Management Training in SMEs



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FOREWORD

The OECD Working Party on SMEs has carried out this research project on management training in SMEs. The study finds that managerial weakness may lie at the heart of small firm failure. However, SMEs are less likely to obtain management training than larger firms due to financial constraints, information gaps and other factors. Governments are now attempting to enhance SME management training to foster more high-growth firms, but need to carefully evaluate the impact of these programmes and identify best practices.

The report is divided into two main parts: a synthesis report and management training case studies on Canada, Finland, Germany, Japan, the United Kingdom and the United States. The names of the experts who participated in this project and drafted the country studies are listed in the annex. The OECD would like to extend its thanks to the French authorities, who generously sponsored the project.

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MANAGEMENT TRAINING IN SMEs: SYNTHESIS REPORT

Summary

Upgrading the skills of all types of workers, including managers, is central to firm performance in knowledge-based economies. The quality of management is particularly important for small and medium-sized enterprises (SMEs), which must be able to adapt quickly to evolving markets and changing circumstances, but which often have limited resources. Such constraints also put limits on their ability to engage in training, even though studies indicate that there is a positive correlation between the degree of management training and the bottom-line performance of an SME. There is preliminary evidence that formal management training can reduce the failure rates of small firms, which are far more likely to fail than larger firms, particularly in the early years. These are the findings of case studies of management training in six OECD countries: Canada, Finland, Germany, Japan, the United Kingdom and the United States.

For a variety of reasons, smaller firms are less likely than larger enterprises to provide external training to all grades of workers, including managers. In addition to financial constraints, information gaps make smaller firms less aware of the benefits they would obtain from management training and few see training as a strategic tool. Due to higher turnover in managerial staff, small firms may not realise the same benefits from training investments as larger firms. And since training providers must group a number of SMEs together to realise scale economies, such generic training may be of more limited value to a small firm than to a larger firm receiving more targeted courses.

For these reasons, and to realise the social benefits from high-performance SMEs, many OECD governments have implemented programmes to enhance SME management training. These must be geared to the profile of training provision in various countries, which highlight a prominent role for government/industry partnerships in Germany, for schools and universities in Finland and for the private sector in the United States. Although publicly supported training programmes are often rated by the trainees, there is little empirical assessment of the impact of management training schemes on firm performance. A first recommendation for governments is to engage more systematically in programme evaluation. Other recommendations for management training "best practice" emerging from the case studies are:

- Differentiate between training for start-ups and counselling for established SMEs.
- Teach management skills such as flexibility and teamwork needed in the current business environment.
- Target training to specific groups of managers, such as new entrepreneurs or exporters.
- Provide training at local levels and reasonable times for small-firm managers.
- Make greater use of electronic delivery of training through the Internet.
- Foster entrepreneurship through the general educational system.

Introduction

This report synthesises case studies of management training for small and medium-sized enterprises (SMEs) in six countries: Canada, Finland, Germany, Japan, the United Kingdom and the United States. It attempts to present an overview of existing programmes for SME managers and to highlight what appear to be the most effective approaches to management training in small firms. To the extent possible, the report examines inputs to management training, outputs from management training and the need for government policy interventions.

Definitions of what constitutes management training are not uniform across countries or across academic studies and evaluations (see Annex). In this report, management training is defined as training in managerial skills for managers of SMEs. More specifically, it is "Group-taught formal learning, external to the firm, provided for owners and managers of independent enterprises with 500 (or 250) employees or fewer, and at least partly funded by the organisation". This definition is fairly narrow and excludes: *i*) business start-up training provided for individuals whether or not they are employed; *ii*) training provided to workers not classified as managers, even if it contains elements of management such as staff supervision; *iii*) training provided to a manager which is not managerial training, *e.g.* upgrading of computer skills; and *iv*) "on-the-job" managerial training.

The management training discussed here is provided by external bodies. Only taught, as opposed to self, learning is included. Hence a manager in a small firm undertaking a distance training course, such as an MBA, where the company makes no contribution to the fees/expenses, is excluded. It also excludes any self-learning or general educational upgrading which managers might undertake in their private time. In addition, the external training discussed here is "formal", meaning that it is planned in advance and has a structured format and defined curriculum.

Lastly, this report is primarily concerned with management training rather than counselling. Many governments provide or subsidise the provision of business advisory services for small firms. Examples include the counselling or consultancy services provided by the Small Business Development Centres in the United States or the Personal Business Advisors in Business Links in the United Kingdom. The key distinction between training and counselling is that the latter is a "one-to-one" service tailored to the specific requirements of the individual firm. Training, however, is a more generic service provided to a group of individuals from one or more businesses at the same time. Finally, management training may or may not result in a formal qualification; both cases are included here.

Management training and SME performance

In knowledge-based economies, firm-level investments in the upgrading of training and skills is believed to be one of the keys to growth. In the "new economy" era, fast-changing technologies and globalising economies are putting increased pressures on firms to reorganise their structures to enhance adaptability and flexibility (OECD, 2000b). This is true for large as well as small firms, whose performance is increasingly dependent on a managerial structure which is decentralised, participatory and adaptive. According to the OECD study on high-growth SMEs, good management is vital for better performance: "It is striking to observe the array of managerial and organisational instruments used by high-growth firms. They are no longer the privileged attributes of large corporations. The key factor in a firm's competitiveness is better organisation of the innovation process and other functions more than innovation itself." (OECD, 2000a)

Available evidence indicates that there is a relationship between the degree of management training and the bottom-line performance of a firm. In some instances, this "bottom-line" performance is expressed in terms of survival; in others it is reflected in higher profits or sales. According to officials in the United Kingdom, " ... the balance of evidence indicates that formal training and development cuts failure rates by half – all other things being equal" (SFEDI, 1999) and "... failure rates could fall from one in three in the first three years to one in ten where training was undertaken" (Storey, 1994). As is indicated in data on firm survival rates in most OECD countries, it is the smallest firms which are the least likely to last more than five years (Table 1). This shows that failure rates are twice as high for the smallest size of firm as for the largest of small firms.

Table 1. Failure rates of UK SMEs, 1990-95

Employment size	Death rate
0-9	35.1
10-19	27.1
20-49	27.4
50-99	24.3
100-199	16.5
200-499	18.3

Managerial weaknesses may be at the heart of (small) firm failure. When combined with the observation that the individuals who own/manage many smaller businesses are (generally) less well educated than those working in managerial positions in large firms, and are less likely to be formally trained, the inference is that small-firm managers "need" training. This implies that, if training were provided, it would enhance managerial skills and so lead to improved firm performance as reflected in lower failure rates. According to a study of Canadian small firms:

"Almost half the firms in Canada that go bankrupt do so primarily because of their own deficiencies rather than externally generated problems. They do not develop a basic internal strength to survive. Overall weakness in management, combined with a lack of market for their product, cause these firms to fail..... The main reason for failure is inexperienced management. The managers of bankrupt firms do not have the experience, knowledge or vision to run their businesses." (Baldwin *et al.*, 1997)

Other studies of the impact of human resource management practices on firm performance in North America corroborate these findings. Huselid pioneered the US studies which found that the heavy use of a number of specified management practices was associated with an increase in company profits of nearly USD 4 000 per employee per year (Huselid, 1995). A study of formal training provision in Canadian workplaces also found positive outcomes for firms which trained:

"Organisations with training programmes had more favourable performance trends in a number of areas including revenues, profitability, employee relations, quality and productivity and their business viability and outlook. ... Multivariate analysis sustained this link between training and firm performance. Even after controlling for other establishment characteristics, we found that establishments with the strongest commitment to training were significantly more likely than other firms to report positive revenue and productivity trends over the previous two years." (Betcherman *et al.*, 1997)

However, there is a case for caution in hypothesising a direct link between management training and firm performance. In the case of the Huselid analysis, this is based entirely on large firms which are known to be much more likely than small firms to provide training for their workers. Such firms are also unlikely to fail so the impact of training on survival cannot be assessed. The main Huselid result is that it is the combination of management measures which influences performance. These measures include not only training but also recruitment, employment security, use of self-managed teams, wages linked to performance and information-sharing. Moreover, this combination of managerial practices which fosters enhanced performance in larger firms parallels the managerial approaches (e.g. flexibility, decentralisation, teamwork) practised in the majority of high-growth SMEs (OECD, 2000a).

Analyses of the links between management training and firm performance in smaller firms have certain methodological weaknesses: the influence of training falls when more "controls" are introduced or when other non-training managerial practices are included. These are shown to have a stronger link to performance than training; no link between training and productivity trends is apparent and, even if a positive correlation were to exist, the methodology is unable to disentangle whether small firms that train perform better or whether small firms that perform better can afford to train. Recent analysis in the United Kingdom found a positive association between current training measures and historic performance, but no clear association between current training and subsequent performance. The implication is that prior performance may generate the resources to undertake training, but that it is difficult to assert that training expenditure enhances future performance (Cosh et al., 1998). Further data and analysis are needed to confirm empirically the link between management training and enhanced performance of SMEs.

Current status of SME management training

Although considerable information on education and training is available in the OECD countries, it is difficult to separate management training from other forms of training. It is also problematic to isolate the proportion of training budgets that are management training and those that are not, and it is rare for statistics to distinguish by firm size. This presents problems in determining the scale of the total market for external management training for SMEs and the extent to which this market is "underpinned" by public funds. However, some information on the extent and nature of SME management training from which inferences can be drawn is available for a few OECD countries.

Available evidence indicates that smaller firms are relatively and absolutely less likely than larger enterprises to provide external training to all grades of workers. In the United States, there is a clear relationship between firm size and the provision of formal external training (Table 2). Studies show that managers in large firms (>500 employees) spent an average of 0.29 hours in formal training per week, compared with 0.18 for managers in firms with 50-100 employees. Although the US data are unable to determine the extent to which this applies to different occupational groups, UK data confirm that for all occupational groups, formal external training increases with firm size.

Table 2. Management training by firm size: United States

Establishment size (number of employees)	Any formal training	Management training
0-9	0.61	0.13
10-24	0.84	0.39
25-49	0.89	0.42
50-99	0.97	0.63
100-249	0.98	0.74
250-499	0.99	0.83
500+	1.00	0.91

Source: US Bureau of Labor Statistics, 1993.

Regarding the size of the external, formal management training market for SMEs, the UK study concludes that the total value of the market for firms with fewer than 500 workers is about GBP 200 million annually (Table 3). This compares with GBP 330 million annually for enterprises with more than 500 employees. The study illustrates several points. The first is that the proportion of the workforce classified as managers decreases with firm size. More importantly, the proportion of managers undertaking formal external training increases sharply with firm size, so that only 37% of firm managers with fewer than ten employees participated in external training, compared with 82% of managers in large (>500 employees) firms. Table 3 also illustrates that, if managers do undertake formal external training, the time spent varies comparatively little by firm size. The key difference by firm size is whether they undertake it at all.

Table 3. External management training market in the United Kingdom

Firm size	Number of employees ('000)	Number of managers (%)	Number of employees sent on external training courses last year (%)	Total numbers attending external training courses ('000)	Days per person	Total person days ('000)	Daily charge (GBP)	Total cost (GBP million)
0	2 866		?	?				
1-9	3 502	22	37	285	2.2	627	50	31.4
10-24	7	7	44	161	2.4	386	100	38.6
	3 050							
25-49		12 	51	187	2.7	505	100	50.5
50-99	1 071	j	57	73	2.7	197	100	19.7
100-249	1 473] 9	66	87	2.4	209	150	31.4
250-499	1 118		75	75	2.8	210	150	31.5
500+ All firms	7 993	7 (est.)	82	459	2.9	1 331	250	332.6 536

The delivery of management training to SMEs is organised differently in the six countries studied, largely dependent on the political and economic culture. There are four main types of providers of management training to small firms: private sector providers, colleges and universities, industry chambers and associations, and public organisations. Table 4 provides an indicator of the relative importance of each of these groups in the six countries as shown by the size of the dot.

Table 4. Management training providers, by country

Provider	Canada	Finland	Germany	Japan	United Kingdom	United States
Independent private sector	•	•	•	•	•	•
Colleges/universities	•	•	•		•	•
Chambers/ industry associations	•	•	•	•	•	•
Public organisations	•	•		•		

In Germany, chambers of commerce and industry associations are at the core of training for all groups of workers, including managers and owners of small firms. While such chambers are public corporations, they are administered by the business community. All firms are required not only to be members of their local chamber, but also to pay a membership fee. The chambers also receive income from the federal government. In return, chambers provide a wide range of continuing vocational training tailored to the interest of their members. As an illustration of their importance, in 1997, the two largest chambers provided more than 500 000 people with nearly 50 000 management training courses. Alongside the chambers in Germany are the industry associations which gave more than 44 000 courses to more than 700 000 participants in 1997.

In most countries, colleges and universities are of moderate importance as external management training providers for SMEs. The country in which they play the largest role is Finland, where training in entrepreneurship is organised at all levels in the Finnish school system. Furthermore, all vocational colleges provide business training and almost all universities have business studies programmes, with Joensuu, Jyvaskyla and Vaasa specialising in the subject. Several business schools in Finland also have dedicated small-firm units. For example, the Helsinki School of Economics and Business Administration has its Small Business Centre at Mikkeli. The Centre provides programmes for future entrepreneurs, supervisory training programmes and internationalisation programmes. There has been a similar trend towards small-firm centres in business schools and universities in the United States, the United Kingdom and Canada. In Canada, there are now 32 Entrepreneurship Centres in 34 universities. In general, they are new, with virtually one-third having started in the last two years, and the oldest dating back to 1984.

The provision of external management training for SMEs by public organisations takes place primarily in Japan, Finland and to a modest extent in Canada. Here it is important to note that this refers to delivery and not financing. SME management training in Japan has a long history dating back to 1963. Currently the Small and Medium Enterprise Agency (SMEA) plans the overall structure of training provision which is delivered through two channels: local governments (prefectures and cities) and the Japanese Small Business Corporation (JSBC). Training provided via local government comprises management and technical training for SME owner/managers. Current capacity on these programmes is about 7 000 persons per year, with the duration of the courses varying from 18 to more than 95 hours. The training provided by JSBC through its training arm, the Institute for Small Business Management and Technology (ISBMT), is at a higher level and more specialised than that provided by local governments. ISBMT also provides training for SME advisors.

Finland also has public organisations providing external managerial training for SMEs. The most notable are the Employment and Economic Development Centres which deliver regionally the services of three ministries: Trade and Industry, Agriculture and Forestry, and Labour. While they also provide consultancy services, the Centres provide a range of management training programmes including programmes for SMEs and women entrepreneurs. In contrast, the role of public or quasi-public organisations involved in management training for SMEs in the United States is more modest. Setting aside educational institutes such as the community colleges, the public US players are the Small Business Development Centres, of which there are 57, at least one per state; in 1997, training was provided for 370 000 attendees.

The United States relies most heavily upon the independent private sector for management training and other types of skills upgrading. In fact, small firms providing business and managerial training for other enterprises is a booming sector in the United States (OECD, 1999). This reflects in large part the US entrepreneurial culture. The implicit assumption is that everyone in the United States is an entrepreneur or a potential entrepreneur and that entrepreneurship is "taught" by the culture. Furthermore, practical information is available to individuals running their business through, for example, the free-phone call system operated by private sector suppliers such as the large computer companies.

Another factor is that the concern about business failure which characterises many European countries is less important in the United States. In essence, the US philosophy is that those who are sufficiently entrepreneurial to start their business will do so. Once in business, they will learn from their own experience. In many instances, these individuals will fail, and some will be put off starting a business again by realising that they did not have the necessary qualities to be a successful entrepreneur. On the other hand, some (correctly or incorrectly) will view their business failure as bad luck or as a matter they can rectify. In this case, they will be more likely to start a business again. The US assumptions are that the individual, and society as a whole, recognise that it is possible to have bad luck; it also assumes that the individual learns from the bad judgement which he or she exercises. Thus, government involvement in management training for small firms is less evident in the United States, where this is left to the private sector and to "learning by doing".

Government SME management training programmes

Rationale

It is unquestionably the case that small firms provide less (formal, external) training for their managers than larger firms. What is less clear is whether this justifies government intervention in the market to rectify a shortcoming which could be a result of market failures. Government programmes might be justified on three grounds. First, small firms, because of imperfect and asymmetric information, fail to appreciate the (private) benefits they would obtain if they provided training (at a level comparable to large firms). A clear illustration of this is provided in a report recommending policy changes in the European Union following the review of continuing vocational training (CVT) in Europe:

"CVT policy makers have to foster the awareness of SME employers/employees on the importance of CVT for the competitiveness of their enterprise. The first line of policy action should be precisely the encouragement among SMEs of the idea of training as a strategic tool within the management of the enterprise." (IKEI, 1998)

The reason why small firms provide less training for their workers is because they may be unaware of the (private) benefits which training generates for their business. The implication for government is to provide some form of "taster" training scheme. Here, the firm would be subsidised to a limited extent to undertake training of workers who were previously untrained. Having provided the training, the firm would then observe an improvement in business performance linked to the provision of the training and would possibly use own funds in future training. However, an important consideration is that SMEs often do not have the capital available to invest in such training unless the initial government provision of training leads to immediate improvements in performance and profits. It is also not clear that this approach would apply to managerial training for owners/managers.

Other reasons why smaller firms may not invest sufficiently in management training relate to supposed SME characteristics, including short-termism, an inability to accrue the benefits from training, and differing costs and benefits from training. Training is an investment where the returns do not accrue immediately to the business. However, small firms often have shorter time horizons than larger firms, if only because they are more likely to cease trading in the short term. Another problem facing a small firm considering the purchase of management training is that the trainee may not remain with the firm for a sufficient period for the outlay on training costs to be recouped. Managers also leave larger firms but because larger firms generally pay higher wages and provide more fringe benefits than small firms, SMEs face a higher risk that the newly trained manager may shift employers.

Not only may the benefits of training be less realisable for small firms, but the real cost of training to small firms may be higher. From the viewpoint of training providers, the unit cost of training provision is lower where there are large numbers of similar trainees. This is likely to be the case for large firms. For small firms, the training provider often has to combine many small firms to reach an economically viable number of trainees and this leads to a "class" with very mixed interests. To resolve this, the small-firm training provider tends to deliver generic, rather than company-specific, training which runs the risk of being of more limited value to the small firm.

Another justification for government schemes is that the presence of a highly skilled and trained labour force provides competitive benefits, over and above those accruing to the individual worker or enterprise. It is therefore, in principle, justified for the state to "intervene" in the market to supplement private provision. The classic example of this is state provision of compulsory, but free, education to children. Since a group of high-growth SMEs have been shown to be large net job creators and drivers of economic growth, enhancing the managerial skills of small firms might be justified on the basis of correcting a market failure stemming from externalities and public goods: better-managed small firms will contribute to overall economic growth and the well-being of society as a whole.

The following are examples of government programmes to enhance management training for SMEs taken from the country case studies. Other examples of government management training and counselling schemes are given in Box 1.

Canada

Canadian Small Business Service Centres (CSBCs) co-ordinate information on all public sector services for small businesses. There are over 400 such centres. Most centres co-locate new business registration/licensing with access to Web sites, but also link this to suggesting that new firms enrol in a seminar lasting no more than a few hours. At that seminar, given by an experienced professional, the new business owner is provided with basic legal, financial and market guidance. Informal feedback on the scheme has been positive, with some new firms returning to the Centres to seek further advice at a later stage (Roy, 2000).

Box 1. Government SME management training programmes

Australia. The Small Business Enterprise Culture Program (SBECP) was announced in the May 1999 Budget, with funding of AUD 6.4 million over three years. This programme supports initiatives that are designed to enhance small-business access to skill development, mentoring and information services. A specific focus of the programme is developing the business skills of women small-business managers.

Belgium. Under the 1998 Law, Programme for the Promotion of Independent Enterprises, all registered SMEs, except those operating in professional and regulated activities, are eligible for management or entrepreneurial training provided through the chambers of commerce. Start-up assistance can be obtained through a paid training period (with legally fixed remuneration) for a period from 12 to 30 months.

Denmark. Under the Skill Development and Formation Programme, 14 approved Technological Service Institutes (GTS) supply Danish enterprises with counselling services provided at market prices (although small enterprises with up to 50 employees enrolling for the first time pay reduced rates). The Entrepreneurs Programme offers up to 15 hours counselling for those wishing to start a business and assistance in drawing up a business plan. The Programme for Management, Organisation and Competencies (LOK) promotes joint ventures among enterprises and with public institutions to develop internal management.

Ireland. The Pilot Training Projects aim to develop the strategic focus and skills of SME owners and managers. FÁS provides the Training Support Scheme, Company Development Cluster Programme, Diagnostic Skills Programme, Management Development Grants Programme, and the Business Appraisal Training Programme. The SBOP Small Business Best Practice Dissemination programme disseminates information on best managerial practice

Korea. A venture enterprise legal consulting team was organised in 1999 to provide start-up consulting services to prospective small, medium and venture enterprises. To foster the SME consultancy industry, exemplary management consulting firms will be designated and an Association of Management Consulting Firms set up.

