8%	46.6%	100%
Italy	11.1%	25.6%	24.7%	8.2%	30.4%	100%
France	11.2%	12.2%	16.8%	9.5%	50.3%	100%
Portugal	15.5%	24.4%	27.5%	8.4%	24.2%	100%
	1-9	10-49	50-249	250-499	500+	Total
Germany	2.8%	9.0%	19.6%	11.1%	57.5%	100%
Korea	4.1%	16.6%	23.1%	9.6%	46.7%	100%
Japan	4.2%	16.1%	27.6%	14.8%	37.3%	100%
Sweden	5.7%	10.8%	17.7%	8.7%	57.1%	100%
Norway	6.1%	16.7%	29.8%	12.0%	35.4%	100%
Czech Republic	6.2%	10.6%	23.4%	13.9%	46.0%	100%
Netherlands	6.6%	15.6%	22.4%	17.6%	37.9%	100%
Denmark	7.1%	15.2%	24.2%	12.4%	41.0%	100%
Spain	8.5%	22.6%	23.1%	12.0%	33.9%	100%

*Production, with the exception of Italy, the Netherlands and Portugal, for which turnover data are used.

Note: For size class exceptions, see Box A1.

Source: OECD, SEC (Statistical Database on Enterprises, by size class) and Eurostat (New Cronos).

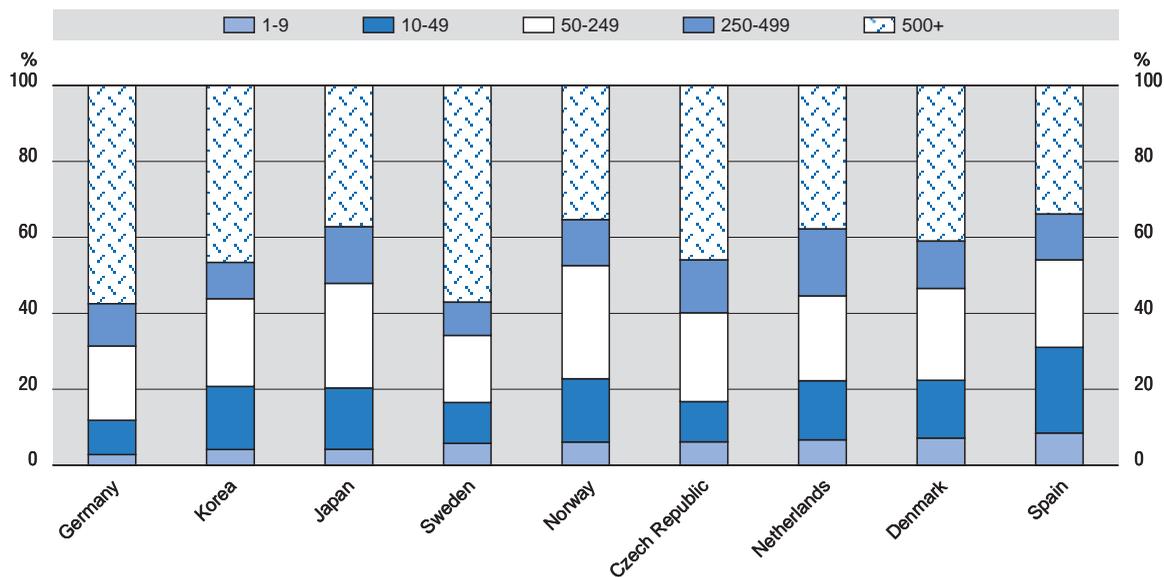
Figure A3. **Distribution of output in the manufacturing sector, by size class**
1999 or nearest year



Note: For size class exceptions, see Box A1.

Source: OECD, SEC (Statistical Database on Enterprises, by size class) and Eurostat (New Cronos).

Figure A4. **Distribution of output in the manufacturing sector, by size class**
1999 or nearest year



Note: For size class exceptions, see Box A1.

Source: OECD, SEC (Statistical Database on Enterprises, by size class) and Eurostat (New Cronos).

Table A5. Percentage share of self-employed women in total self-employed, 2001

Portugal	39.9	Belgium	27.8
Canada	38.6	Germany	27.6
United States	38.1	Czech Republic	27.4
Poland	37.6	Iceland	27.0
Switzerland	34.8	Japan	27.0
Austria	34.1	Spain	26.9
Netherlands	33.3	Slovakia	26.3
France	32.7	United Kingdom	26.0
Australia	32.3	Sweden	25.9
Finland	32.1	Greece	25.6
New Zealand	30.6	Italy	24.6
Norway	29.2	Denmark	20.1
Korea	29.0	Ireland	15.7
Mexico	28.4	Turkey	13.0
Hungary	28.0		

Source: OECD (2002), Annual Labour Force Statistics.