Mexico. The CRECE (Regional Centre for Entrepreneurial Competitiveness) develops SME management skills through integrated counselling services. The Promotion of Thematic Self-Diagnoses for Industry, started in April 1998, provides entrepreneurs with an online assessment tool for management skills and other business areas.

Netherlands. The Chambers of Commerce and the Institutes for Small and Medium-Sized Enterprises (IMKs) provide training in specific areas such as product innovation, partnership, quality assurance and export, aimed at improving the quality of entrepreneurship. There are plans to offer IMKs and Chambers of Commerce the opportunity to supply their information products and develop an SME service on the Internet.

New Zealand. The BIZ programme is aimed at improving the management capabilities of SMEs through: i) a business development component contracting 46 private providers nation-wide to deliver services on 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.

Poland. The National System of Services for SMEs (KSU) provides advisory, training and information services for SMEs. Through its 20 regional information centres, the Business Information Network (BIN) aims to improve the access of entrepreneurs to business information and supply entrepreneurs with the information necessary to set up and manage a business.

Portugal. The SME Training Pilot programme launched in 1996 assists SMEs (up to 50 employees) through the provision of consultants/trainers who work with the entrepreneur or manager for approximately one year (lectures complemented by on-the-job training and consultancy) with the goal of increasing the firm's management capabilities.

Sweden. The Starting Line (Startlinjen) is a NUTEK-managed programme which provides information on the administrative framework, financing, etc., during an enterprise's start-up phase. The Web site (www.nutek.se/startlinjen) contains step-by-step instructions and administrative forms on setting up a business, detailed information about financing and accounting, and databases for financing and permits.

Source: OECD (2000c).

Finland

The Employment and Economic Development Centres in Finland (*Tekeskukset*) provide support and advice to SMEs in all sectors. This advice can be at start-up or as part of the development of a business. In some cases, such as with the Pro Start Scheme, it comes closer to counselling – one-to-one advice. Other programmes, however, are closer to training. For example, the Balanssi programme covers business finance for 1.5 days, followed by a further half-day, two to three months later. More formal management courses are also provided. These can last for up to two years, with instruction taking place for between one and three days per month. Such programmes focus specifically on those who currently manage SMEs, or who are about to assume such responsibilities. Special programmes have been designed for female managers; in addition to the training, participants also are eligible for a consultancy day. Another programme is a General Managers Course aimed at directors of SMEs; a total of ten two-day seminars are provided over a 12-month period, concluding with a consultancy day.

Germany

For management training and counselling, the federal government largely avails itself of the services offered by chambers of commerce as well as other business partners. In 1998, the Federal Ministry of Economics and Technology provided approximately DEM 44 million for training and counselling to SMEs; some 16 300 entrepreneurs received advice concerning the implications of self-employment. Moreover, the Federal Ministry of Economics and Technology, together with the chambers of commerce and other institutions, organise meetings in the new states, with experts delivering counselling on the spot.

Japan

Japan has substantial and long-established management training programmes for small and medium-sized enterprises. These are either delivered via local government or via the Japan Small Business Corporation (JSBC). The scale of the programmes is shown in Table 5. Business management advice is provided through the SME Evaluation System ("SHINDAN") which analyses the performance of SMEs with regard to production and technology and presents concrete measures to improve the business environment. Each prefecture and the administrations of 12 major cities analyse the management conditions of SMEs and make detailed recommendations. Skilled personnel with responsibility for providing guidance to SMEs are located in each prefecture and in each of the 12 major cities, and they provide management consultancy advisory services in co-operation with private SMEs consultants, as required. The central government has responsibility for the selection criteria and choices associated with these consultancy and technical guidance services. In addition, there is a programme that involves the dispatching of private management consultants to firms. By June 1998, approximately 15 000 consultants had been used. Some 12 000 companies benefited from 34 000 consultant-years through the prefectures and JASMEC by FY1997. In addition, the Institutes provide a variety of training programmes for SME managers for Small Business Management and Technology. Trainees number about 14 000 annually.

Table 5. Management training via local government in Japan

Programme	Since	Designed for	Results in 1997
Management training (long-term)	1963	Management, middle management	177 trainees/7 courses
Management training (short-term)	1967	Middle management, management staff	1 683 trainees/61 courses
Information technology training (short-term)	1987	Middle management, management staff	311 trainees/13 courses
Training for SMEs retailers (short-term)	1992	Management, middle management, sales staff	1 053 trainees/49 courses
Training for start-ups	1995	Management of start-up SMEs, entrepreneurs with an actual plan for starting up an SME	319 trainees/12 courses
Total			3 543 trainees/ 142 courses

United Kingdom

While the United Kingdom devotes considerable public funds to providing consultancy guidance (one-to-one) to small firms, it does not generally deliver, or provide public funds to support, schemes that provide management training to small firms. However, there are three small-scale schemes which are illustrative of different approaches: the UK Small Firms Training Loans Scheme (SFTLS); the Golden Key scheme; and the National Vocational Qualification (NVQ) in (small) Business Planning. Only the third fully satisfies the definition of (formal, external) management for established small enterprises.

In 1994, the Department for Education and Employment introduced the Small Firms Training Loans Scheme (SFTL). Under the scheme, authorised banks provided loans to small businesses seeking to fund training either of workers or managers. The interest rate on the loan averaged only about 2% above base rate, and the public subsidy comprised a repayment holiday period. Between 1994 and 1998, 346 Small Firm Training Loan Awards were made, almost half of which were by one bank – Barclays which no longer participates in the scheme.

The Golden Key package began in 1994 in Norwich, following research in the locality which showed that in 80% of business failures, lack of management skills was a factor and that lack of financial management was of critical concern. It sought to enhance the financial planning skills of small businesses in the locality through a training programme delivered by the City of Norwich College. The novelty of the scheme was that several of the major banks provided discounts to customers who completed the programme. One bank, for example, offered up to GBP 150 per annum off its charges for three years, or 1% off overdraft rates, subject to a floor of 3.5%. Subsequently, the concept was widened, both geographically and in terms of programmes delivered. Geographically, the programme was extended to Suffolk in 1995, to Derbyshire in 1996 and to other areas in 1997. The programme diversified to a Golden Arrow package covering marketing and a Golden Star on general business skills. The involvement of the banks is critical because they provide a financial incentive to small firms to undertake the training. The training was delivered over five "three-hour" evening sessions spanning two and a half weeks. The format was highly interactive, but worked through cash flow, profit and loss accounts and balance sheet forecasting (Cushion, 1995; 1997).

After a number of years of preparation, during which it was appreciated that owners and managers of small business had very different learning "styles" from their large-firm counterparts, the Small Firms Enterprise Development Initiative (SFEDI) developed a set of national common standards for SME managerial competencies – National Vocational Qualification (NVQ) in (small) Business Planning. By 2002, SFEDI aims to have 100 000 prospective business owners participating each year in programmes linked to SFEDI Start-Up/Business Planning Standards. The qualifications are at different levels and target two different groups – start-up and established businesses. As an example, the higher (Level 4) OM4 course in Business Management and Development qualification is achieved by obtaining eight units; five of these are mandatory and three are from the nine optional units. The five mandatory units are: review the performance of the business; develop the business plan; manage the finances of the business; and improve own management of the business. The nine optional units are: plan the finances of the business; obtain finance for the business; develop a credit control policy; develop and implement the marketing plan; develop and implement the sales plan; export products and services; develop the contribution of people to the business; purchase products and services; and obtain and manage business premises.

Currently, the OM3 course – which focuses on start-ups – is more popular. At the end of 1999, there were 10 722 registered candidates and to date, 27 062 awards have been made. This compares with OM4 – which covers established businesses – where there are 613 registered candidates and 813 awards to date. Since this programme is very recent, there has been no evaluation of its impact. However, SFEDI, in conjunction with the Leicester Centre for Enterprise, is undertaking a Small Firms Impact Assessment Study, designed to assess the impact of training, business support and the use of national standards on small-firm performance.

United States

The Small Business Development Centers (SBDCs) provide management assistance to current and prospective small-business owners by delivering counselling, training and technical assistance. The scale and changes in the scale of SBDC activities since the end of the 1970s is marked; in 1977, the prime focus of SBDC activity was in training activities which had 15 times as many clients as counselling. However, by the mid-1980s, this had fallen to a ratio of about 3:1 and has since fallen to a ratio of about 1.5:1 (Table 6). There has thus been a refocusing of SBDC activities away from formal training towards a greater emphasis on counselling. One evaluation of the SBDC found that counselling for both start-ups and established businesses contributed significantly to job creation, tax revenues and the leveraging of external finance from the private sector (Chrisman, 1997).

In addition, the Small Business Information Centers provide the latest in high-technology hardware, software, and telecommunications, together with counselling to assist small business. The Service Corps of Retired Executives provides free expert problem-solving assistance to small businesses. The Women's Business Centers provide financial management, marketing, and technical assistance to current and potential women business owners.

Table 6. US Small Business Development Centre Programme

Fiscal year	Number of clients counselled	Training course attendees
1977	2 000	30 000
1978	2 600	34 000
1979	3 000	37 000
1980	17 482	36 618
1981	14 202	40 381
1982	24 025	54 594
1983	42 506	94 019
1984	50 115	102 384
1985	66 745	182 417
1986	72 153	258 991
1987	56.034	219 638
1988	128 514	248 298
1989	171 700	283 257
1990	191 865	274 437
1991	190 602	279 534
1992	222 497	319 535
1993	230 483	326 289
1994	224 995	331 987
1995	228 424	341 148
1996	237 107	333 513
1997	245 766	377 651
Grand totals	2 423 815	4 206 191

Programme evaluation

As with many government programmes directed at smaller enterprises, the evaluation of management training programme outcomes is rare. The only countries in the current survey that give examples of training evaluation are Japan and the United Kingdom. Two types of measures are used to assess the impact of the provision of management training: i) satisfaction of the trainees/firms; and ii) impact upon the firms. Due to the difficulties in assessing the latter, most evaluations are confined to surveys of recipients of training.

It is clearly necessary for trainees to recognise the value of their learning in order to implement it for their own and their businesses' benefit. In most training courses, as a minimum, the satisfaction of respondents is polled. For example, in 1998, the SMEA in Japan surveyed trainees from two of its training programmes asking them to rate their satisfaction with the training provided. Respondents were given five grades, ranging from 1 = very unsatisfactory to 5 = very satisfactory. The results show that the trainees were generally highly satisfied with the training provided (Table 7). The table also shows that the "scores" are virtually the same for the training provided by local government and by the Institutes for Small Business Management and Technology (ISBMT). Finally, it shows that all aspects of the training are highly regarded. In only one case, facilities and equipment, a training course provided by the local government, was the rating slightly lower.

Table 7. Trainee satisfaction with management training in Japan

	Local government scheme	ISBMT scheme
Total	3.90	3.97
Curriculum	3.89	3.94
Comprehensiveness	3.80	3.90
Training period	3.89	3.79
Balance of lecture and practice	3.47	3.64
Training material/method	3.69	3.64
Facilities/equipment	3.35	3.84

Japan is not unique in achieving a high level of trainee satisfaction with training content. The evaluation of the UK Golden Key scheme showed that clients were highly pleased with the course and believed it had enhanced their management skills (Table 8). It is therefore important that the views of trainees are automatically sought as a cost-effective means of assessing the value of training provision.

Table 8. Trainee evaluation of the Golden Key scheme: United Kingdom

- Customers said they would be prepared to pay GBP 111 for the course
- They rated the courses 4.34 out of 5
- They rated the presenters 4.51 out of 5
- 91% said they would recommend the course
- There was a 52% increase in management skills as a result of the course
- 74% said that the courses had actually affected their growth plans

Source: Cushion (1997).

An official evaluation of the UK Small Firms Training Loans Scheme (SFTL) has also been undertaken (Maton, 1999). A telephone interview with 92 businesses that had received the training found:

- Nearly two-thirds of the businesses said the training they undertook using SFTL would
 not have happened so quickly or at the same level if the loan scheme had not been
 available.
- Almost half of the businesses employ more people now than when they took out the loan; this suggests that there are links between the decision to invest in training and job growth.
- Fully 81% of businesses thought that SFTL was a good way to fund training. Only 3% were not happy with the scheme.

These responses are not, of themselves, sufficient for making an assessment of their impact upon the performance of the small firm. This is because if the trainee is a (non-owning) manager, he/she could leave for another job, taking with him/her the skills acquired. Even for owner/managers who do not leave, it is quite plausible to express satisfaction with a training course without that leading to performance enhancement at work, possibly because this is constrained by factors which the training cannot/does not influence. Quantitative assessments of the impacts of management training on the actual performance of the firm in the longer term are needed to fully evaluate the contribution of these programmes. However, there are several methodological problems in seeking to link provision of training to firm performance and it is for these reasons that such evaluations are rare.

The first is to decide what is meant by firm performance. Given that those owning small firms exhibit widely differing aspirations, the performance measures could include profit/sales growth, short-/long-term survival, maximising family income, minimising tax burdens, etc. In practice, sales growth and survival are chosen because they are easiest (but not easy) to identify.

A second issue is that firm performance is influenced by a myriad of factors other than management training. To assess the impact of management training, all these other influences need to be taken into account. These will include "external" influences such as the size, ownership, age, sector and location of the firm. A second group of influences are "internal" influences on firm performance, which include strategy, research and development and leadership. Failure to take account of these "external" and "internal" influences on firm performance could lead to the contribution of management training being either over- or under-estimated.

The third methodological issue is referred to as the "endogeneity" issue. By this is meant that, even if it is shown that the firms which have performed best are those that train most intensively, the direction of the relationship is unclear. It is equally plausible that the firms that train are those that can afford such training – reflecting good performance in the past. Hence it may be that good performance leads to more training, rather than that more training leads to good performance.

Fourth, there is the key issue of selection. The small firms that provide training may not be a random sample of small firms; they may be more motivated, aggressive, dynamic and it is these qualities which generate "better" performance. The fact that these happen to be correlated with training provision is spurious, and it would be entirely wrong to assume that it was the training that led to enhanced performance when it was more basic qualities such as motivation and dynamism.

Best practice in SME management training

While publicly funded management training is widespread, the absence of careful evaluations make it difficult to judge effectiveness. This means that it is not easy to address the issue of "best practice" or "exemplars" in this area based upon careful assessment. A key recommendation is therefore for those responsible for government management training and counselling programmes for SMEs to undertake evaluations, ideally using a broadly similar methodology. Templates for such methodologies are available (OECD, 2000c; Storey, 1999) and the OECD could play a key role in ensuring that the approaches adopted across countries are broadly compatible. Due to this evaluation gap, this report presents subjective observations concerning how publicly supported management training might be designed to enhance the human capital of those responsible for owning and managing smaller enterprises. It seeks to identify broad characteristics, but cannot be certain that these constitute "best practice".

Differentiate counselling and training

Both training in groups and individualised counselling are useful approaches to upgrading SME management, but should be tailored to different types of firms. Governments currently devote more resources to counselling than to training in the SME sector. However, training is perhaps more relevant for start-ups, while counselling is more appropriate for established firms. When an entrepreneur starts a business there are a number of "generic" issues which have to be addressed, many of which are encompassed within the formulation of a business plan. These include market assessment, pricing and costing, financing and cash flow. It may also include aspects such as

employing workers, health and safety, intellectual property rights, etc. Awareness of these issues can be enhanced by training which can be provided to similar groups of would-be entrepreneurs.

Once the business becomes established, business owners or managers need to supplement their knowledge through information focused on their specific business. In this context, training may be less appropriate and greater value is provided by "one-to-one" counselling. This broad separation is apparent in the activities of the Small Business Development Centers (SBDCs) in the United States, in the activities of Human Resources Development Canada (HRDC), and in Business Links (BLs) in the United Kingdom.

Teach important management skills

Above all, management training programmes for SMEs should impart a package of skills needed in the current business environment. For start-ups, this includes training in formulating business plans, identifying markets, hiring skilled workers and complying with government regulations. For more established SMEs, it might comprise developing skills in marketing and exporting; product development and process improvements; identification and use of new technology, including information and communication technologies (ICT); increasing co-operation among staff and promoting internal teamwork; enhancing networking with suppliers, clients and other firms; and generally improving adaptability and flexibility to respond to changing market conditions and client needs.

In many countries, management training is being given through a "Develop your Business" approach. Executives from SMEs come together in small working groups where they confront, help and share problems and issues with other participating managers. The analysis, plans and strategies that are produced during the course are scrutinised by the group. This process produces a tight-knit group in a constructive environment where the managers can draw on each others' experience and learn to view their business in a new light. The working group can continue to meet in future years to share experiences and insights (SIM, 1999).

Target training to specific groups

Training can be developed for particular groups of owners and managers in SMEs. The obvious distinctions are between "start-ups" and "established" businesses. The case studies indicate that it is through select groups of like managers that SMEs may receive the greatest benefits from management training. A second key group is "exporters". In the United States, the Department of Commerce has developed the Export Trade Assistance Partnership (ETAP) for groups of "export-ready" small firms wishing to develop new markets, particularly within NAFTA. A third "group" is young people. Canada is particularly active here, with its Canadian Youth Business Foundation Programme and its Young Entrepreneurs Financing Programme, both of which link finance to the provision of advice/training for young people.

Make programmes local and flexible

Delivery of training should be through local organisations offering flexible programmes. Neither the individual about to start a business, nor the existing small-business owner is prepared to travel far for training. Furthermore, given the long hours which such individuals work and their reluctance (or that of their employers for them) to be "away from the shop" during trading hours, it is vital that training is provided at times which suit this customer. This is likely to be in the evenings or at weekends. For example, the training in the Employment Development Centres in Finland can often be of up to two years duration, but involves only 1-3 days per month. The Golden Key scheme for start-ups in the United Kingdom is given over the course of five evenings.

Maximise electronic delivery

Although older managers may be unwilling to learn in this way, it is likely that training programmes for SMEs will increasingly be delivered by computerised learning packages. In the future, "best practice" is therefore likely to incorporate, or even be wholly based, on electronic media. Those evaluations of small-business management training which have taken place suggest that individuals learn best when part of broadly homogenous groups. They also learn from one another, and particularly when the learning is structured by an individual with strong practical and personal experiences of being an entrepreneur. However, in many large countries, especially where the population is geographically isolated, it is difficult to deliver this type of training. In such locations there is a stimulus to move away from traditional "classroom" teaching and towards electronic learning. Many OECD countries are putting their management training insights for both start-ups and established firms on line through the Internet and thus broadening their geographical reach.

Foster entrepreneurship through education

Entrepreneurship should be taught as a value and skill through the general educational system which is the key provider of skills in an economy. Inculcating an understanding and awareness of business in general, and entrepreneurship in particular, can be undertaken by the education and formal training system. Clear examples of this are in Germany and Finland. In both cases, the system of management training for small firms is closely entwined with the system of continuing vocational training (CVT). In Germany, this is closely linked to the Chambers of Industry and Commerce, which set the training agenda. In Finland, the focus on entrepreneurship starts even earlier, with training being organised at all levels in the Finnish school system. It continues as individuals leave school and attend colleges and universities. Efforts to stimulate entrepreneurship among young people are also apparent in other countries. For example, Atlantic Canada has had a programme for incorporating entrepreneurship in the school curriculum since the early 1990s. The UK Government, in 1999, set aside GBP 30 million for the Science Enterprise Challenge to develop entrepreneurship teaching primarily to science students in a small number of UK universities.

Conclusions

In addition to designing best practice programmes for management training for SMEs, there are three general SME training challenges for governments. The first is that governments have vast amounts of information which are potentially of use and value to those running small businesses. Unfortunately, much of this information is effectively inaccessible to the entrepreneur. Large firms often have legal departments that deal exclusively with legislation and legislative awareness; such a luxury is not available to small enterprises. Furthermore, the small firm requires immediate answers in "bite-sized chunks". The first challenge to government, therefore, is not necessarily to collect more information but instead to view small firms as a potential customer for this information. Information intermediaries, whether or not subsidised by the state, whose task is to take specific questions asked by entrepreneurs and immediately obtain valuable information from databases, play a critical role. To

achieve this, governments have to collate their own information sources to enable such questions to be answered.

The second challenge is, in addition to management training for managers, to enhance the generally low level of training for all employees in small firms. If the objective is to enhance the level of skills of workers in all firms throughout the economy, irrespective of size, then the non-training of SME workers has to be addressed. While it is difficult to link training provision to enhanced firm performance among small firms, it is easier to link training to improvements for individual workers. The implication is if the benefits accrue to the workers, then perhaps small-firm workers require some form of "portable" training which they cannot reasonably expect the employer to provide. As the benefits of this training accrue to the economy as a whole, then it might be reasonable that (small) firms be given incentives to provide training for their workers, including managers.

The third challenge for all governments is to generally enhance entrepreneurship and make it easier for small firms to start up and fail. It may be that the most effective "learning" for small-firm owners is through experience, with some of this experience being acquired through failure. Outside the United States, business failure is viewed as a reflection of lack of competence, and those individuals who have "failed" often have great difficulty in obtaining funding to start another business. In the United States, there is an acknowledgement that failure can be a "chance event" and that, if it is not, individuals may learn from the experience and subsequently establish more successful businesses. The cultural shift which this implies would be considerable in some countries where there is a stigma associated with business failure and bankruptcy. Reviewing the role of "failure" has to be considered as a real option for governments seeking to enhance small-firm owner/manager learning and entrepreneurship in general.

ANNEX

DEFINITIONS

This report begins by defining what is meant by "management training for SMEs". While the concept might appear simple, in practice it has been extremely difficult to construct an operational definition which has some validity and applicability across the six countries. We have therefore identified a definition which conceptually captures the underlying logic, and which is, in principle, capable of being quantified by the statistics collected by at least some of countries examined. The following provisional definition of management training for SMEs will be used:

"Group-taught formal learning, external to the firm, provided for owners and managers of independent enterprises with 500 (or 250) employees or fewer, and at least partly funded by the organisation."

The following three diagrams are intended to clarify the significance of the items included and excluded in the above definition.

Diagram 1a

	Managers	Non-managers
Large		
Small	~	

Diagram 1a shows that the only occupational group of interest is managers (owner managers) currently employed within a (non-large) enterprise. This definition specifically excludes:

- All business start-up training provided for individuals, whether or not they are employed.
- All training provided to workers not classified as managers, even if such training contains elements of management such as staff supervision.
- Any training provided to a manager which is not managerial training so that for example IT skill upgrading would (probably) be excluded.

A second key distinction is made between "internal" and "external" training. Diagram 1b illustrates that distinction. This definition excludes:

• "On-the-job" managerial training.

The definition includes only "external" training, on the grounds that this can be more easily identified.

All training All training External to Internal to the firm Taught Self learning

The diagram also shows that, even for external training, only taught, as opposed to self, learning is included. Hence, a manager in a small firm undertaking a distance training course, such as an MBA, but where his/her company makes no contribution to the fees/expenses, is excluded. It also excludes any self-learning or general educational upgrading which managers might undertake in their private time.

A third component of the definition is the word "formal". The US Bureau of Labor Statistics defines formal training as occurring when:

- Employees are taught skills or given information to help them do their jobs better.
- It is planned in advance.
- It has a structured format and a defined curriculum.

On the other hand, informal training is:

- Unstructured.
- Unplanned.
- Easily adapted to situations or individuals.

A fourth critical distinction is shown in Diagram 1c. For small firms, in particular, in many countries, the state either provides, or subsidises the provision of, business advisory services. These are sometimes called consultancy services. The key distinction between training and consultancy is that the latter is a "one-to-one" service tailored to the specific requirements of the individual firm. Training, however, is a more generic service provided to a group of individuals from one or more businesses at the same time. It is not the purpose here to assess the impact of consultancy services. Finally, it is important to note that management training may or may not result in a formal qualification. For the purposes of the definition both forms are included.

Diagram 1c



REFERENCES

- Baldwin, J.R., E. Gray, J. Johnson, J. Proctor, M. Raliquzzaman and D. Sabourin (1997), "Failing Concerns: Business Bankruptcy in Canada", Statistics Canada, Catalogue No. 61-525-XPE, Ottawa.
- Betcherman, G., N. Leckie and K. McMullen (1997), "Developing Skills in the Canadian Workplace", CPRN Study No. WO2, Renouf Publishing, Ottawa.
- Chrisman, J.J. (1997), "The Economic Impact of Small Business Development Centre Counselling Activities in the United States, 1994-5", unpublished report.
- Cosh, A., J. Duncan and A. Hughes (1998), "Investment in Training and Small Firm Growth and Survival: An Empirical Analysis for the UK 1987-95", Department for Education and Employment, Research Report RR36.
- Cushion, Nigel (1995), "How to Succeed in Small Business Training", City of Norwich College and Nat West Bank.
- Cushion, Nigel (1997), "Second Annual Evaluation Report of the Small Business Initiative", City College Norwich and Nat West Bank.
- Huselid, M.A. (1995), "The Impact of Human Resource Management Practices on Turnover, Productivity and Corporate Financial Performance", *Academy of Management Journal*, Vol. 38, No. 2.
- IKEI (1998), "Training Processes in SMEs: Practices, Problems and Requirements", Leonardo Programme, European Report, Ref. E/12234.
- Maton, K. (1999), "Evaluation of Small Firms Training Loans", UK Research Partnership, Department for Education and Employment (DfEE) Research Report RR97, Norwich.
- OECD (1999), Strategic Business Services, OECD, Paris.
- OECD (2000a), "High-Growth SMEs: Phase II Synthesis Report", DSTI/IND/PME(2000)3.
- OECD (2000b), "Is There a New Economy? First Report on the OECD Growth Project", DSTI/IND/STP/ICCP(2000)3.
- OECD (2000c), OECD SME Outlook, OECD, Paris.
- Roy, P. (2000), "Small Business Skills Problematique", Industry Canada.
- SFEDI (1999), "Small Firms Training Impact Assessment", Executive Summary, SFEDI Centre for Enterprise.

- Storey, D.J. (1994), "Understanding the Small Business Sector", Routledge, London.
- Storey, D.J. (1999), "Six Steps to Heaven: Evaluating the Impact of Public Policies to Support Small Businesses in Developed Economies", in D. Sexton and H. Landström (eds.), *Handbook of Entrepreneurship*, Oxford, Blackwell.
- Swedish Institute for Management (SIM) (1999), "Develop your Business: Profitability and Efficient Management in Small and Medium-sized Companies", SME Business Development Programmes, Stockholm.

Chapter 1

CANADA

Introduction

This chapter reviews publicly available material on the provision and impact of management training, briefly defined, in smaller enterprises. In this provision the public, and quasi-public sector plays a much larger role than in the United States.

The chapter begins by reviewing the data sets available on training provision by enterprises of different sizes. It then reviews work which has sought to link training provision at enterprise level to firm performance.

The second half of the chapter reviews key policy initiatives, noting the particular interest of Canadians in seeking to enhance "youth enterprise".

Many of the policy initiatives in this area, however, have begun only recently and it is difficult to be confident of the effect of the initiatives.

Training provision in Canada

In Canada, the key source of data on training provision is the study by Statistics Canada entitled "The Evolving Workplace". This pilot survey includes 748 establishments and 1 960 workers. Data on training provision by establishment size is shown in Table 1. It shows that formal training is provided in 39% of Canadian establishments, but that this is strongly influenced by establishment size. Thus, 95% of establishments with 500 or more employees provide training, compared with only 32% of those with 20 or less workers.

The size differences are even more striking when account is taken of whether or not the training provided is vocational or non-vocational. The second column of Table 1 shows that smaller establishments – with fewer than 20 workers – are much more likely to provide non-vocational than vocational training. On the other hand, large establishments are almost equally likely to provide vocational and non-vocational training.

Table 1 tends to exaggerate the differences in training provision by establishment size. This is because the large establishment need only provide training for a single worker in order to be classified as a training provider. The alternative, and perhaps a more realistic indicator of training intensity, is shown in Table 2. This represents the percentage of employees in establishments of varying sizes that reported being in receipt of training during the previous 12 months. This also is clearly related to establishment size, but the differences between the smallest and the largest sizes of establishment are much less than in Table 1. From Table 2, it can be seen that 27% of employees in establishments with

fewer than 20 employees were in receipt of training during the previous 12 months, compared with 48% of employees in large (500+) establishments. Unfortunately, the study does not publish data on how this varies by occupation, so it is not possible to identify training intensity by owner/managers in small enterprises.

Table 1. Training provision in Canada, by establishment size

		Percentage of estab	lishments offering:	
Employment	Formal vocational training	Formal non- vocational training	Both formal vocational and non-vocational training	Any formal training
0-19	28	20	16	32
20-99	77	53	51	79
100-499	93	79	79	93
500+	95	90	90	95
All	35	26	22	39

Source: Statistics Canada (1998), The Evolving Workplace, Table 3.4, p. 31.

Table 2. Employees trained, by establishment size

Employment	Percentage of employees reporting training
0-19	27
20-99	31
200-499	45
500+	48
All	41

Source: Statistics Canada (1998), The Evolving Workplace, Table 3.10, p. 36.

Other studies of training provision by firm size in Canada

During the 1990s, four major studies have sought to investigate the link between training provision and firm size in Canada, one of which, the Statistics Canada (1998) study, was discussed above. The four, together, are reviewed in Table 3. Unfortunately, comparisons are difficult because of the different definitions of training used. The only definition which appears to be fairly consistently shared by three of the four studies is the percentage of establishments providing formal training. Here there is a quite strong similarity in results, ranging from 39% of all establishments in the Statistics Canada study to 44% in the Human Capital Development and Innovation Study.

However, this similarity may, to some extent, be fortuitous since, as is shown in the final column, in all studies, there is significant variation in training provision by establishment size. For example, the Betcherman *et al.* study (1997)finds that 86% of establishments with more than 100 workers provided training, compared with only 38% of establishments with fewer than 20 workers. There is an equally wide variation in the Statistics Canada study by establishment size.

The effect is that the "average" figures quoted above are heavily dependent upon the size distribution of establishments; hence, where there is a higher proportion of small establishments, the average figure is likely to be very much lower than where average establishment size is larger.

Table 3. Training provision studies in Canada

	Percentage of establishments providing training					
Study	Year	Formal	Informal on-the-job	Any	Both	Variation by establishment size
Betcherman et al. (1997)	1995	42		70		Formal training provision varies from 38% in establishments with <20 workers to 86% in establishments with >100 workers
Statistics Canada/HRD The Evolving Workplace (1998)	1996	39				Formal training varies from 32% in establishments with <20 workers in 95% in establishments with 500+ workers
Canadian Federation of Independent Business	1991		60			On-the-job training was <i>more</i> likely to be provided by the smallest firms.
Human Capital Development and Innovation (1995)	1992	44	40		59	Not specified in tabular form but large firms are statistically significantly <i>more</i> likely to train.

Nevertheless, the Statistics Canada and the Betcherman *et al.* (1997) studies indicate that 38% and 32%, respectively, of establishments with fewer than 20 workers in Canada provide formal training for their workers. This proportion rises sharply with establishment size: it is 86% in establishments with more than 100 workers and 95% in establishments with more than 500 workers.

The only study to examine the provision of informal training is the one by the Canadian Federation of Independent Businesses. The CFIB study reports that 60% of all enterprises provided informal training and that on-the-job training was almost twice as likely to be provided by the smallest firms (fewer than five employees) than among the largest firms of 100 or more employees.

Training impacts

Betcherman et al. (1997) report in their studies for Canada:

- "The analysis also found positive outcomes for firms that trained. Organisations with training programmes had more favourable performance trends in a number of areas including revenues, profitability, employee relations, quality and productivity and their business viability and outlook.
- "Multivariate analysis sustained this link between training and firm performance. Even after controlling for other establishment characteristics we found that establishments with the strongest commitment to training were significantly more likely than other firms to report positive revenue and productivity trends over the previous two years."

This work is a major examination of workplace training in Canada. It took two surveys of employers, one in 1993 and the other in 1995. The 1993 panel of 2 543 establishments was then reinterviewed in 1995, yielding 1 089 respondents. This is then supplemented by a new sample in 1995 of 1 495 respondents yielding a total 1 995 sample of 2 584.

The value of the re-interview is that information was available in 1993 upon whether or not the establishment provided formal training. In 1995 information is sought from the respondents about their performance during the previous two years. Unfortunately this was not collected in the 1993 survey.

In an ideal world two improvements could be made to this methodology:

- Instead of examining only the 1995 respondents, it would have been better to have examined all the 1993 respondents, because in this way the impact of training could have been identified both for survivors and non-survivors. As it is, the analysis for 1995 can only be conducted for survivors.
- The performance data used was collected in 1995, and respondents were asked how they felt the business had performed during the previous two years. In an ideal world it would have been better to have used the 1993 data on the current position and compared that with data collected in 1995. Betcherman *et al.* justify their approach with reference to Cook (1990), who found that "managers are able to provide reasonably accurate assessments of general performance trends".

A rather different view is that, partly because of fading recall, partly because of personnel changes and partly because of an unwillingness on the part of some to admit poor performance, doubt has to be placed upon the ability of respondents in a telephone, or even postal, survey, to accurately reflect historic, or even current, firm performance. Arguably, this inability is greater in the case of smaller than in larger enterprises, partly because the temporal fluctuations are likely to be greater and partly because of the greater rapidity of staff changes.

This certainly was the case among UK middle market companies (Amos *et al.*, 1997), where there appeared to be virtually no correlation between subjective estimates of performance provided by managers and objective performance defined as sales growth from publicly available databases.

The work by Cosh *et al.* (1998) for the United Kingdom also illustrates the difficulties of using retrospective estimates. In that study, firms in 1990 were asked whether they conducted formal training; they were also asked about their performance in the period between 1987 and 1990. When these were correlated it was found that, even taking account of the number of other elements, there was a statistically significant association between training provision in 1990 and reported performance between 1987 and 1990.

However, when the 1990 sample was rolled forward five years to 1995, the association between training in 1990 and performance in the *following* five years virtually disappeared apart from the certain tightly identified size groups.

In an ideal world, the study could be improved in two ways. The first is the use of objective, rather than subjective data; the second is that it is desirable to go forward rather than backward in time. The advantage of going forward is that it is possible to include both survivors and non-survivors. It also means that respondents do not have to speculate as to how they have performed in previous times.

Finally, as Betcherman *et al.* themselves recognise, a correlation between training expenditure at time t and performance in the two years prior to t, does not necessarily reflect causation. Thus the firm which extensively trains in period t, could be doing so because it is able to afford to train as a result of good performance in the years prior to t. It does not necessarily mean that training expenditure in year t yields returns in the years beyond t.

Given the above, the statements by Betcherman *et al.* used at the start of this section relating training and firm performance need "softening".

Table 4 shows that the two subjective indicators of performance are: reported increases in revenue and reported increases in productivity between 1993 and 1995. Using a multiple regression framework, Betcherman *et al.* then examine whether reported changes in revenue and productivity

during the previous two years are related to training where the formal training was provided by the company in 1993. Other explanatory variables are also included in the equations.

Table 4. Training significance in Betcherman et al. models

	Structural	Full	Full without HRM	
Revenue	Yes	No	Yes	
Productivity	No	No	No	

Table 4 shows that, using the revenue performance measure, formal training provision in 1993 is significant in two of the three equations. The structural equation included "controls" such as firm size, unionisation, industry sector, regions and, when all these variables are included, formal training in 1993 has a positive and significant influence upon growth to 1995.

However, when more firm characteristics are included to supplement the structural variables, the role of formal training becomes more questionable. In particular, Betcherman *et al.* introduce variables which relate to human resource management (HRM) practices. These include formal communications or information-sharing programmes; teams, job rotation or cross-skills training; formal employee involvement; variable compensation and pension provision. When these HRM variables are included, the training variable becomes insignificant and is replaced by the HRM practices variables. Since the HRM practices variables are much more wide-ranging than the training variable, it is tempting to believe that it is these, rather than training *per se*, which influences revenue trends.

The second row of Table 4 indicates that, when an alternative measure of performance – productivity trends 1993-95 – is examined, there is no statistically significant contribution made by formal training in 1993.

Our overall conclusion is therefore that it is appropriate to soften and qualify the view that training provision and enhanced firm performance are clearly and unambiguously linked. The careful and pioneering work which Betcherman *et al.* undertook implies that there can be a link between training and small firm performance but that it is quite weak. It may be enhanced by widening what is referred to as "training" to include the concepts of learning and development, but the formal statistical testing of this has yet to be undertaken. Finally, it has to be emphasised that this research does not limit itself to management training which is the prime focus of this review. Training, as defined by Betcherman *et al.*, includes whether training is undertaken by individuals within the business. It is not specifically focused on management training.

Assessing the impact of firm strategies upon growth in smaller Canadian firms

A number of studies have been conducted during the 1990s on smaller enterprises in Canada by John Baldwin and colleagues at Statistics Canada. The first "Strategies for Success" provided an overview of the strategies and activities of a group of SMEs which were growing during the latter half of the 1980s. The second "Successful Entrants" examined the operating and financial practices of entrants that survived their early teen years. The final study "Failing Concerns" sought to identify the characteristics of small businesses which experience bankruptcy.

In the present context, the second study on "Successful Entrants" is of particular interest since it compares faster and slower-growing entrants and seeks to distinguish the factors which "explain" this difference in performance.

The value of the study is that it takes two fundamentally different approaches: the first is to seek the opinions of those owning and managing the business; the second is to seek to link, through statistical analysis, the factors to the objective measures of performance of the firm.

Table 5 shows that these two approaches appear to lead to almost diametrically opposed conclusions. Those running small businesses believe the most important growth factors are (their) management skills and skilled labour and that the least important are the R&D capability of the firm and government assistance. The statistical analysis suggests that R&D and technological capabilities, together with access to new markets are the most important, whereas management skills and labour skills are the least important.

Table 5. Strategies for success in Canadian firms

Factors	Firms self-assessment	Statistical analysis		
Most important growth factors	- Management skills	 R & D and technological capabilities 		
•	- Skilled labour	 Access to new markets 		
Location persons arough factors	- R&D capability	- Management skills		
Least important growth factors	- Government assistance	- Labour skills		
		- R & D spending		
Most important competitiveness factor	- Customer service	 New products & range of product lines 		
Least important competitiveness factor	- R&D spending			
Most important marketing strategy	- Selling <i>current</i> products in <i>present</i> markets	- Emphasising <i>new</i> products or <i>new_</i> strategies		
Most important human resource strategy	- General motivation technique	- Innovative compensation		
wost important numari resource strategy	- Staff training	package		

Source: J. Johnson, J. R. Baldwin and C. Hinchley (1997), "Successful Entrants: Creating the Capacity for Survival and Growth", Catalogue No.61-524, Ottawa, Statistics Canada.

The purpose here is not to review the overall strategies of success in Canadian firms, but instead to seek to examine the role which training and human resources play in SME performance. Labour skills, using the statistical analysis, is shown to be comparatively unimportant, but Table 5 does identify the most important human resource strategy. When the business owners are asked this question they point to general motivational techniques and also to staff training as the most important factors. Neither of these, however, appears in the statistical analysis, where innovative compensation packages are of prime significance.

This work clearly highlights the problems of evaluation in this area. Quite simply, asking the business owner what they view their strategies for success as being yields fundamentally different answers from statistical analysis which links these factors to firm performance, particularly growth. Of particular importance in the current context is that the statistical analysis fairly consistently fails to link management skills and labour skills to performance; on the other hand, owners of small businesses clearly believe that link to be there.

Management training and youth enterprise

It is a consistent finding from research that younger people are more likely to cease trading in business than are older people. The results from the United Kingdom (Cressy and Storey, 1994), which took a sample of 2 000 business start-ups, indicated that the age of the entrepreneur was a clear

influence upon business survival rates. For the youngest age group – under the age of 25 – survival rates were less than one half of those of individuals in the 50-55 year old age group.

A number of reasons are put forward for this, which include the lack of experience of younger entrepreneurs – as well as factors such as easier access to finance by older people and the lack of alternative attractive employment opportunities available to older people.

Table 6. Examples of advisory, mentoring or counselling services provided for young entrepreneurs

Name	Function	Location	Budget	Organisation	Performance results
Young Entrepreneurs Financing Programme	1. Loans of up to CAD 50 000 to young people	National	Federal budget CAD 10 million	Business Development Bank of Canada (BDC)	None reported
	Mandatory counselling of hours built into loan			2. Bank of Montreal	
Canadian Youth Business Foundation Programme	1. Loans of CAD 15 000 to young people starting for first time, not able to obtain funding elsewhere	National	Not known	1. Royal Bank	None reported
	Have to agree to work with mentor			2. Bank of Montreal	
Service d'Aide aux Jeune Entrepreneurs (SAJE)	100 Centres funded to advise young people	Quebec only	CAD 5.3 million	Ministre de l'Industrie du Commerce et de la Technologie (MICT)	10 000 advised; 20% start a business creating 2.5 jobs per business
ACOA Seed Capital Programme	1. Provides loans of up to CAD 15 000 to young people	Atlantic Canada	CAD 3 million	Atlantic Canada Opportunities Agency	None yet; started April 1997
	Linked to access to counselling and training				

Partly to compensate for the disadvantages which young people may experience as entrepreneurs, several countries have developed programmes to help young people. Probably the best-known such programme is Law 44 in Southern Italy, but Canada has also made this a focus of policy at both national and state level. Table 6 shows four illustrations of national and state programmes which are designed to provide advisory, mentoring or counselling services to young entrepreneurs, a central component of which is to enhance their business/managerial skills. Many of these are only recently established and so it is difficult to assess their effectiveness.