Table A6. Percentage share of firms introducing new or technologically improved products or processes on the market¹, 1994-96

	Manufacturing			Services	
	All firms	Firms with 20-49 employees		All firms	Firms with 20-49 employees
Portugal (1995-97)	25.4	21.6	Norway (1995-97)	33.0	22.9
Turkey (1995-97)	33.3	20.0	Portugal (1995-97)	33.1	30.7
Spain	34.8	21.1	France	40.5	25.7
Belgium	37.4	32.5	Sweden	41.5	28.2
Poland	41.5	16.5	Finland	42.8	29.4
Italy	42.7	44.0	Belgium	44.1	16.8
Mexico	45.8	25.0	United Kingdom	44.5	46.7
France	50.7	34.1	Canada	46.4	
Norway (1995-97)	53.4	39.2	Austria	54.5	48.5
Finland	54.2	26.1	Netherlands	55.7	31.2
Australia	59.9	52.6	Switzerland	62.2	62.9
United Kingdom	60.1	54.4	Luxembourg	62.9	45.0
Sweden	60.9	42.9	Ireland	70.8	61.9
Austria	66.2	59.3	Germany	76.0	42.3
Canada	67.4				
Denmark	70.4	63.5			
Switzerland	73.4	65.1			
Ireland	73.4	68.4			
Netherlands	75.4	53.7			
Luxembourg	76.7	21.0			
Germany	78.9	62.5			

1. Weighted by number of employees.

Table A7. Percentage share of business R&D by size class of firms

1999 unless otherwise specified

	Number of employees	
	< 100	100-500
Japan	7.2 (< 500)	
Korea (1997)	4.1	8.8
Germany (1997)	5.8	9.3
Sweden	3.7	13.2
OECD	7.2	10.2
United States	10.4	8.3
France (1998)	6.8	14.3
European Union	7.6	14.5
Italy (1998)	5.4	18.9
United Kingdom	7.2	17.2
Netherlands (1998)	10.6	18.2
Finland	14.0	14.2
Hungary	16.3	13.7
Switzerland (1996)	10.1	20.3
Canada (1998)	16.8	15.8
Czech Republic	10.5	24.3
Belgium (1995)	19.0	17.2
Turkey (1996)	5.2	31.5
Mexico (1995)	13.8	24.5
Denmark (1998)	16.1	23.4
Spain	17.2	26.2
Australia (1998)	29.1	20.6
Norway (1995)	25.8	29.4
Poland	11.2	50.6
Portugal	25.6	41.2
Iceland	38.6	56.8

Source: OECD.

Table A8. Percentage share of businesses lacking qualified personnel or know-how to use the Internet by size class, in 2000

	Finland	Portugal	United Kingdom	Austria	Spain	Denmark	Italy
10-49	23.67	21.47	18.80	15.36	14.80	6.40	10.37
50-249	19.84	18.48	14.23	13.23	10.26	4.36	10.40
250+	18.98	15.35	11.24	9.74	7.67	2.37	9.82

Source: Eurostat E-commerce Pilot Survey 2001.

Table A9. Internet purchases and sales by size class, 2000

Percentage share of businesses in each size class

		Sales	Purchases			Sales	Purchases
Australia (2000-2001)	0-4	7	19	Japan ¹	50-99	14	9
	5-9	9	19		100+	25	20
	10-19	12	23	Luxembourg	10-49	5	16
	20-49	14	28		50-249	10	24
	50-99	12	28		250+	22	25
	100+	17	34				
Austria	10-49	10	12	Netherlands ²	5-9	17	17
	50-249	14	19		10-49	22	23
	250+	20	25		50+	31	35
	0	2	5	New Zealand (2000-2001)	10-49	9	23
	1-9	4	15		50-249	11	32
10-19	6	20	250+		15	40	
Canada	20-49	9	22	Norway	10-49	16	32
	50-99	10	26		50-249	24	51
	100-299	9	34		250+	27	72
	300-499	8	44	Portugal	10-49	3	8
	500+	13	40		50+	7	14
Denmark	10-49	24	31	Spain	1-4	0	2
	50-249	23	47		5-9	5	6
	250+	29	62		10-49	4	8
Finland	5-9	10	26	50-249	6	15	
	10-49	13	33	250+	11	16	
	50-249	17	42	Sweden	10-49	16	51
	250+	26	45		50-249	25	62
			250+		26	71	
Greece	10-49	4	5	United Kingdom ²	10-49	15	31
	50-249	10	10		50-249	20	39
	250+	9	6		250-999	33	48
			1 000+		45	54	
Italy	10-49	2	7				
	50-249	3	13				
	250+	5	17				

1. All businesses with 50 or more employees.

2. Orders received or placed over the Internet and other computer-mediated networks.

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