The first two programmes are national programmes in which access to bank finance is linked to the "purchase" of counselling, mentoring/advisory services. The first programme (Young Entrepreneurs Financing Programme) requires loan applicants to commit to 50 hours of counselling for the duration of the programme. The cost of the counselling is built into the loan repayments. The Canadian Youth Business Foundation Programme also links a mentor to the business. This programme is focused upon those seeking to start a business and who are unable to obtain funding elsewhere.

At a provincial level, the *Service d'Aide aux Jeune Entrepreneurs* (SAJE) is a series of 100 centres throughout Quebec which have been established to provide advice to young people. Some

of that advice is prior to start-up, but the centres also run a wide range of entrepreneurial services such as access to libraries, CD-ROMs, the provision of specialist seminars, etc. In many cases, the centres link with volunteers prepared to provide mentoring services either at cost to the centre or without charge. This enables the service to be provided at low cost to the individual entrepreneur.

In other geographical areas – such as Atlantic Canada – ACOA also links the provision of its loans to access to counselling and training.

While there has been some review of the SAJE programme – indicating that about one in five of the individuals advised actually start businesses – the remaining programmes have no formal appraisals in the public domain. Hence it is difficult to estimate the "added value" of the mandatory counselling/mentoring/advisory services for which the client is expected to pay as part of the price of accessing loans. Clearly, the banks and government departments believe this adds to the likelihood of success of the venture, but, as yet, there is no clear demonstration of this.

Business Development Bank of Canada (BDC)

A key player in Canada in small business development is the Business Development Bank of Canada (BDC). The BDC currently plays an important role in the development of youth enterprises.

The Business Development Bank of Canada (BDC) is a crown corporation and was established by an Act of Parliament in 1974 as the Federal Business Development Bank. It changed its name in 1995 and is wholly owned by the government of Canada.

Its objectives are to promote and assist in the establishment and development of business enterprises in Canada, especially SMEs, by providing a wide range of financial and consulting services tailored to meet the current needs of those businesses and to earn an appropriate return on investment capital which is used to expand the loan portfolio.

It is therefore "special" because of its public ownership and because it seeks to provide not only finance but other business services. These include consultancy services. The Responsive Consulting Group (RCG – formerly Management Services) provides both one-to-one consulting services and group programmes. In 1998, 6 800 businesses were served, generating a revenue of CAD 21.4 million. Approximately one-quarter of this came from customised management programmes and a further quarter from quality management (ISO). About one-fifth came from general management consultancy and the remainder was distributed among exporting, planning and start-up from early growth services. The 9% growth in revenue of RCG supports the bank's view that growth in the new economy has increased the need for "high-end" management expertise in SMEs.

The role of universities

Menzies (1998) provides a recent review of Entrepreneurship Centres in Canadian universities. She identifies 32 such centres in 34 universities in Canada. She was able to obtain detailed information on the focus of such centres in 30 cases; just over half focused either on start-up or established businesses – what is referred to as "outreach" activities. For the remaining centres, there is a stronger emphasis upon entrepreneurial activities of students and on research work.

The nature of this outreach activity varied, but it included the provision of high-quality consulting, provision of training and support to start-up and/or management of small businesses. In

some cases the focus was more specific, e.g. upon technology-based enterprises or women-owned businesses.

Eleven of the centres had been in existence for two years or less so it is difficult to obtain a clear picture of the impact of the outreach activities which they provided. However, a comprehensive review is available for the Venture Development Group at the University of Calgary (Chrisman, 1997), which started in 1984. His work seeks to assess the contribution as perceived by business, of participation in the Venture Development Group's activities and programmes between 1990 and 1994. Clients could have participated in one or more of the following programmes:

- Projects: These are projects undertaken in small firms primarily by graduate students, under the direction of faculty. Clients are charged a small fee for the service but the student work is provided free of charge. Approximately 100 projects are completed each year in areas such as opportunity analysis, market research, market or product feasibility, product design and business and financial planning.
- The Business Owner Transition Programme: here a four-month programme was offered, usually twice a year, to small businesses in the locality. It provided ten interactive workshops and 15 small group working sessions by faculty members and industry experts. The programme was suspended in 1994 and has not restarted. Nevertheless, during the 1990-94 period approximately 200 businesses passed through the programme.
- Forums: Workshops and seminars on a wide variety of issues such as business planning, marketing, financing and government regulation were provided. Approximately 750 managers and entrepreneurs attend these forums each year.
- Legal clinic: This provided legal information to managers and entrepreneurs in the community. It was run in conjunction with the Faculty of Law and served approximately 200 clients per year. Businesses were provided with a mix of legal students, mentors from the legal community and members of the Faculty of Law. It covered items such as confidentiality and disclosure agreements, business formats, product and business liability, taxation, trademarks, copyrights, patents and contracts.

Chrisman sought to contact Venture Development clients for their views of the value of the services which they had received. The four types of programmes in which they could have participated are shown as the rows of Table 7 and two indicators of satisfaction are shown as columns. The first column reports the percentage of firms whose expectations of the programme were realised. The second column shows the percentage of firms who reported that most, or all, of the recommendations they had received were implemented.

Table 7. Venture Development clients' views of the benefits of the programme

	Percentage of expectations realised	Most or all of recommendations implemented
Projects conducted by management students	69	34
Business owner transition programme	77	36
Forms of other workshop/seminars	72	25
Legal clinic	79	68

It is not clear from Chrisman's work whether there are statistically significant differences in recorded satisfaction levels for firms participating in the four programmes. Nevertheless, taking only

the two indicators shown in Table 7, it suggests that the legal clinic was generally viewed as having a clearer direct impact than the other three types of programmes. The table shows that 68% of firms reported the recommendations as being implemented mostly or fully. This is vastly higher than for the other three programmes. It is also interesting that, although the differences among the four programmes are modest, the legal clinic also achieved the highest percent of expectations realised.

In commenting, Chrisman states:

"Apparently clients were most likely to implement the recommendations of the legal clinic. This is not terribly surprising, since legal information is based more on hard facts than soft evaluations."

This is a very "telling" comment. It illustrates that busy owner-managers attribute real value to "hard" information but are much less willing to pay for – or devote their own time to – softer issues. In part, this is because the soft issues are deemed to have less priority, or the owner-managers feel themselves to be the "best judge" of these softer issues, without having to rely on outside advice.

What does seem beyond dispute is that the legal clinic, which Chrisman believes to be unique in North America, is widely appreciated and valued. Indeed, its value is probably because it is "hard" in the sense of focusing upon immediate and identifiable business problems, rather than "soft".

Given these findings, it is interesting that Menzies reports that during 1998 a new director was appointed to head the Venture Development Group at Calgary and:

"The Centre is now focusing more on the education of the students. Resource constraints have forced a more focused path. There are many organisations conducting outreach within the community, therefore the University is no longer the sole provider."

Conclusions

- 27% of employees in establishments with fewer than 20 employees were in receipt of training during the previous 12 months, compared with 48% of employees in large (500+) establishments. No analysis is provided by occupation.
- The link between training provision and enhanced firm performance was examined. Our view is that this link is not strong. Unfortunately, the training reviewed is not limited to management training.
- Studies of successful SMEs have shown that the views of the entrepreneur on what made the company successful frequently emphasise the importance of "management" and labour skills. This is less frequently identified in the statistical studies.
- Canada currently places considerable emphasis, at both federal and provincial level, on enhancing the business and management skills of young people. It has a number of programmes to develop these skills.
- Most Canadian universities have Enterprise Centres, the function of which is to encourage students to become more entrepreneurial and to provide training and advisory services to local SMEs.

REFERENCES

- Amos, E., J. Spiller and D. J. Storey (1997), "The Middle Market. How They Perform: Education, Training and Development", FMI/Coopers & Lybrand/Warwick Business School.
- Baldwin, J.R., E. Gray, J. Johnson, J. Proctor, M. Raliquzzaman and D. Sabourin (1997), "Failing Concerns: Business Bankruptcy in Canada", Statistics Canada, Catalogue No. 61-525-XPE, Ottawa.
- Betcherman, G., N. Leekie and K. McMullen (1997), "Developing Skills in the Canadian Workplace". CPRN Study No. W02, Renouf Publishing, Ottawa.
- Chrisman, J.J. (1997), "The Economic Impact of Small Business Development Centre Counselling Activities in the United States, 1994-95", unpublished report.
- Cosh, A., J. Duncan and A. Hughes (1998), *Investment in Training and Small Firm Growth and Survival: An Empirical Analysis for the UK 1987-95*. Department for Education and Employment, Research Report RR36.
- Cressy, A. and D. Storey (1994), "New Firms and their Banks", National Westminster Bank, London.
- Menzies, T. (1998), "Entrepreneurship and the Canadian Universities", John Dobson Foundation, Brock University.

Chapter 2

FINLAND

Introduction

This chapter describes the current situation in Finland regarding training of management and executives of SMEs. It draws, in part, on the Ministry of Trade and Industry data bank on business development projects. In describing the operating environment specific to SMEs, we have used background information taken from studies and surveys carried out in Finland. Current information on the training offered to SMEs has been obtained from official sources as well as training organisations.

It has not been possible within this survey to provide quantitative data on participation rates of SME management in training programmes. Therefore, the discussion is limited to describing current training provision and its features. Some training programmes are described in more detail. In addition, it has not been possible to provide accurate data on the funding of training. For example, EU funding is administered through different ministries and it was not possible to collect information on how the various projects are classified in terms of EU funding, whether consultation is regarded as training, etc.

Some business schools and technical colleges have conducted research studies on SMEs. The SME Institute connected with the Turku School of Economics and Business Administration produces information and data on SMEs in Finland. Some associations and employers' organisations also conduct surveys, for example on the skills base and training needs of their member organisations. The Statistical Office of Finland produces quantitative data on training in Finland and Finnish businesses. Training organisations collect information about their own training activities and carry out evaluations of their training projects. In addition, various ministries collect quantitative data on their own particular sectors and monitor projects.

Comprehensive data on training in SMEs is currently not available. There are some studies concerning the training situation in SMEs which have also been used for this chapter. However, the studies are fairly old and do not contain up-to-date information. In addition, the studies tend to look at the training situation as a whole and do not separate out management training. Management training in SMEs is, therefore, an unresearched area in Finland at the moment. Some surveys are planned, however; for example, the Finnish Industry and Employers' Association is initiating a research programme on the training of SMEs, but the study has not yet produced any data. Previous surveys concentrate on the situation in large businesses. To produce comprehensive data on management training in SMEs, a large survey would be necessary. In the context of this report this has not been possible. However, on the basis of this descriptive report, it would be possible to carry out a more extensive survey by conducting an inquiry to Finnish training organisations about their management training programmes for SMEs and by a more detailed analysis of the results than has been possible here.

SMEs in Finland

According to European Commission recommendations, SMEs are firms with fewer than 250 employees, a turnover under ECU 40 million and a balance sheet under ECU 27 million. Furthermore, a big company may not own more than 25% of a SME (Statistical Office of Finland, 1997).

When using number of employees as a criterion for SMEs, 99.7% of all Finnish companies are small or medium-sized (as of 1997). This means there are altogether 189 000 SMEs in Finland. Finnish SMEs have a total of 634 000 employees and their total turnover is about FIM 500 billion. Therefore, SMEs employ 57.9% of the total workforce and produce 50.6% of the turnover of all companies (Statistical Office of Finland, 1997). The number of Finnish companies according to size and personnel is presented in Figure 1.

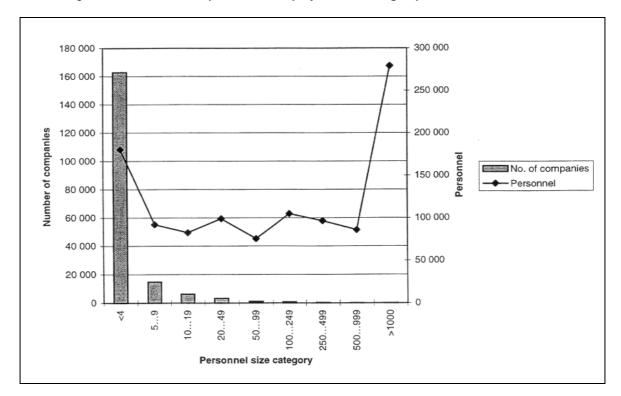


Figure 1. Number of companies and employees according to personnel size in Finland

Source: Statistical Office of Finland, 1997.

Compared to the European average, the share of SMEs in Finland is slightly lower in terms of total number and employment share. In the EU, on average, 99.8% of companies are SMEs and represent 66% of the workforce. The turnover of SMEs in Finland is also lower than the European average, which is 65% of the turnover of all companies (Statistical Office of Finland 1997).

Figure 2 shows how the numbers of companies and employees are distributed among different branches of industry in the SME sector. Most enterprises operate in the service sector and in the field of trade and industry. Industrial enterprises are typically larger than those in trade and services (Statistical Office of Finland, 1997).

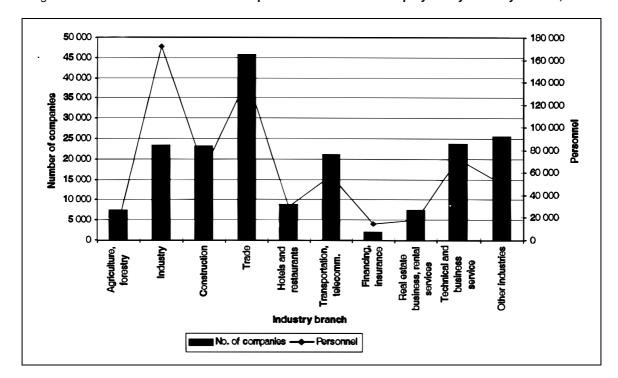


Figure 2. Finnish SMEs: number of companies and number of employees by industry branch, 1995

Source: Statistical Office of Finland, 1997.

Typical characteristics of SMEs

Because SMEs are distributed in different industries and different markets, diversity is their most striking and important characteristic. Despite their diversity and heterogeneity, SMEs have also some similarities (Martinsuo and Järvenpää, 1998).

Typical SME strengths and weaknesses are rooted in their small size and their diversity. According to Martinsuo and Järvenpää (1998), one of the most important features of SMEs is their innovative capacity. SMEs also typically have highly motivated managers and employees. SMEs do not need much bureaucracy and are flexible and adapt to opportunities. They have the capacity to customise their products and processes and respond to varying customer requests. Their competencies may be unique so that their operations are difficult to copy, and the benefits to be reaped from copying their success is small owing to small market shares. Typically, SMEs have less formalised external and internal communication systems and a quick, effective and centralised decision making process. They also have relatively low specialisation of production factor (Martinsuo and Järvenpää, 1998).

Their typical weaknesses are the lack of time and resources and their short-term perspective. SMEs play an important role in innovation but they may have difficulties in accessing new technologies owing to a lack of funds. Small firms are also more sensitive to external pressures and risks and have limited capacity for marketing, strategy and acquisition of new knowledge and technology. owing to their sensitivity to external turbulence, SMEs often neglect the need for internal improvements and are confused by outside issues such as changes in competition, customer demand, etc. Additionally, SMEs are characterised by lack of information, little functional expertise and means

of growth. The lack of resources causes problems in developing products and using new technology. This is a potential hindrance to innovation and adaptability (Martinsuo and Järvenpää, 1998).

Finnish SME policy

A key reason for being interested in SMEs is their potential to create new jobs and innovations and thereby generate economic growth. SMEs also make for a more varied regional industrial infrastructure. The importance of the SME sector as a job provider grew in the 1980s and 1990s as large enterprises externalised their activities, the number of contractors increased and the small enterprise sector providing jobs grew. According to the latest barometers, SMEs will also provide employment in the future and believe that the number of their employees will increase. Industry is the biggest employer in the SME sector followed by the trade sector. In future, the role of the service sector as employer is expected to grow (Finnish Ministry of Industry and Trade, 1998b).

The targets of the Finnish SME-policy programme and the short- and long-term guidelines are defined in the political programme concerning SMEs drafted by the advisory committee on SMEs. The 1996 programme focused on the following issues:

- Development of the operational environment of SMEs.
- Development of the working environment in SMEs.
- Promotion of projects strengthening the growth and development of SMEs (Finnish Ministry of Industry and Trade, 1998b).

Finnish industrial policy seeks to eliminate obstacles to SME growth and improve the functioning of markets. The central objective is to foster entrepreneurship that is independent of state aid. As Finland is preparing for European Monetary Union, the focal areas of industrial policy are the promotion of competition and corporate internationalisation, greater outlays on technology, education and training. Furthermore, improvement of the tax system to enhance job creation, the development of the financial markets and the lower prices are other important policy objectives. At the same time, it must be ensured that the regional industrial infrastructure develops in a balanced way (Finnish Ministry of Trade and Industry, 1998b).

EU and SME policy

The Finnish political programme concerning SMEs is in accord with SME policy in other European countries. The Multi-annual Programme of the European Commission in which Commission DG XXIII responsible for SME matters has defined the lines of European SME policy for the period 1997-2000. Finland's accession to the European Union has brought new nuances to the implementation of the SME policy in Finland. The Ministry of Trade and Industry aims at increasing the success and development possibilities of SMEs by combining the resources of the EU Structural Funds and national subsidies (Finnish Ministry of Trade and Industry, 1998b).

The EU structural funds therefore represent a possible additional funding source for existing support structures. Projects financed by structural funds always require also national funding. The EU funds are channelled to enterprises via national organisations and support structures.

The European Social Fund (ESF) is administered by the Ministry of Labour in Finland. ESF support during the years 1995-99 for the Finnish employment and education policies amount to about

FIM 3.5 billion. Total funding under the Fourth Framework programmes for the years 1995-99 in Finland is almost FIM 1.7 billion. European Union funds amount to FIM 491 million through the ESF. The objective of the Fourth Framework programme is staff development within SMEs, and various programmes are implemented throughout the country (Finnish Ministry of Labour, 1999).

The EU regional funds are administered by the Ministry of the Interior in Finland, while the Ministry of Education is responsible for administering projects in the education sector. There were 600 projects funded by the regional funds by the end of spring 1998 representing FIM 200 million from the EU and a corresponding amount from national sources channelled through the Ministry of Education (Finnish Ministry of Education, 1999).

Responsibility for actual project implementation is decentralised to corresponding regional organisations. Within the labour administration these are regional labour and employment offices. Enterprises may apply for project funding from the Ministry of Trade and Industry's regional offices, provincial administration offices and local labour offices. Education sector projects administered by the Ministry of Education are usually implemented by universities' centres of continuing education, polytechnics and other educational institutions.

Community projects are co-operation projects between two or more EU member countries. During the current funding period, for example, the SME initiative project is implemented in Finland. These projects receive two-thirds of their EU funding from the European regional funds and one-third from the ESF. In total, Finland raised FIM 64 billion from EU sources for SME projects in 1996-99 (Finnish Ministry of Labour, 1999). In addition to the SME community's initiative projects, the following projects are implemented in Finland during the current funding period for regional funds: INTERREG II A and C, LEADER II, URBAN, ADAPT, EMPLOYMENT AND PESCA. Of these, ADAPT and EMPLOYMENT are tailored to SMEs.

The ADAPT (Adaptation of the Workforce to Industrial Change) programme aims to adapt employees working in SMEs to ongoing structural changes in industry by developing knowledge and professional skills of the workforce as well as increasing flexibility and mobility. Objectives also include strengthening the competitiveness of businesses, prevention of unemployment and creation of new job opportunities, especially within the SME sector. The emphasis is on enterprises employing up to 50 staff. The ADAPT target groups are:

- Employees of SMEs who are under threat of unemployment due to structural changes.
- People who have lost their jobs or have been made redundant due to changes in production, but who have the possibility of becoming self-employed either in their own businesses or as free-lance professionals.
- People who are temporarily unemployed due to the structural changes.
- Part-time employees who have lost their full-time jobs due to the changes but who have the possibility of finding full-time employment again.
- Persons who may find job opportunities through vocational guidance and counselling or through retraining (Finnish Ministry of Labour, 1999).

The EMPLOYMENT (Employment and the Development of the Human Resources Initiative) initiative aims at the improvement of skills and labour markets in general. The programme has been designed to help those who have the most difficulties in the labour market (women, disabled people, socially excluded young and low-skilled people). The initiative comprises of four separate but related programmes:

- NOW: promotion of equal opportunities for men and women in the labour market.
- HORIZON: integration of the disabled into the labour market.
- YOUTHSTART: integration of young people under 20 and without training into the labour market.
- INTEGRA: prevention of social exclusion (Finnish Ministry of Labour, 1999).
- LEONARDO da VINCI is a EU training programme which aims at raising the standard of vocational education in Europe. Participation is open to enterprises, too.

The Finnish education system

The different levels of the education system

Pre-school

In Finland, the term "pre-school education" is used to mean the systematic education and instruction provided in day care or in comprehensive schools during the year preceding compulsory education. Thus the term "pre-school education" emphasises the aspect of preparation for school, as opposed to the kindergarten education given at an earlier stage of childhood.

Comprehensive school

The comprehensive school provides general education for all and is free of charge for all citizens. It is governed by the Comprehensive School Act (1983). The comprehensive school is intended for children from 7-16 years of age and lasts nine years. There are no entrance requirements. The comprehensive school is divided into the lower stage (years 1-6) and upper stage (years 7-9). Comprehensive school can also provide pre-school education for six-year-olds and an extra tenth year for those who have completed their compulsory education.

Upper secondary school

The upper secondary school provides three years of general education for pupils aged 16-19. It continues the teaching of the comprehensive school and qualifies the pupil for all higher-level studies. The upper secondary school leads to the national matriculation examination.

Education level Doctorate 5 4 3 Universities Higher 2 2 19 Upper 18 secondary schools 2 2 Upper secondary Vocational schools 17 1 1 16 8 Upper stage Lower secondary Compulsory schooling 7 Comprehensive schools Primary 3 2 Lower stage Preprimary education in Preprimary children's day care centres (kindergartens) and comprehensive schools

Figure 3. The Finnish education system

Source: Finnish Ministry of Education 1998.

Vocational schools

Finnish vocational education is given in educational institutions. They are equipped for both theoretical and practical instruction and have access to up-to-date facilities, including laboratories, tools, machinery and other equipment needed for training. Periods of on-the-job training are included in all programmes. Some 11% of all vocational institutions in Finland are maintained by the state, 66% by municipalities (and federations of municipalities), while the remaining 23% are privately owned. An increasing number of state-owned vocational institutions have changed hands in recent years, with municipalities and private organisations taking over. The government has decided to pull out entirely by 1997.

Vocational schools are becoming larger, multidisciplinary institutions. The schools are being merged and the number of institutions is decreasing each year. Most vocational institutions operate both at secondary and post-secondary level. In recent years, the trend has been to combine separate schools and to form multi-field institutions. This division will be removed from the new legislative structure.

Higher education

Higher education is developed as a system of two parallel sectors, the new non-university sector comprising AMK institutions, and the university sector. The strategy for higher education is based on co-ordination and application of academic, state and market regulation. Management by budget allocation and legislation will give way to management by objectives. The national framework for higher education management is set in the government plan for the development of education and research. The setting of objectives and consultation on performance will constitute the principal channel of communication between the Ministry of Education and the institutions of higher education. Systematic evaluation is introduced in all higher education with a view to improving quality and providing a basis for strategic planning.

Adult education

Adult education, which is designed for the entire working-age population, has expanded rapidly during the past few years. General adult education is provided by independent sponsoring organisations and evening schools. Vocational adult education is given by all vocational institutions and, specifically, by vocational adult education centres. Adult education in universities comprises further education and open university courses. All institutions of higher education and most vocational institutions have a centre or department for adult education.

Administration

The legislative framework for and general principles of education policy are enacted by parliament. The government, the Ministry of Education, and the National Board of Education are responsible for implementing this policy at central administration level.

The Ministry of Education is the highest education authority in Finland. Nearly all publicly subsidised education is subordinate to or supervised by the Ministry. The Ministry of Education prepares education legislation and makes the necessary decisions for submission to the government. The administrative field of the Ministry of Education includes not only education – primary, secondary, vocational and higher education both for youth and adults – and research, but also cultural, ecclesiastical, youth and sports affairs. Employment training is financed by the Ministry of Labour but given in educational institutions under the administration of the Ministry of Education.

Financing of education

The responsibility for financing education is divided between the state and local authorities or other owners or those mandated by educational institutions. In addition to their own funding, local authorities and other parties maintaining schools and institutions are entitled to government grants for the founding and operating costs of educational institutions. The basis of financing is the same regardless of the form of ownership. State subsidies for current expenditure are granted on the basis of flat rates, which are confirmed each year per student, teaching hour or another unit, respectively. Government subsidies are calculated to cover 57% of operating costs. The main factor affecting government subsidies is the number of pupils. Government subsidies are not earmarked for any particular costs.

International comparison of the Finnish education system

The Statistical Office of Finland and the Ministry of Education have, in co-operation with UNESCO and the EU Statistical Office, Eurostat, designed a new education classification system. The system will become operational this year and it will make international comparisons easier. While the previous system compared only the duration of training, the new system takes some aspects of the training content into account. Table 1 shows the international classification and how it compares with the Finnish system (*Helsingin Sanomat*, 11 April 1999). The international comparison of the Finnish education system is shown in Table 2.

Table 1. International comparison of the Finnish education system

	Education level	Main content
Level 0	Pre-primary education	Pre-school education in day care or in comprehensive school (ages 3-6)
Level 1	Primary education	Lower stage in comprehensive school (years 1to 6)
	Secondary education	
Level 2	Lower secondary education	Upper stage in comprehensive school (years 7 to 9 and the voluntary extra tenth year)
Level 3	Upper secondary education	The upper secondary school and the matriculation examination, basic vocational qualifications, qualifications by performance exams.
Level 4	Post-secondary non-tertiary education	Advanced vocational qualifications by performance exams
	Tertiary education	
Level 5	5A programmes	The lower and higher academic degrees, AMK degrees (polytechnics)
	5B programmes	Polytechnic degrees in vocational colleges. Most of the educational in vocational colleges will be upgraded to polytechnics.
Level 6	Doctorate-level education	Optional pre-doctoral postgraduate degrees (licentiate degrees) and doctor's degrees.

Source: Helsingin sanomat, 11 April 1999.

Entrepreneurship training in the Finnish school system

Training in entrepreneurship is organised at all levels in the Finnish school system. In the comprehensive school and upper secondary schools, the training concentrates on attitudes and issues such as inner motivation, learning to learn skills, taking responsibility and getting to know the world of work. In vocational training, students learn the basic, practical skills of running a business. Training also includes placements in local businesses (Ministry of Education, 1998b).

Vocational adult training recognises previous work experience and self-directed learning. The professional qualification system supports the principle of lifelong learning. It is possible to use different means to obtain a professional qualification and through a performance exam. The Vocational Certificate (*yrittäjän ammattitutkinto*) in Business Administration is aimed at professional people who want to set up their own businesses. The Vocational Diploma (*yrittäjän*

erikoisammattitutkinto) in Business Administration is a programme for people who already have their own businesses and want to improve their skills in the area. Opportunities are also opening up for apprenticeship training for entrepreneurs (Ministry of Education, 1998b).

In Finland all vocational colleges (33) give business training. In some, the teaching has been decentralised to be included in different subject areas. Some colleges organise a common business study module for all students (2-20 study weeks). Usually the business study unit is offered to all students as part of their orientation studies. Many polytechnics offer business study units where the language of instruction is partly English. Business studies can also be taken as the main subject. The polytechnics typically promote entrepreneurship through practical work projects. Some polytechnics have so-called business incubators where students can practice in authentic circumstances (Ministry of Education, 1998b).

Universities are increasingly offering entrepreneurship training and at the same time their contact networks with the business world have become wider. Almost all universities have business studies in their programmes. In addition to the actual business schools, the universities of Joensuu, Jyväskylä and Vaasa have focused on business studies. Generally speaking, however, academic studies and business studies in Finland do usually not converge (Ministry of Education, 1998b).

Training for SMEs

SMEs are offered entrepreneurship training, business training and business management training. Entrepreneurship training prepares people, for example, for setting up their own businesses. The target group for business training is often the whole staff of a company. Many training organisations offer management and leadership training for business managers who already have experience in management or running businesses. Management training programmes may focus on specific business sectors or they may be general courses where questions of management and leadership are approached through different disciplines. In some training organisations, this division does not apply (Hanhisalo *et al.*, 1994).

While training to develop human resources has increased in Finland, the training of potential entrepreneurs, in addition to the training offered to traditional business owners, has also increased. During the last few years the need to change attitudes has become apparent. The emphasis has moved from pure entrepreneurship training to "businesslike thinking". Businesslike thinking can also be useful in paid employment, even within a large organisations, and the concept has raised interest in companies looking for creative, target-oriented, independent and active employees, the so-called "inner entrepreneurs". This attitude change has affected the field and the target group has widened. Entrepreneurship training is now increasingly included in all levels of the education system (see Proceedings of the Second Finnish SME Research Forum, 1998).

Most of the entrepreneurship training for SMEs in Finland is provided by different ministries: Ministry of Trade and Industry, Ministry of Education and Ministry of Labour as well as the various organisations operating under them including educational institutions, higher education institutions, universities and their centres of continuing education as well as the technology centres. In addition to these organisation, which receive their funding from public sources, many commercial training organisations offer business training. Also some business associations and private consulting firms offer training in the field (Hanhisuo *et al.*, 1994).

Most of the funding for training for SMEs in Finland comes from the state and municipalities. Staff training is the responsibility of the companies themselves. Most staff training is provided by

private companies and commercial training organisations (National Board of Education, 1997). Training provided by projects financed by EU structural funds are administered by the ministries of labour and the interior. The Ministry of Education funds management training for SMEs through various educational institutions. The Ministry of Labour funds mostly employment training programmes. The Ministry of Trade and Industry funds training for business managers and key personnel which is organised by the technology centres.

Training in SMEs

The changing business environment of Finnish SMEs

The environment in which SMEs operate has changed dramatically owing to the demands of the information society, technological development, internationalisation and globalisation (Hämäläinen and Karlberg, 1998).

In the information society, managers have to be able to handle an enormous amount of information and differentiate between useful and the useless information. Because people and their knowledge and skills are the key resources of any firm, managers have to recognise the importance of leadership (Hämäläinen and Karlberg, 1998).

New technology will be reshaping organisations in the future. Automation is growing and new technologies are being developed rapidly. One of the new challenges facing SME managers in the future is to use new technology efficiently to develop new products and services (Hämäläinen and Karlberg, 1998).

Although in 1997 92.7% of companies operated in the home market only, interest in internationalisation has grown as national borders have become less important. The European Union affects all businesses regardless of their size. The internationalisation process of Finnish companies often starts with markets close by, Sweden, Estonia, Russia and Norway (see SME Report 1998).

Training needs of SMEs

According to a survey of the Finnish Industry and Employers' Association (1997), the training needs in SMEs are quite similar to those in large companies. This is understandable because SMEs work more and more in networks with large firms and, therefore, the qualifications needed in SMEs are similar to those needed in large enterprises (Finnish Industry and Employers' Association, 1997).

According to a report of the Finnish Industry and Employers' Association, the three most important training areas in the year 2000 are quality development, teamwork and customer service (Finnish Industry and Employers' Association, 1997).

The types of training most needed in enterprises by the year 2000 are:

- Internationalisation
- Product development
- Customer service
- Foreign languages
- Teamwork
- Management/leadership

- Marketing
- Personnel management
- Quality control
- Information technology
- Production

The Federation of Finnish Enterprises has also asked its member enterprises about their training needs (Federation of Finnish Enterprises, 1998). According to this survey the most significant training needs are:

- Management and leadership skills
- Foreign languages
- Customer service
- Teamwork
- Efficiency, profitability, time management
- Basic vocational skills
- Process management: product development, quality control
- Creativity
- Advanced vocational skills
- Skills related to attitude: commitment, flexibility, responsibility

The project of the University of Helsinki's Vantaa Institute for Continuing Education, Human Resource Development Sector (Developing Expertise in Enterprises) indicates that participants' most important training needs are:

- Internationalisation, EU, the effects of the EMU
- Marketing
- Management systems
- Financial management, accounting systems
- Quality
- Language skills
- Project management

According to the Ministry of Trade and Industry (SME Barometer, 2/1998), the most important training needs of SMEs in 1998 were:

- Marketing and dissemination of information
- Staff development and training
- Information technology
- Production and materials
- Financing, economy and accounting
- Sales

- Product development
- Management/leadership
- Taxation, legislation
- Quality, quality control
- Exports and internationalisation
- Co-operation and networking

In the report of the Finnish Industry and Employers' Association (1997), 25% of enterprises estimated that management training was very important to their competitiveness in 1995, and 40% of enterprises estimated it would be very important to them by the year 2000.

When asked about management training, the respondents stressed leadership skills. In their view, the emphasis in management training by 2000 would be strategic planning, internationalisation, productivity, personnel planning and process management (The Finnish Industry and Employers' Association, 1997).

A summary of the surveys conducted by various organisations on training needs shows that they currently, and in the future, concentrate on language skills and internationalisation, teamwork, customer service, quality control, research and product development as well as management and leadership training.

Learning in SMEs

SMEs employ less educated and less experienced people than large companies (SME Report, 1997). They are becoming increasingly aware of their training needs. However, they do not have the personnel to analyse their needs and look for suitable training, nor do they have time to participate in training. In addition, their financial resources for training are scare (Training as a Success Factor in SMEs, 1996).

SMEs have a weak tradition of professional training. Lifelong learning in industry has mainly been developed by large enterprises (Otala, 1993). Enterprises prefer learning experiences that are short. They also want specific knowledge that solves their immediate needs, not general information. In their learning process they are more reactive than proactive and more content-oriented than process-oriented. They also want to learn from those who have experienced the same situation, *i.e.* other entrepreneurs (Hämäläinen and Karlberg, 1998). In SMEs learning-by-doing is important because expectations for training relate directly to the improvement of operations and production and the adaptation to the new technology and new tasks at work (Training as a Success Factor in SMEs, 1996).

There is variety in the content, methods, length and arrangements of courses. Traditional learning methods such as lecturing and self-study are mostly used. Computer-based distance education is still quite limited. Because the lack of time makes managers reluctant to participate in training, especially if participation requires travelling, distance education could potentially help to overcome these problems (Hämäläinen and Karlberg, 1998).

Managers have to become computer-literate and learn to discuss electronically both with people and data so they can benefit from new technology and telematics. Although Finnish SMEs are well equipped with computers, there is space for improving the use of new technology. Hämäläinen sees a need especially in developing collaborative and network approaches. Networking will, in future, open up new opportunities for SMEs by changing their way of working. It also offers an innovative way of organising training, but at the same time requires training itself (Hämäläinen and Karlberg, 1998).

Participation in training in SMEs

According to research carried out by the Research Institute for Business Economy (*Liiketaloudellinen tutkimuslaitos*) (1996) about half of enterprises train their employees themselves or buy training regularly. White-collar workers participate in training slightly more than others. Enterprises mostly organise training for their workers. Also self-directed learning of workers is supported by enterprises more than other groups of employees (Training as a Success Factor in SMEs, 1996).

According to the survey by the Federation of Finnish Enterprises (1998), about 70% of respondents had taken part in training of some kind during the current year. Shop floor managers' and supervisors' participation rates were slightly lower: about 60% had taken part in training during the current year. Office personnel's participation was about the same: 52% of workers had taken part in training. The group that had the lowest rate for training were specialists: 40% had had training during the current year (Federation of Finnish Enterprises, 1998a).

Participation in training organised by educational institutions in any given sector seems to have increased along with the growth in the number of employees. According to a survey by Finnish Entrepreneurs (1998), half of companies with 50 or more staff had taken advantage of training offered by their local educational institutions. Participation decreases with the number of employees. In businesses with 10-30 staff, 36% had taken part in training in their local educational institutions, in companies with 4-9 staff the participation rate was 29% and in companies with 1-3 staff the rate was 11% (Federation of Finnish Enterprises, 1998a).

Based on these isolated studies it is very difficult to draw conclusions about the participation of SME staff in training. There is a large number of training organisers and there is not a body that coordinates SME training organisations. Production of comprehensive figures requires a large survey of training organisers and was beyond the scope of this study.

Training organisations do not always keep records of whether the course participants were managers from SMEs or larger organisations. The Statistical Office of Finland does not differentiate between SME and other managers in staff training. Training organised as part of individual company development projects is attended not only by the management but by the whole staff of the organisation as, for example, in the AEL's Osaava Uusimaa project. Therefore, management training is difficult to separate from other business training.

Many studies on business training concern large organisations and the results cannot be applied to SMEs. Some studies of training in SMEs, some of which have been used in compiling this report, contain very general information. Numbers of respondents to questionnaire-based surveys have been small and do not allow for generalisation. Often the whole staff of an enterprise takes part in training and there are no separate statistics relating to management participation. In addition, separation between advisory and consulting services and training is not always clear.

Organisations providing management training for SMEs

The organisations providing specialist services to the management of SMEs can be classified as follows:

- Associations.
- State and public sector organisations.
- Foundations, funds and public sector organisations set up for specific purposes.
- Higher education institutions.
- Municipal organisation.
- Other training organisations

Training services as well as guidance and counselling services can be considered as specialist services. The following lists the organisations and the training, guidance and counselling services provided by them.

Associations

Chambers of Commerce

The Chambers of Commerce are regional organisations for representation, co-operation and services. Their activities are based on private funding. The legal basis for the activities is provided by the law concerning Chambers of Commerce. There are 21 Chambers of Commerce in Finland with a total membership of 13 600.

The Chambers of Commerce organise training for their members. Topics include current issues, such as legislation, financing, pay structures, accounting and auditing as well as international trade. Training courses are short and concentrate on current issues.

Federations

Federation of Finnish Enterprises

The Federation of Finnish Enterprises is a nation-wide organisation representing SMEs. Total membership is 75 000 companies in trade, transport, service, industry and contracting. The organisation consists of 20 regional offices, 410 local associations, 12 regional handicraft and small industry associations and 67 sector offices.

SYKE is the training and development organisation of the Federation of Finnish Enterprises. SYKE's activities include training, development projects, publications and small-scale research projects. In addition to general training courses, SYKE organises training in co-operation with various sectoral and regional organisations and offers individual tailor-made courses and consultation. The course topics include current issues, such as legislation, employment contracts, taxation, social benefits, communication skills, internal entrepreneurship and information technology. In 1998 SYKE organised 372 courses with 1 561 participants (*Suomen yrittäjien Kehittämissäätiö*, 1998b).

Federation of Small Industries (PTK)

The organisation represents its members and offers enterprises consulting services in, for example, taxation, financing, product development, internationalisation, exports, contracts and agreements, industrial disputes, competition, consumer matters, product liability, quality control systems and standards. The training organisation of PTK trains annually about 2 500 entrepreneurs and SME staff. The training focuses on the specific needs of the members and may also include consulting.

Employers' associations

Service Industry Employers' Association (Palvelutyönantajat)

The Service Industry Employers Association is a marketing organisation for its members. The central organisation includes nine member associations with a total of 6 200 members representing 275 000 employees and owners. In addition to representing its members, the association trains the staff of its member companies in matters of pay and employment conditions as well as staff development. The member associations also provide training. During 1998, the association, together with its member associations, provided a total of 851 training days. The courses are either open to all or are tailor-made for individual companies.

The Finnish Industry and Employers' Association

This nation-wide organisation aims to support the SMEs by commissioning research, publications, reports and by organising short courses on current topics for SME personnel.

Trade unions

Trade unions (AKAVA, STTK, SAK) are also active in training their members in addition to representing them. However, their training activities are not specifically aimed at enterprises, although the courses are open to them if they are members of a trade union.

AKAVA, for example, organises training through Sefek which is the Economists' Union training organisation. The courses focus on management, financial management and marketing. Sefek also provides language training for specific purposes. Their training products are compact seminars with current topics, but they also provide extended training programmes as internal company training.

Finally, various employers' and enterprise associations and employees' professional associations are an important group of training providers, particularly in the area of short courses on current topics.

They are the main agents through which employers can update their knowledge of, for example, changes in legislation and other regulations. The associations inform their members about current issues and their training provision in membership journals and organise training on current issues for the different sectors. The benefit of the training provided by the associations is their short reaction time to changes and their ability to give members the latest information quickly.

State and public sector offices and organisations

Employment and Economic Development Centres (TE-keskukset)

Employment and Economic Development Centres are joint regional service centres of three ministries: the Ministry of Trade and Industry, the Ministry of Agriculture and Forestry and the Ministry of Labour. They provide services to business people, farmers and individuals in 15 regions. The tasks of the centres include:

- Support and advise SMEs in the different phases of their life-cycle.
- Promote the technological development of their client companies, assisting them with export and internationalisation issues.
- Implement regional labour policy plan and organise training and education for adults in terms of the official labour policy.
- Promote farming and rural industries.
- Develop fisheries.
- Contribute to the overall development of the region.

Thus, each regional Employment and Economic Development Centre provides, on a centralised basis, the same services that were previously provided by the regional units of the three ministries: the MTI Business Service Office, the regional unit of the Technology Development Centre TEKES, the regional office of the Finnish Guarantee Board and the regional unit of the Finnish Foreign Trade Association. The centres are also channels for EU finance and will speed up co-operation with the EU.

Employment and Economic Development Centres provide assistance, advice and consultancy for companies, for both management and personnel. They help firms to set up, expand and develop their business operations and personnel. A centre contributes to the development of its region by financing its client companies' investment and development projects.

Examples of training in Employment Development Centres include:

• Expert and consultation service products:

The enterprises are considered as entities and developed as such. At the end of each development programme the company receives a written development plan which contains a list of issues which have been discussed, conclusions and recommendations for actions.

Examples of service products:

In the Pro Start programme the business idea is evaluated together with the requirements for setting up an enterprise. Help is given in the further development of the idea. The consultation consists of two 3-4 hour sessions with an expert.

The Balance (*Balanssi*) programme is a development and analysis programme on business finance. The programme covers one day + one-half day. In addition there is half-day follow up session two to three months following programme implementation.

Management training programmes and other extended courses:

The total duration of these courses is one to two years, but the practical implementation of the training is through monthly training sessions of one to three days. Management training programmes are organised for those who are preparing to take on management responsibilities and for existing managers and directors.

Examples of management training programmes:

The Ladies' Business School is targeted to female managers and directors of SMEs. The objective is to develop the participants' skills in analysing, planning and developing their businesses. Several management methods are studied and participants learn to be effective managers. The training programme lasts about 20 days during the year. In addition, it includes one consultation day for the enterprise as well as an individual management/leadership evaluation.

The General Managers' Course is aimed at directors of SMEs and includes ten two-day seminars during the year and one consultation day.

• Current issues-training and other short training courses:

The current issues training usually concerns changes in legislation and other regulations which are important for businesses. The other short courses referred to here may be training events on different themes or issues relating to various aspects of running a business.

• Programmes funded by the European Social Fund:

Projects funded by the ESF are mainly the training and consulting service products mentioned above as well as extended training programmes. They are large programmes, which are designed to meet the training needs of specific customer groups.

The Lapland Training and Development Centre project concerning Inari carpenters' pilot workshop can be mentioned as an example. The objective of the project is to initiate the production of wood items which utilise the special features of the wood from the area.

Employment offices

Employment offices organise entrepreneurship training for prospective entrepreneurs. The training is in three stages. The first stage covers basic information about starting a business. During the second phase the business is usually set up. The business idea is further developed and actions concerning the running of the business are discussed. Basic skills in accounting, marketing, taxation are taught and the risks involved in running a business are also discussed. The third stage includes consultations with the new entrepreneur. The aim of the course is to develop various aspects of business activities and support co-operation between enterprises.

Enterprises can use employment training and apprenticeship training in their staff development activities. The employment training can be planned and implemented in co-operation with the employment office. The SME development training, KEKO training, is implemented as co-operation projects between the Ministry of Trade and Industry and the Ministry of Labour. The aim is to provide employment for trained unemployed individuals in the development projects undertaken by SMEs.

The training organisation involved in the development project trains the individual to meet the needs of the enterprise. The development project is implemented in the enterprise together with a tutor, so that the business acquires skilled labour and up-to-date information in the specific area of the project. KEKO training projects are implemented in co-operation with Training and Development Centres, vocational institutions, adult education centres and higher education institutions.

Provincial and regional administrations

The development funds previously granted by provincial governments are today allocated by regional administrations. The money is targeted to development projects in which more than one business is involved and which benefit the development of the local area.

The Ministry of Trade and Industry provides most of the training and consultation services to enterprises in Finland. A large number of Finnish organisations come under the responsibility of the Ministry of Trade and Industry and receive financial support to organise training for the SMEs in their own sectors. The Employment and Economic Development Centres (TE Centres) are the regional agents through which the Ministry of Trade and Industry's services are channelled.

The training in which the Ministry of Trade and Industry is involved is usually a part of larger programmes or development projects which include consultation and guidance services to enterprises. The Ministry always takes part in the organisation of the training, for example through consultations. The Employment and Economic Development Centres support SMEs by providing guidance, consultation, training, project activities and well as financial grants to companies. The grants are usually allocated to enterprises for investments and development projects.

The Ministry of Labour works in co-operation with the Ministry of Trade and Industry through the TE Centres. The main target group for training organised by the Ministry of Labour are, however, the unemployed. The third ministry which organises training in Finland is the Ministry of Education which works through educational institutions and finances basic education and training leading to qualifications. The role of the provincial and regional administrations is limited to allocating funds to regional development programmes designed to answer local needs.

Associations, funds and public sector organisations set up for specific purposes

Finland's Jobs and Society

Jobs and Society is a working model which is implemented in Finland by 27 Jobs and Society Centres throughout the country. The national umbrella organisation is Finland's Jobs and Society. The Jobs and Society Centres help, guide and support prospective entrepreneurs or those already working in SMEs who want to develop their businesses. The centres do not organise actual training courses.

PKT Consulting Forum (PKT = Pienen ja keskisuuren teollisuuden edistämissäätiö)

PKT Consulting Forum develops and promotes management consulting services, principally for small and medium-sized industries. In co-operation with other organisations, PKT Consulting Forum co-ordinates development projects for SMEs, helps and advises enterprises nation-wide and promotes networking of enterprises. These activities normally involve the use of outside specialists, *i.e.* management consultants. The activities are focused on developing the quality and quality assurance of consultant services and on adapting SME consultants to the demand resulting from changes on the European scene. The Foundation employs no consultants of its own, but as a service to

enterprises and organisations, it maintains an active register of more than 1 000 management consultants, complete with CVs and references. The Foundation is privately owned and enjoying government financing. It operates in close co-operation with the Ministry of Trade and Industry, the Regional Development Fund of Finland Ltd (Kera Oy), the Confederation of Finnish Industries and Employers, Federation of Finnish Enterprises, the Finnish Institute of Management (LIFIM) and many other private and public organisations. PKT co-operates with LJK, the Finnish management consultants' association. PKT is a member of CESCE, the European Committee for Consultant Services.

PK Service Network is one of PTK's co-ordinated projects. The funding comes from the Ministry of Trade and Industry, the National Board of Education and TEKES. The national network consists of 28 educational institutions (polytechnics, technical and business colleges, craft and design colleges and the enterprise services units of adult education centres). The network aims to develop the competitiveness of SMEs. The educational institutions offer enterprises an opportunity to use the skills and facilities of the network organisations. The PK Service Network offers enterprises tailor-made solutions to their problems.

Other organisations and centres

Finnvera Oyj

Finnvera Oyj is a financing organisation which offers risk capital to Finnish businesses to develop their national activities as well as exports and internationalisation. Finnvera Oyj is wholly owned by the Finnish state. It provides SMEs with financing and expert services and guidance. It also produces guidebooks and other publications for SMEs.

Finpro

Finpro is a national export organisation which supports Finnish enterprises in international marketing and exports. It organises seminars, offers guidance services as well as training. It also conducts business analyses, searches for co-operative partners and helps companies modify their products to suit the prospective markets.

TEKES (technology centre)

The objective of TEKES is to support the application of new technology in industry and to develop the international competitiveness of Finnish products and services. The activities focus mainly on providing funding and expertise for various technological development projects. TEKES's annual budget is over FIM 2 billion. It has initiated technology clinics for SMEs in order to speed up the utilisation of new technology in businesses. TEKES has a secretariat (Suomen EU-T&K-sihteeristö), which organises various training and information events aimed at SMEs.

SITRA

SITRA is an independent public fund responsible to the Finnish Parliament. SITRA's activities are mainly financed by profits from capital investments and business financing. SITRA supports the growth of Finnish welfare by investing in high-technology businesses and foundations and by

developing new and successful business activities. SITRA's activities include business investments, technology transfer, research and training. The training focuses on co-operation between the public sector and private business.

Technology centres and business incubators

Various technology centres and business incubators have been set up in Finland mainly with funding from the public sector, but also using private capital. The centres aim to combine the skills and knowledge in the local polytechnics (mostly technical) and private businesses. They aim to develop local business by disseminating to the businesses knowledge gained at local higher education institutions. The business incubators work in conjunction with the technology centres and support the process of setting up and developing enterprises in the local area.

To conclude, the main objective of the various foundations, funds and public sector organisations set up for specific purposes is to advance, either through direct actions or indirectly, the activities and profitability of SMEs. Their role is mainly in providing guidance and financing. Their training activities are limited.

Universities, institutes of higher education, and other schools

Universities

There is a continuing education unit at each university and institute of higher education in Finland. Continuing education and training are provided as adult education under official labour market policy, as education ordered by employers and other forms of continuing education. The forms of continuing education, provided for entrepreneurs for money, are for example, MBA and executive MBA programmes, executive education programmes, entrepreneurship programmes and studies developing special skills. Both short-term courses and comprehensive programmes of several years, and everything in between, are provided.

Education under official labour policy refers to training ordered by employment services. According to the Statistical Office of Finland (1998), in 1995 most such education and training were provided in the fields of business economics, marketing and office work, with 54% of men students. The volume of training programmes ordered by employers increased in 1995. The continuing education units of the universities of Helsinki and Jyväskylä organised most training programmes ordered by employers. Among participants of these programmes 57% were women, and most training was given for management and executive skills, in courses for teachers and guidance workers, as well as in languages. In other continuing education programmes in 1995 most lessons were allotted to teacher and guidance worker training, to the fields of business economics, marketing and office work, as well as to languages, and some 60% of students were women. The major suppliers were the continuing education units of the universities of Helsinki, Turku and Jyväskylä (Statistical Office of Finland, Institutes of Higher Education 1996).

The following are examples of continuing education provided by universities and institutes of higher education.

Helsinki School of Economics and Business Administration, Executive Education Centre

Executive education programmes provided by the continuing education unit of Helsinki School of Economics and Business Management are, for instance, the international MBA programme, the international executive MBA programme, the JOKO executive education programme, language courses and tailored continuing training.

Helsinki School of Economics and Business Administration, Mikkeli Small Business Centre

The Mikkeli Small Business Centre is a service unit of Helsinki School of Economics and Business Administration. It has focused on development of small businesses and promotion of entrepreneurship. The Mikkeli Small Business Centre's provision of education and training includes the following training programmes:

• Programmes for future entrepreneurs:

The Small Enterpreneur Certificate is a programme unit for university students and recent graduates planning to start a business. Its goals are to orient participants to the basics of a new business, to prepare them for scheduling a business idea and a business plan of action and to enhance the facilities of internal entrepreneurship.

• Entrepreneur, manager and personnel programmes:

The PK-JOKO executive education programme is designed to develop the executive skills of business managers. During the programme, participants schedule a business plan as the basis of the development of their business activities. The education programme is carried out as seminars in six three-day periods. The total length of the programme is 18 days and 150 lessons. Generally, the participants pay for the course. The Finnish Ministry of Trade and Industry supports access to the programme to a certain extent. The first PK-JOKO programme started 15 years ago; the ongoing course is the 58th. The programme includes various subjects, such as teamwork, networking, co-operative learning, marketing, accounting, investments, business idea, personal management style and competition strategy.

The supervisory training programme is targeted to SME management, middle management and personnel who are willing to improve their skills in management of individuals. The aim is to make participants realise the importance of the role management of individuals and the work atmosphere play in achieving success and to give facilities for putting management theories into practice in one's own company. Training is composed of five two-days periods. A student may participate in the programme as a whole or choose certain periods. It takes about six months to complete the whole programme. ESF funds the programme and participants pay only about a half of the training fee. The themes of the programme are management, team work, management of change, communication skills, usage and national and foreign customs.

• Internationalising programmes: Strength from exports, exports to Russia training course, the international exchange programme between small businesses, international communication skills.

Turku School of Economics and Business Administration and the Institute of Small and Medium-sized Enterprises

The best known programme is the executive master of business administration (eMBA), which takes over two years. It is composed of individual modules, such as the general management training programme JOKO in Finnish and the international marketing programme Business Executive Institute (BEI) and the International Executive Program (IEP) on European strategies and business economics, both given in English.

The SM Institute

The SM Institute organises entrepreneur education and training, as well as development programmes on enhancing the competitiveness of SMEs. The media group provides international media training, for example, the further training project executive MediaMBA and the comprehensive training programme GRAM, which is related to structural changes in the graphics industry and is financed by ESF.

Pan-European Institute

The Pan-European Institute organises education related to the European integration, *e.g.* euro-education for journalists. The research and training unit specialised in trade to the East provides continuing education in this specific field. Pori Institute is a joint unit for continuing education units of the Turku School of Economics and Tampere University of Technology. Its major activities are graduate engineer training, continuing education for business management and research.

Continuing education at University of Oulu

The University of Oulu provides SMEs with training and education which includes training programmes (EMBA), customised company tailored programmes and so called "trial projects" where training is built, for instance, on a certain theme. The executive MBA programme is an example. Those in the programme have graduated from university or vocational college. They have work experience and are in a position where they can put theory into practice. In case of an individual with a long work history, the degree criteria can be more flexible. The goal of the training programme is to develop a thriving base of participating companies and the business administration skills of individual participants. The content of the programme consists of modules:

- 1. Start of the programme
- 2. Strategy process
- 3. Information systems for management
- 4. Human resource management
- 5. Financial management
- 6. Management of technology and innovation
- 7. Business law
- 8. Case of a manufacturing plant; preparing for Module VII

- 9. Practising strategic thinking
- 10. Marketing
- 11. Leadership and management of change
- 12. Economics
- 13. International marketing and distribution; preparing for Module XIII
- 14. Doing business in the world
- 15. Conclusion of the programme

The provincial board of Oulu supports the participation fee of SMEs, so that the company's share is at most FIM 60 000 for education which otherwise would cost FIM 80 000.

Continuing education at University of Jyväskylä

The continuing education centre of University of Jyväskylä provides AVANCE management training services, which include four different types of business management training:

- An academic MBA programme, which can also be designed for the needs of a certain company or a line of business.
- Long-term open-enrolment strategy programmes, either for the purposes of general
 management or specialised needs. The programmes are composed of seminars, lasting two
 to three days and arranged about once a month, and of development exercises to be done
 in between.
- Customised company tailored programmes and services.
- A Strategy Club for those who have completed at least one strategy programme. The club
 organises training and social events for its members, as well as educational visits at home
 and abroad.

Helsinki University of Technology, Lahti Centre

The IDPD programme is a competence programme financed by ESF and the Finnish Ministry of Education for business leadership with focus on internationalisation and networking. The programme is targeted to SME leadership and is free for participants. The programme consists of at least 40 weeks of studies, which include management skills, internationalisation, production and product management and environment administration.

To sum up, the aim of involving research and a scientific approach in continuing educational training is because scientific research is an important part of the work of universities. Technical and commercial institutes of higher education have carried out research work which produces skills and knowledge that can be applied to business activities. The continuing education units of other universities have also begun to provide more counselling, consulting and educational services, which are applicable also to SMEs. Training programmes offered as continuing education can be general or customised. As the supply of education has increased, the links between universities and economic life have become more representative. To enhance academic entrepreneurship and to increase entrepreneur studies at universities is one of the goals set by the Finnish Ministry of Education for academic education.

In general, companies pay the participation fees for continuing education and training. Training courses, especially for SME entrepreneurs, are also organised as EU projects with possible national funding, which reduces the financial share of entrepreneurs. Thus, it is possible to support the participation of SMEs especially in training programmes. Universities and institutes of higher education also co-operate with companies through education and training under official labour policy. This training is free for participants.

The training provision of universities and institutes of higher education differs greatly in content, extent and fees. Usually, continuing education centres emphasise subjects related to exports and

internationalisation, as well as networking among companies. There are also several courses related to management, marketing and establishing a business. Training programmes, especially for SMEs, are provided by Helsinki School of Economics and Business Administration and its Mikkeli Small Business Centre, as well as the Turku School of Economics and Business Administration and its SME institute.

Polytechnics and vocational colleges

Polytechnics and vocational colleges organise business management training within the framework of their basic education. The units of SM Service Net provide local companies consulting, research and development, application of knowledge and co-operation.

Vocational colleges and polytechnics also organise adult education. The provision of adult education includes education leading to a degree with the possibility of taking a polytechnic degree, while working and by means of evening and multiform studies.

Open polytechnic education is open to everybody. It is possible to complete parts of a polytechnic degree covering 5-20 weeks of study. According to the Statistical Office of Finland (1998), most adult education in 1996 was provided in technology and production, as well as business economics, marketing and office work. Training programmes in management, business economics and marketing ordered by employers were also organised.

The provision of continuing education by polytechnics also includes short-term additional training and long-term specialist studies. It takes about a year to complete long-term specialist studies, if employed. Further, it is possible to participate in MBA programmes in polytechnics. Many polytechnics have a special company service unit, which offers companies consulting and development services. Polytechnics have knowledge of the business world and their study schemes are based on the requirements and development needs of the labour market and economic life. In companies, access to learning is supported, for instance, by means of multiform studies. Examples of education provided by polytechnics are given below.

The Finnish College for SME Business Administration

The main activities include the degree programme in SME business administration (a polytechnic degree). Its aim is to educate people who are versed in languages, internationally oriented experts, on business administration for the SME sector either to set up their own business or to operate as professional managers. The four-year business management programme consists of 160 credits and requires four years. The main study units are: basic studies, entrepreneurship, business management, company financial management, business law, foreign languages, marketing, international business, production economics, studies abroad, optional studies, practical training and final report.

- One-year courses: the one-year course for entrepreneurs trains students to build up their own business. The college also offers one-year courses in data processing.
- Short-term courses: the course department of the college offers short-term courses for the personnel of private enterprises and public administration in different fields, such as various business topics, data processing and foreign languages.

Haaga Institute Polytechnic

The middle management continuing education programme is aimed at those who are working, or soon will be, as department managers (in supervisory or expertise tasks), in tourism, hotel or restaurant businesses, and have completed a supervisory training course. If employed, the programme takes one year to complete and there are 2-3 days of seminars a month. Studies also include distance learning in the form of exercises and studying of management learning material. The programme covers 15 study weeks and the core subjects are marketing and sales guidance, staff management, as well as scheduling and making returns. Participants pay their training fees, but the provincial board of Southern Finland supports the programme financially.

Vocational adult education centres

Vocational adult education centres mainly organise tailored courses ordered by employers. These centres also arrange training and education under official labour policy and apprenticeship training.

Amiedu offers both open-enrolment courses and tailored courses as ordered by clients. The provision of education includes *e.g.* interactive, co-operative and teamwork training. Further, Amiedu organises entrepreneur training courses. The business development shop offers starting entrepreneurs office premises, information and office techniques, as well as tailored consultation and training.

There is one ESF project called *Osaava Uusimaa*. It is a SME development project which involves the whole personnel of a company. Otherwise, courses specialised in technology and open for all are provided.

Municipal organisations

There are about 230 municipalities in Finland who have employed agents of business and occupation, or equivalent full- or part-time local officials, such as company agents or company guidance workers, with expertise in subjects of economic life. Many municipalities have established business service and development companies for SMEs. It is mainly the services offered by agents of business and occupation that are restricted to guidance and referrals to the appropriate service.

Other organisations providing education

This section covers some organisations, which in addition to the above-mentioned groups, offer companies education and training. Further, there are commercial consultancies providing education. The focus of their services depends on their fields of consultancy and are mainly specific customised company training services. The number of private consultancies or their provision of education is not known. Therefore, other organisations providing education are noted.

POHTO

POHTO was established in 1972. It consists of Finnish industrial companies in electronics, metal and forest industries, such as Enso, Kemira, Metsä-Botnia, Nokia, Outokumpu, Rautaruukki, and UPM-Kymmene Corporation. The City of Oulu, the Development Organisation of Electricity

Suppliers, the largest labour organisations and the Confederation of Finnish Industry are also members of the foundation.

The primary task of POHTO is to support and enhance the competitiveness of its clients and to develop the skills of their personnel, and thus enable these organisations to become leaders in their own field. The main areas of training and development are business management and leadership, management of technology and organisational development. The main services are courses and seminars, company-specific programmes, consultant services, research studies and congress services.

School of Management Skills

The School of Management Skills organises both open courses and seminars and tailored, company-specific training, development and consultant projects. Training subjects are *e.g.* comprehensive development of an organisation, development of business activities and strategy planning, as well as management of change. For SMEs the school organises KEKO training programmes and ESF-funded development projects.

FINTRA (The Finnish Export Institute)

FINTRA was established in 1962 by the Finnish government, industry and universities. It operates on a non-profit basis for export promotion. FINTRA provides in-depth training for business leaders and those in business. Operational fields are:

- International business training and training consultancy.
- Language training.
- Publications and market studies.

FINTRA organises special internationalisation programmes for SMEs. Usually certain key persons from companies in the same economic area are invited. Programmes of about one year include *e.g.* exports in practice, internationalisation strategies and language training. Programmes are conducted in co-operation with the company services of the Finnish Ministry of Trade and Industry. Programmes can also be specific to a certain line of business, if so desired.

FINTRA offers also training and education under official labour policy. A part of this training is built with SMEs in mind (KEKO training programmes). There are three types of training programmes targeted to SMEs: local development schemes, task-specific internationalisation programmes and business-line-specific development schemes. Successful SMEs in terms of internationalisation and their key personnel (up to three per company) are invited to the programmes. The content of programmes is tailored according to the needs of participants. One year's training consists of seminar days and some company-specific work with a consultant as well as co-operation with other companies.

Helsinki Institute

The Helsinki Institute is a foundation jointly established by the City of Helsinki and the University of Helsinki in 1990 as a centre for further academic education. It is specialised in internationally oriented training activities and the main subject areas are Europe, Asia, Russia, and Central and Eastern Europe. A substantial part of the training takes place beyond the Finnish borders,

elsewhere in Europe and Asia. Educational visits abroad are one form of training. Most educational visits, as well as other training, are tailored for clients' needs. The Helsinki Institute also provides consultant and organisational services in connection with various international and national events, ranging from seminars to conferences.

Institute of Marketing

The Institute of Marketing is a national school established in 1930. It is owned by the relief association of the Institute of Marketing, which represents various sides of Finnish economic life. The internationalisation programmes of the Institute of Marketing are directed to those working as company managers, experts and superiors, as well as those working in the field of exports and imports. Training programmes are appropriate also for entrepreneurs and future entrepreneurs, who plan to go into international business.

Summary of management training providers

There are many services providing training to the SME sector: AIKO, a national database maintained by the Development Centre for Tele-Informatics, has collected information on about 300 training providers and their 2 600 programmes. The AIKO database covers information on short-term training courses organised especially for adults. Courses are provided by large and small enterprises, schools, private and public education and training centres and governmental bodies.

Most training offered to SMEs is short-term training. Short information sessions about current topics are mainly organised by chambers of commerce, employer and entrepreneur organisations, who educate the personnel of their member companies. Open-enrolment, short-term courses are organised by almost all schools, the continuing training units of universities, private providers and the Employment and Economic Development Centres.

The Employment and Economic Development Centres and the continuing training units of universities and polytechnics concentrate on longer-term continuing training and development programmes. Programmes such as the MBA and PhD are offered by continuing training units of polytechnics and universities and other institutes of higher education. About 17 institutes offer MBA programmes in Finland and there are hundreds of providers of various continuing training programmes and specialised studies. Programmes may differ greatly from each other, thus any comparison is problematic. There is no official procedure of approving MBA and PhD studies.

A body for specialised studies at universities was formed under the authority of the Finnish Ministry of Education to assess academic continuing studies. The body will start its work in the beginning of 2000. On the basis of careful consideration, studies can be entered in a register which is of use to both employees and employers. A national register also acts as a quality control of continuing studies. There are no ranking lists for Finnish schools or continuing training programmes, as is the case, for instance, in the United States and the United Kingdom.

In longer-term training programmes, the development approach is an integral part of training. As an outcome of training, the company gets a development scheme. In long-term training programmes seminars are held within a year or a half, for instance, on two or three days a month, and practical exercises are conducted at participant's own work place in between. Consulting is also an integral part of training.

The provision of training seems to centre, on the one hand, on supportive training for starting businesses and, on the other, on continuing training for existing companies. In Finland the owner of a company is often also the manager of his/her company, thus, especially in smaller companies he/she is the key target person of executive education. Larger companies may have managers who also participate in training. Because the role of entrepreneurship as a provider of employment is considered very significant, the aim of training is to support the establishment of new businesses.

For those starting a business, training is organised, for instance, under official labour market policy, and is then free for participants. A great deal of training for starting entrepreneurs is funded by the EU. Training and education under official labour policy is organised with the co-operation of employment services and universities, polytechnics, other schools and Employment and Economic Development Centres. They all also have ongoing EU projects. The main content of training offered to the management of existing companies is internationalisation and languages, as well as international marketing. Also teamwork, client service and business administration are central subjects. Further, the training of leadership concentrates on development of production and quality, as well as management strategies.

The volume of self-education, including studies with help of literature or participation in openenrolment courses, is impossible to assess exactly. Recent statistics on adult education (1998) of the Statistical Office of Finland show that the volume of adult and personnel training has increased, but it is difficult to give exact figures on SME management training.

Conclusion

Entrepreneur training in Finland is quite extensive if assessed on the basis of the amount of training providers. This study does not cover all providers of entrepreneur training, but the analysed material shows that entrepreneurs have several choices of training. The provision of education is increasing.

The provision of education, however, is quite unco-ordinated. The provision of education is partly overlapping and the share of short-term courses is large. Entrepreneur training is composed of separate elements, so it is not a uniform training system. Although the Finnish educational system now offers entrepreneur studies at each level of education, present entrepreneurs did not get these lessons in their basic education. Their business activities are built on specific vocational skills and in their continuing training they use different training organisations quite randomly. Training as support to entrepreneurs may become very short-term and fragmented.

It is necessary to co-ordinate training and information on training because entrepreneurs find it difficult to get information on training and development projects and to compare the offer of different training providers. It is planned that forecasting and purchasing boards should be formed in the Employment and Economic Development Centres. Their task is to forecast employment and training needs and to organise, inform and market the provision of education, as well as to assess and control the quality of education. This concerns the Employment and Economic Development Centres.

When developing the provision of training and information on training, we have also to take into account the increasing need to tailor entrepreneur training. Tailoring may further increase the heterogeneity of training provision but make it less overlapping. General training programmes do not meet the needs of SME entrepreneurs. Although the total volume of training seems to be sufficient at the moment, the accessibility of training in different regions of the country leaves a lot to be desired. Tailored training, specific to a certain group of entrepreneurs or certain lines of business, is also

needed more. Information on provision of education and financial support for education should be increased and focused especially to SMEs.

Most providers of education offer companies a chance to use consultancy. It is not always easy to differ training from consultancy, but a consultative approach is used more and more as a part of training. Especially in training programmes organised by the Finnish Ministry of Trade and Industry consultancy is always a part of training. Since many small companies are not used to consultancy and as it is considered expensive, it seems worthwhile to offer an opportunity to try it. With help of good consultation experiences it might be possible to intensify the later follow-up of training and development programmes.

When choosing students, each training organisation applies its own selection criteria. All those wishing to do so may generally participate in open-enrolment courses. The biggest exclusion factor is perhaps the time and money required for participation. Academic continuing education programmes often require a lower academic degree and some years' work experience. Specialised studies offered by polytechnics often require a degree from vocational college and a few years' work experience in supervisory tasks. Generally, the criteria can be negotiated case by case.

A great part of training offered to companies is organised with rather traditional methods. Participation in training means having to be present, although many training providers try to take into account the development of multiform studies. In the future, training will probably move from schools into companies.

It is difficult to show the impact of training in companies. Some indicators of successful training could be, for instance, the number of newly established businesses, the survival rate of new businesses, the growth of turnover in companies, the increase in the number of personnel, better profitability or increased exports. It is, however, impossible to say to what extent these factors depend on training without simultaneously taking into account various other factors.

From the point of view of trainers, training programmes are successful and profitable, if the same client companies regularly participate in training and maintain good client contacts. In the opinion of one provider of training and education (Helsinki University of Technology, Lahti Centre), SME entrepreneurs have a positive attitude toward training and want to educate themselves. In Finland, businesses are often established on the basis of certain vocational skills, and entrepreneurs are thus motivated to get, for instance, business management qualifications by means of further education. It is, however, very difficult to make entrepreneurs commit themselves to training. There are often just a few persons working in a company and the contribution of the entrepreneur himself/herself is very significant. Since SME entrepreneurs operate under severe time constraints, they tend to "vote with their feet" if training is not motivating. The role of a trainer is to offer SME entrepreneurs ways to update their information.

Useful experiences and development schemes for management training

Research by the Finnish Industry and Employer's Association (1997) indicates that companies would like to have more courses in English or in other foreign languages or training abroad as part of management training. It was desired that supervisory training courses should enhance both mental and physical strength. More practical and concrete programmes were suggested, for instance, with the help of company cases. Special subject days on management skills and effective short-term courses were also requested. The present provision has training periods that are too long, are too expensive for some companies and do not take into account the time constraints on the side of SME managers and key

employees. Other aspects lacking in management training are leadership skills and personnel management, self-knowledge, participatory action, orientation, changing styles of management, models for strategy development. Also topics concerning the environment should be included in programmes more often. There should be more supporting and self-study material, for instance, for education through the Internet (Finnish Industry and Employer's Association, 1997).

On the basis of the feedback received from the above study, all forms of education and training should be more developed in view of the future needs of economic life. Training has to track the latest developments of work and practice. Further, training should be as practical as possible by means of exercises, group work and real-life examples. Training programmes should also be tailored into units applicable for persons who accomplish certain tasks. Trainers should be individuals with experience of practical work. More training and education for trainers is needed. Nowadays the provision of training is too much centred in Helsinki. Therefore, the supply of training courses outside of Helsinki should be increased. Also the study notes the need for impartial assessment and co-ordination of training services. Finally, companies wish that training institutes would look at more company-specified training needs (Finnish Industry and Employer's Association).

Trainers at Helsinki University of Technology have good experience with replacing exams by exercises to be completed in companies. Students gave good feedback on international visitors who were chosen on the basis of the wishes of each student group. Students felt that it was good to get information from elsewhere. International information seemed to be fresher than domestic information. Practical and concrete aspects of theory are emphasised in SME entrepreneurs' training. It must be possible to apply theory to practice (telephone interview).

Good experience was gained from joint training programmes for representatives of SMEs, as well as those of larger companies. SME entrepreneurs liked joint training events, although modes of action are different in big and small companies, and their problems and challenges may be too different. For instance, in matters of capital and financing, bigger companies may be referred to too often, and there is a risk that SME entrepreneurs feel themselves outsiders. In questions of internationalisation, for instance, the representatives of SMEs have been able to study, in safe surroundings, matters which are familiar to the representatives of bigger companies. Studying in the same group enhances the possibility of networking and co-operation between companies (phone interview, Helsinki University of Technology, Lahti Centre).

There seems to be an urgent need for more comprehensive studies on SME training. Topics of such studies should include:

- What are appropriate methodological choices in SME training?
- How are the needs of SMEs met by the provision of training?
- Analysis of providers of training and content of training programmes and, on the basis of this, scheduling an operational training plan.
- Comprehensive conclusion of the analyses of EU projects.
- Forecasting the future training needs in SMEs.
- International comparison of development plans and future prospects in SMEs.

REFERENCES

Federation of Finnish Enterprises (1998a). Information Materials for Small and Medium-sized Enterprises.

Federation of Finnish Enterprises (1998b). Annual report of the Development Centre of Federation of Finnish Enterprises SYKE, 1998.

Finnish Industry and Employer's Association (1997). Training needs of the personnel in industry (Teollisuuden henkilöstön osaamistarpeet) 1997-2000. Report 17 June 1997.

Finnish Ministry of Education (1998a). The higher education policy in Finland.

Finnish Ministry of Education (1998b). The final report of the entrepreneur project (Yrittäjyyshankkeen loppuraportti).

Finnish Ministry of Education (1999). www.minedu.fi

Finnish Ministry of Labour (1999). www.mol.fi/EU

Finnish Ministry of Trade and Industry (1997). Implementation of the SME Policy Program 1996. Finnish Ministry of Trade and Industry, Helsinki.

http://www.vn.fi/ktm/1/1.htm

Finnish Ministry of Trade and Industry (1998a). SME-barometer 2/1998.

Finnish Ministry of Trade and Industry (1998b). SME-report.

Finnish Ministry of Trade and Industry (1998c). SME-report 1998.

Hanhisalo, Kainu and Vaherva (1994). Training as a support system for the entrepreneurs (Koulutus yrittäjän tukena). Ministry of trade and Industry 32/1994 (Kauppa- ja Teollisuusministeriön tutkimuksia ja raportteja 32/1994).

Helsingin Sanomat 11 April 1999.

Hämäläinen, M. and A, Karlberg (1998). Training for SME Managers – Background for the Leadership Link Project. In Martinsuo, M and Järvenpää, E. (1998). Development and Challenges of Small and Medium-sized Enterprises. Helsinki University of Technology, Working Paper No 13, Espoo.

National Board of Education (1997). Picture of Education (Koulutuksen kuva) 1997. Statistics of training and trainees (Tilastoja koulutuksesta ja koulutettavista).

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- Training as a Success Factor in SMEs. (1996). Research Institute for Business Economy (Liiketaloustieteellinen tutkimuslaitos). Helsinki: Helsinki School of Economics and Business Administration (Helsingin kauppakorkeakoulun kuvalaitos).
- Lifelong Learning in the Information Society (1996). Koulutussuunnittelun neuvottelukunnan mietintö 1996: 10. The Ministry of Education. Helsinki: Yliopistopaino.
- Martinsuo, M. and E. Järvenpää (1998). Development and Challenges of Small and medium-sized Enterprises. Helsinki University of Technology, Working Paper No 13, Espoo.
- Myllymäki, H. (1997). Leadership Training for Finnish SME Managers (PK-yritysen johdolle suunnattu koulutus Suomessa). Unpublished Report. TAI Research Centre, Helsinki University of Technology, Espoo.
- Otala, L. (1993). Lifelong Learning Based on Industry-University Co-operation. A Strategy for European Industry's Competitiveness. Helsinki University of Technology, Lifelong Learning Series, No 1/1993.
- Proceedings of the Second Finnish SME Research Forum, 4.-5.02.1998, Turku, Finland. (1998). Small Business Institute, Business Research and Development Centre, Turku School of Economics and Business Administration, edited by Pasi Malinen.
- Statistical Office of Finland (1997). Companies in Finland 1995 (Suomen yritykset 1995. Tilastokeskus, Yritykset 1997; 3, Helsinki).
- Statistical Office of Finland (1996). Vocational Institutes (Ammatilliset oppilaitokset 1996. Tilastokeskus, Koulutus 1996:11, Helsinki).
- Statistical Office of Finland (1996). Universities 1996 (Korkeakoulut 1996. Tilastokeskus, Koulutus 1996:12, Helsinki).
- Statistical Office of Finland (1998). Statistics of Educational Institutes (Oppilaitostilastot 1998. Tilastokeskus, Koulutus 1998: 5, Helsinki).
- Telephone interview of representative of Helsinki University of Technology, Lahti Centre.

Chapter 3

GERMANY

Introduction and overview

Small and medium-sized enterprises (SMEs) are recognised as constituting the backbone of the German economy. This is especially true when looking at the contribution of the SME sector to the German apprenticeship system which in many fields is a unique advantage of Germany in traditional sectors of industry and trade. However, recent technological changes and the trends towards internationalisation of economies provide new challenges, especially for SMEs. Moreover, the structural shifts from the manufacturing sector towards service economies will reinforce the importance of SMEs in the overall economy as firm sizes in services are much smaller than in manufacturing and turnover (start-up rates, closing rates) are larger in services than in manufacturing.

Recent research in labour and industrial economics stresses the impact of new technologies on the skill structure of employees. Employment trends in favour of the highly qualified are present not only in manufacturing but also in services and there is a great deal of evidence that this trend is omnipresent in industrialised countries. Technological and structural change also leads to a reduction of the period over which initial vocational knowledge can be exploited. Lifelong learning will be even more important in the future than in the past. These developments are often described as part of the knowledge-based economies.

This general description also affects initial endowment needs as well as the need to update frequently the knowledge of the entrepreneurs and management of SMEs. However, it is often claimed that, owing to financial and time restrictions as well as differences in the structure of incentives (e.g. raising the short-term horizons of SMEs), investment in management training and the provision of continuing education and vocational training in SME is at odds with existing needs. Many suppose that there are market imperfections that give rise to welfare-enhancing government market interventions for continuing education and training. Moreover, it is also argued that these market imperfections are especially severe for SMEs.

It is not the aim of the case study to analyse the theoretical rationale for government market interventions for management training or to present new empirical facts. However, an attempt is made to gather available empirical evidence which can be used as a starting point to analyse the need for and the extent of management training in SMEs. Given the data available, even this is hard to do. Although a lot of information on continuing education and continuing vocational training in Germany is available, it is hard to identify the what is management training and what is not. Even if this information is available, it is not always possible to isolate SME management training from management training for large enterprises. Given the available empirical studies, SME management training is often assessed by looking simultaneously at continuing education and training by firm size and at continuing education and training by occupational groups.

Another limitation concerns the detailed description of courses offered. Instead of dealing with the content of courses, an overall impression is provided of the supply of management training activities by public or semi-public bodies (such as chambers of industry and commerce). It will be clear that there is a broad spectrum of courses open to SMEs in Germany.

It also should be mentioned that the impact of management training on SME performance cannot be assessed using available studies. This is true for single training courses as well as for the assessment of the whole supply of management training.

The following report contains six sections. Some remarks on the flow of the analysis seem a worthwhile starting point. Continuing education and training for managers and key employees in SMEs are based on the initial provision of vocational skills by the education and training system. The assessment of the system of management training strongly depends on the system of education and initial vocational training. Therefore, the basic principles of the German education and training system are described. The roles of both the federal and the *Länder* level are highlighted. Moreover, the main characteristics of the educational system in Germany are described, ranging from primary and secondary education to the dual system of vocational training which is one of the main starting points for management education in German SMEs.

The following section reviews available empirical studies on motives for continuing education (CET) and vocational training (CVT) in Germany. Some figures on the overall GDP share of education expenditure and CET/CVT expenditure are given. Moreover, the most important institutions providing CET and CVT are mentioned, with special reference given to those institution that are important from the viewpoint of SMEs. Finally, some public policy initiatives in the CET and CVT areas at the federal level are indicated.

The next section starts with the problem of defining management training in SMEs. Management levels are described briefly to give a clearer picture of what can be defined as management training. In order to highlight the importance of SME and, therefore, SME management training data on the share of SMEs in the German economy are reviewed. Based on this basic definitions, available empirical evidence on participation of firms in CET and CVT as well as in management training by firm size and industries are discussed. Here, different types of CET and CVT are defined and it is shown that the management level takes part in CET and CVT to a greater extent than less-skilled employees. The costs of CET and CVT by firm size are presented, as well as participation rates for managers and other employees in CET and CVT by firm size and industry.

The following section starts with a description of the "market share" of various types of providers of CVT. Then, important players in the field of CVT and CET are examined more closely. Starting from some specificities of the German "dual system" of vocational training, a distinction is made between the provision of upgrading training which qualifies especially for management tasks in SMEs and adaptation training which enhances the knowledge base at different skill levels, with special attention to management tasks. Special reference is made to CVT and CET offered by the German system of chambers of industry and commerce, the crafts chamber and the industry associations. Due to lack of information the role of commercial suppliers of CET and CVT is not addressed.

A concluding section notes that there is no reliable evaluation of the effects of management training of the performance of SMEs. Some available data sources are indicated and selected empirical studies on CET and CVT in Germany are briefly discussed.

Some remarks on the limitation of the present case study are worthwhile. It mainly aims at collecting facts and figures on management CET and CVT in the Germany economy. Given the

available time frame, no attempt was made to put the German case into an international perspective nor was a comprehensive assessment attempted of the quality of the German system of CET and CVT for managers in SMEs. The report's conclusions report should therefore be viewed with some caution, as more discussion and evaluation of the empirical facts are necessary.

Education and training in Germany: some basic remarks

The Federal Government and the Länder: basic principles for role sharing in education and training

One of the principal features of Germany's federal system of government is the idea that the *Länder* (*i.e.* the federal states) should enjoy complete authority in the domains of education and culture. The system of higher education in the Federal Republic of Germany, being primarily the responsibility of the ministries of education in the *Länder*, evolved for a long time without any interference by the *Bund* (the Federal Government). Private school institutions have never played a significant role in German higher education. To the extent that system-wide harmonisation was necessary, it was accomplished at the *Länder* level by the Standing Conference of the Ministers of Education of the *Länder* of the Federal Republic of Germany.

The increasing demand for higher education in the 1960s made shortage of personnel, space and financing for research and instruction all the more obvious. In this process, the Federal Government became gradually involved in funding and policy-making for higher education and research, thus eroding the firm principle of "cultural federalism". In this way, the higher education sector was radically expanded around 1970, when a new type of institution, the *Fachhochschule*, was established.

The tendency to strengthen Federal authority in educational matters was supported, to a significant degree, by the social and political maxim laid down in the Basic Law (*Grundgesetz* – GG) that uniform living conditions should be maintained in all regions of the Federal Republic. This point implies a centralist perspective. In contrast, the perspective of cultural federalism aims to preserve diversity. In the wake of comprehensive Federal financial reforms, the proposal was made to involve the Federal Government in those responsibilities of the *Länder* that are important for the general public and in which the co-operation of the *Bund* was necessary to bring about uniform living conditions throughout the Federal Republic. These were called "joint tasks".

Introduced into the Basic Law in 1969, the joint tasks particularly concern education and science as follows:

- The expansion and construction of higher education institutions, to be provided for by legally regulated joint framework planning (see Art. 91a GG).
- The possibility of co-operation, by way of agreements, in educational planning and the promotion of institutions and projects of scientific research of national importance (see Art. 91b GG).

Simultaneously, the *Bund* was authorised, within the framework of concurrent legislation, to issue "framework regulations" with regard to general principles of the system of higher education (see Art. 75, 1a GG).

The term coined for the new form of co-operation between the *Bund* and the *Länder* was "co-operative cultural federalism".

However, within the framework of concurrent legislation, the *Länder* are authorised to pass legislation only "as long and as far as the Federal Government has not made use of its legislative authority" (see Art. 72, 1 GG). Thus, the range of competencies transferred to the *Bund* decides which competencies in the cultural and educational domains remain with the *Länder*. The legislative authority of the *Bund* with regard to vocational training is therefore not restricted by the so-called "cultural authority" of the *Länder* or by their right to legislate exclusively in the school domain.²

The role of government in the domain of CVT (with particular regard to in-company CVT and CVT for unemployed) is not important. In principle, legal influence on CVT is based on the assumption that the "social partners" (trade unions and employee associations) are responsible for initial and continuing training of employees. Thus, government has a minimal support function. This means that:

- The enterprises are responsible for the CVT of their employees.
- The Federal Employment Office (FEO) is responsible for qualification courses for the unemployed.

The various existing forms of CVT (in-firm, individual, subsidised and controlled by the FEO, subsidised by government in recognised schools, etc.) have created market segments which are characterised by different features.³

Defining education and training within the German framework

Peters (1966) states that "training has its natural home in the realm of skills where something has to be done or manipulated" (p. 34), and "trained' suggests the development of competence in a limited skill or mode of thought whereas 'educated' suggests a linkage with a wider system of beliefs" (p. 32). In the narrowest sense, the objects of education can be defined as "independent mastery, the acquisition of knowledge and understanding", whereas those of training are "habits, skills, responses, routines, and the like" (Kleinig, 1982). Hager and Laurent (1990, p. 53) claim that in practice the two streams of activity have become fused, considering changing work practices, the structural changes in technology and new demands on interdisciplinary qualifications.

In Germany, the term "training" is not used with uniformity in the literature. The *Berufsbildungsgesetz* – BBIG (Vocational Training Act) defines "training" in the narrower sense of vocational training, the aim of which is to enable an individual to qualify for a given occupation (Schanz, 1990, p. 245). Section 1 of the Vocational Training Act states: "The object of initial training (*Berufsausbildung*) shall be to provide, through a systematic training programme, a broadly conceived basic preparation for an occupation and the necessary technical abilities and knowledge to engage in a skilled form of occupational activity. Initial training shall also enable a trainee to acquire the necessary occupational experience." Initial training, however, will not be taken into account in this study.

Defining continuing education and training

In Germany the general education system and vocational training are inextricably linked (see next section). Therefore, continuing education and training (CET) will be used as the overarching term; although vocational training has to be separated out, this cannot be done neatly.

For this study, the definition of the German Education Council for CET will be used: it is defined as the continuation or resumption of organised learning after the completion of initial training. Short-term initial training on the job is not considered as a form of CET.⁵ Vocational retraining (*Umschulung*), which, according to Section 1,4 of the Vocational Training Act, is to enable one to acquire a different occupational activity, is irrelevant to this study.

The focus is on continuing vocational training (CVT) for employees, more specifically incompany CVT which concerns the employees in enterprises: in-company CVT build upon the knowledge acquired both through initial training and professional experience and skills, respectively, and emphasises the aspect of continuing learning. In-company CVT encompasses all courses, initiated or financed by the enterprise, which aim at maintaining, adapting, amplifying or upgrading relevant competencies of the company's employees and managers.

CONTINUING EDUCATIONAL TRAINING Non-Vocational CET Continuing Vocational General CET **Training** Political CET · Adult CET etc. CVT for CVT for Vocational Retraining **Employees** Unemployed In-company CVT **Individual CVT** Adaptational Upgrading Training Training

Figure 1. Continuing education and training

Source: ZEW (1999).

In-company CVT can, furthermore, be separated into adaptation training and upgrading training. In the case of adaptation training, vocational qualification is no longer up-to-date with recent developments. Hence, adaptation training includes courses which aim at acquiring, completing or broadening skills. For upgrading training, the qualification of an employee no longer corresponds to his or her position in the company. "The more you train, the higher you can get." Thus, upgrading and

CVT are closely linked. Training seminars which prepare for the examinations of chambers and associations as well as the administration academies are included. Figure 1 shows the link between education and training.

Structure of the education system in Germany

Primary and secondary education

In Germany the general education system and vocational training are inextricably linked. The choice of secondary school has a substantial influence on a young person's later career options. Most children leave primary school at the age of 10. Parents and teachers then jointly decide which one of three – in some states, four – types of secondary school the child will attend for the remainder of his or her schooling.

The first option is the *Gymnasium*, which is the most academically oriented type of secondary school. This type of school caters for the most academically able students and leads to the *Abitur* examination, which is the entry qualification for higher education. The second type of secondary school, the *Realschule*, caters for more vocationally inclined students. Here, the focus is more on the preparation for the world of work. Pupils leave at the age of 16 and either continue into an apprenticeship, a full-time vocational school or transfer to a *Gymnasium* or its equivalent to gain university entry qualifications. The third option is the *Hauptschule*. Traditionally, the *Hauptschule* was the recruiting ground for many employers looking for 15 or 16 year-old apprentices, since this type was the most common and the basis for most vocational training. Recently, however, this type of school has become less of an option that teachers and parents choose for a child but an institution catering for those with either low ability and/or social/behavioural problems (Cockrill and Scott, 1997, p. 338). However, students leaving the *Hauptschule* can study for another two years and achieve the *Realschule* leaving certificate.

In some *Länder*, pupils have the additional choice to attend a comprehensive school (*Gesamtschule*). These schools either teach all students together up to the end of compulsory schooling at the ages of 15 or 16 (depending on the state) or they encompass all three types of secondary school in one school but the pupils are taught in separate streams.

Graduates from all types of school can enter vocational training at 15 or 16, but they are legally obliged to continue with some form of school-based education until they are 18 years old. This requirement is the origin of the term "dual system" – vocational training in Germany can either be in full-time vocational schools (*Berufsschulen*), or, if it is in the form of an apprenticeship, it also always includes a school-based element.

The higher education system

The universities and the technical universities form the traditional core of the higher education system in Germany and they are still the largest sector in it. Theological colleges, which have little numerical significance, and the art academies have always been counted as institutions of higher education as well. The higher education system has gradually been extended. First, the teacher training colleges were added. For most of them, this was an intermediate station on the way to the university system. Around 1970, the *Fachhochschulen* and, in two *Länder*, the new type of *Gesamthochschule* (comprehensive university) were integrated into the higher education system. In 1973, the special type of *Fachhochschule* known as the *Fachhochschule* for Public Administration was added. In the process

of redesigning the higher education system in Eastern Germany in the 1990s, this evolution has largely been repeated. Thus, the higher education system in Germany is now composed of eight types of institutions with different responsibilities and of different quantitative importance: *i)* universities; *ii)* Gesamthochschulen; *iii)* theological colleges; *iv)* teacher training colleges; *v)* art academies; *vi)* Fachhochschulen; *vii)* Fachhochschulen for Public Administration, and *viii)* open universities (Fernuniversitäten).

The dual system of vocational training

Legal background

Vocational education and training has a long tradition in Germany. At present, this area is principally regulated by two pieces of legislation: the Vocational Training Act of 1969 (*Berufsbildungsgesetz* – BBiG) and the Vocational Training Development Act (*Berufsbildungsförderungsgesetz* – BerBiFG) of 1981.

The Vocational Training Act of 1969 not only regulates the training of young persons after their period of compulsory school attendance. As determined in the Act, the concept of vocational training comprises initial training, further training and vocational retraining.⁶

Features of the dual system

Vocational training in Germany is provided on the job and in vocational training schools. Based on what is referred to as the dual system, practical vocational training is given at work, backed up by theoretical training and general education provided in vocational training schools which are generally attended for one or two days a week.

The characteristic feature of this system is that the provision of knowledge and skills is linked to the acquisition of the required job experience. This ensures that training will proceed under the same conditions as the trainee will encounter when practising his chosen occupation. Only "on the job" will a trainee be able to learn and cope with the constantly changing demands of the job and to appreciate the variety of social relationships that exist in that field of labour. In addition, learning by doing will give a sense of achievement and provide a special source of motivation for the trainee.

An important issue is the harmonisation between companies and vocational schools, *i.e.* the allocation of training content to the training employers or to the vocational training schools. Based on the qualifications required, which in turn are derived from the demands made by the work process, this allocation will depend solely upon which of the two sources of training provide the optimum conditions for imparting specific training contents.⁷

Continuing education and vocational training in Germany

Legal framework

Continuing vocational training (CVT)

A key characteristic of CVT is the fragmentary nature of laws governing it (Table 1). First, the responsibility for continuing training is divided between the Federal Government and the *Länder*: On

the one hand, the Federal Government is responsible for non-school-based (*e.g.* in-company) continuing training. On the other, continuing vocational training conducted in schools (*e.g.* technical and vocational schools) falls under the jurisdiction of the *Länder*. Second, all matters related to continuing training, *e.g.* financial sponsorship or educational leave, are governed by various national *Länder* laws.

Table 1. The legal foundations of continuing vocational training

Federal Government	Länder
Vocational Training Act (BBIG)	School and university laws
Crafts Code (HWO)	Continuing training and adult education laws
Employment Promotion Act (AFG)	• Laws on educational leave (10 Länder)
Upgrading Training Promotion Act (AFBG)	
Industrial Constitution Act	
Distance Learning Protection Act	
Vocational Training Development Act (BerBiFG)	

Source: BIBB (1997), Continuing Vocational Training in Germany, Berlin, p. 9.

Motives for continuing education and vocational training

With regard to CET, the German government is guided by the following principles: *i)* the individual's responsibility for CET; *ii)* free-market organisation of CET; and *iii)* the subsidiary role of the state. Thus, CVT is subject to far less regulation. However, as compared to other European countries, Germany makes high formal demands on initial and CET. In the last few years, training structures have been adjusted through the creation of many new training programmes; traditional rules impeding the way to self-employment are being questioned. Continual development of qualifications and competencies is fostered by the government through:

- Targeted human resource development to improve on-the-job training.
- Organisation of a social environment from a learning point of view.
- Development of the existing network of institutions offering CVT.
- Extension of training offers by using new information and communication technologies.

For German enterprises, CVT is a strategic factor in terms of competition. Thus, motivating factors for CVT from the point of view of enterprises are:

- Increasing international competition.
- Problems related to the acquisition of young managers.
- The introduction of new technologies and related changes in the organisation of human resource management (HRM).
- Decentralisation of tasks and decision-making procedures.
- Accountability and quality assurance relating to flat hierarchical structures.

Qualification of employees is becoming a constraining factor as far as the introduction of data processing technologies is concerned.

In the face of rapidly developing information and communication markets, the German government is planning to create new conditions for methodically improved virtual training offers (distance learning, libraries, Internet, etc.). In this way, the issue of the participant's location is decreasingly a real barrier to CVT. However, barriers still exist:

- In-company factors (e.g. workload).
- Consulting opportunities (e.g. information; offers).
- Personal situation (e.g. tax burden, family obligations, lack of child care, etc.).
- Timing and organisation of CVT offer.
- Distance from training location.
- Financial rules.

Both the government and the *Länder* are concerned with removing theses barriers related to CVT.⁸ Courses aim at:

- Improving transparency and consulting.
- Initiatives fostering projects for particular target groups (e.g. women).
- Creation and development of data banks.
- Support for development and testing of new consulting concepts in regions.
- Increasing use of multimedia.

Expenditures, participation and providers

CVT is of particular importance with regard to the significant changes in the economy, the job market and demographic and technological development. The dynamics of the labour market constantly require new qualifications. Expenditure for CVT in Germany amounts to about DEM 100 billion a year.

Growing participation rates in CVT show a generally positive attitude towards the range of training offers. Employers' and enterprises' expenditure for CVT amount to DEM 45 billion; public authorities spend DEM 4.8 billion and the Federal Employment Office DEM 15.7 billion. The participants themselves carry a considerable share which, however, is difficult to be gauged. According to the Federal Institute for Vocational Training, the participants' share amounts to DEM 10.7 billion. At national level, two-thirds of CVT take place during working hours, whereas more than half of the CET (56%) takes place outside working hours.

Table 2 shows the participation in CET and CVT among the labour force according to professional levels over a period of 15 years.

Table 2. Participation in CET and CVT among the labour force, by professional status, 1979-94

Percentages

Continuing education and training

	1979	1982	1985	1988	1991	1994
Unskilled workers	9	9	7	16	17	27
Skilled workers	20	23	13	25	30	41
Lower management	23	29	12	37	31	39
Middle management	33	42	37	49	52	58
Senior executives	39	43	56	48	58	67
Civil servants	44	45	43	56	52	66
Senior officers	51	67	56	60	59	63
Self-employed	21	32	26	42	39	52

Continuing vocational training

	1979	1982	1985	1988	1991	1994
Unskilled workers	4	2	3	6	6	12
Skilled workers	11	12	7	16	20	28
Lower management	12	12	7	20	14	21
Middle management	19	20	23	31	36	39
Senior executives	27	25	37	32	44	49
Civil servants	26	28	26	39	37	49
Executive civil servants	30	44	34	44	37	46
Self-employed	12	20	16	25	26	34

Source: BMBF (1996), Betriebssystem Weiterbildung VI, p. 144.

In every occupational group, participation in CET and CVT has increased. It is striking to see that in both categories the tendency to follow CET/CVT increases with the hierarchical level in the management area (two-fifths of middle management make use of CVT and half of all senior executives).

Figures in various studies show that in Germany people who are already well trained and qualified take advantage of CVT offers. Owing to high unemployment rates and the increasing importance of education in industrial and service economies, the German government plans to take low-paid and underprivileged groups into account.

Institutions offering CET and CVT

Public institutions

In addition to the state institutions of the higher education system in Germany: *i)* universities; *ii)* Gesamthochschulen; *iii)* theological colleges; *iv)* teacher training colleges; *v)* art academies; *vi)* Fachhochschulen; *vii)* Fachhochschulen for Public Administration; and *viii)* open universities, several state institutions offer CVT which is of particular interest for management training in SME. Among these, the most important are the following:

- Federal Institute for Vocational Training (Bundesinstitut für Berufsbildung BIBB) which carries out research and development activities in the field of in-company vocational training and provides services and counsel for the Federal Government and all parties engaged in the practical side of CVT. Its aim is to develop principles to govern initial and continuing training for skilled workers, skilled employees, journeymen and master craftsmen in commerce and industry, the crafts sector, the liberal professions and public administration and also to modernise and improve training provision to keep abreast of technical, economic and social change. An important element is close co-operation with practitioners: experts from all sectors of the economy work together with the Institute's professionals to develop training curricula which allow for up-to-date and forward-looking vocational training.
- Physikalisch-Technische Bundesanstalt (PTB), the national metrology institute providing scientific and technical services, is the highest technical authority in Germany for the field of metrology and physical safety engineering. It co-operates with the technology consulting offices of the Chambers of Industry and Commerce and advises companies in the realms of accrediting, certification, examination and authorisation.
- Bundesanstalt für Materialforschung (Federal Institute for Materials, Research and Testing) is a technical institution under the authority of the Federal Ministry of Economics and Technology. It provides consulting on safety aspects of materials, technology and chemistry for the Federal Government and industry.
- The *Deutsche Forschungsgemeinschaft* (DFG) is a non-profit organisation whose members are the universities, big science institutes, the academies of science and other scientific organisations. To differentiate it from non-university research institutions, the DFG is by far the most important institution for external funding of academic research. It advises parliaments and public authorities on scientific matters and cultivates relations between research and the private sector and links to foreign research. It pays special attention to the promotion and training of young researchers. The DFG receives 60% of its funding from the Federal Government and 40% from the *Länder*. In 1994, the DFG budget totalled DEM 1.2 billion.

The publicly supported non-university research institutes are on roughly equal footing with university research as far as budgets are concerned:

- Big science institutions (16): mainly founded in the 1950s and 1960s to initiate "big science research" particularly in nuclear physics, aerospace, data processing and biomedical science. Their work is connected with long-range governmental programmes and has undergone a certain reorientation in the past few years to fields such as "preventive research" in environmental and climatological science, in health and safety, as well as in the assessment of effects of technology.
- *Max Planck Society*: there are presently 66 Max Planck Institutes in which more than 2 200 scholars pursue research. The focus is on basic research in the natural sciences and history. The budget of the Max Planck Society amounted to some DEM 1.3 billion in 1992
- Fraunhofer Society: its 47 institutes serve applied research in the natural sciences and technology, especially with regard to production technologies. Some of the work is commissioned by industry and public authorities. Its independent joint subsidiary the Fraunhofer Management GmbH, founded in 1990, is in charge of ministries, public institutes, SMEs and large companies with activities in the R&D field. Their customer

service comprises consulting in economic and technological matters and the realisation of projects.

- Hermann von Helmholtz Society of German Research Centres: for these centres, a strategy fund has been established to which they contribute 5% of their basic financing. The centres can apply for funds by submitting project proposals.
- "Blue List" institutes: as a rule, these institutes are funded jointly by the Federal Government and the Land in which they are located. The "Blue List" includes a broad spectrum of research institutes and support facilities for research in all academic fields. With a budget of about DEM 1 billion, the Blue List institutes employ a total of around 10 000 people, with the size varying between 20 and 470 staff.

Semi-public institutions

Rationalisierungskuratorium der Deutschen Wirtschaft (RKW) was founded in 1921 as a non-profit institution. Its task is primarily to promote productivity in SMEs. Integrated into the economic and technological policies of the Federal Government and the Länder, the RKW's activities centre on in-company and external CVT, in particular for managers. Representatives of the economy, politics and trade unions co-operate closely. More than 6 000 members of all kinds of enterprises and lines of business are united in an umbrella organisation which is split up into RKW Länder groups. These are in direct contact with the enterprises and in charge of the provision and carrying out of CVT. Each Länder group⁹ offers CVT twice a year (Tables 3 and 4).

Table 3. **Total budget for the** *Rationalisierungskuratorium der Deutschen Wirtschaft* (RKW) DEM millions

	1994	1995	1996	1997
Total budget	141	151	153	176

Table 4. National CVT offers of RKW, 1995-97

	1995	1996	1997
Participants	64 913	43 530	40 067
Seminars	3 816	2 745	2 803

Arbeitsgemeinschaft industrieller Forschungsvereinigungen "Otto von Guericke" (AIF). The AIF, a consortium of industrial research associations, is an institution promoting SMEs through scientific research. Research results have to be transferred to the managers. In this way, a CVT process takes place which aims less at the commercial domain of business management than at the provision of technological know-how to the company. It is financed by the Federal Ministry of Economy, but industry has to provide matching resources.

Federal Employment Office (Bundesanstalt für Arbeit)

The basic legal foundation for governmental labour market activities in Germany is the Employment Promotion Act (*Arbeitsförderungsgesetz* – AFG) of 1969. This act is administrated by an independent federal agency located in Nuremberg, the Federal Employment Office (FEO). Three broad types of training and retraining are supported:

- CVT to increase skills within the current profession.
- Learning a new profession.
- Employers are subsidised for a limited period to provide on-the-job training for individuals facing difficult labour market conditions to allow them to familiarise themselves with the new job.

Table 5. Expenses for education, initial and CET, 1992-97
Billion DEM

	1992	1993	1994	1995	1996 ¹	1997 ¹
Education and initial training ²	162.6	174.0	177.3	188.3	193.0	194.4
Government	120.7	129.3	131.7	138,3	140.7	140.8
 Primary and secondary edu.³ 	85.5	93.2	94.8	99.5	101.3	101.3
• Universities ^{3, 4}	15.9	17.0	16.9	18.6	19.2	19.6
Subsidy of education system ^{3, 5}	7.3	6.7	6.4	6.2	6.0	5.7
Maintenance benefit for civ.serv ⁶	12.0	12.4	13.5	14.0	14.2	14.2
Enterprises ⁷	29.8	30.1	30.6	33.3	35.3	36.6
Private households ⁸	12.1	14.6	15.0	16.8	17.0	17.0
Continuing education and training ^{2, 14}	34.4	33.9	31.0	31.7	32.6	31.1
Government	20.1	19.6	16.6	17.3	18.1	16.7
• Other educational establishments ^{3, 9}	4.0	4.2	4.2	4.3	4.4	4.5
Federal Employment Office ¹⁰	13.8	13.1	10.1	10.7	11.4	9.9
• Civil service ¹¹	2.3	2.3	2.3	2.3	2.3	2.3
Enterprises ¹²	10.2	10.2	10.2	10.2	10.2	10.2
Private households ¹³	4.1					

- 1. Education and initial training estimated from data from the education budget.
- 2. According to financed sectors.
- 3. Basic budget (without supply benefit and support owing to illness for civil servants).
- 4. Without R&D at universities.
- 5. Subsidy for pupils and students.
- 6. Plus about DEM 1.7 billion of support due to illness.
- 7. Net cost of the economy for initial training in the dual system plus subsidy of universities through enterprises without payment for R&D.
- 8. Revenue of public schools, pre-schools and subsidy of education system as well as payment to private schools, pre-schools and universities (estimated in the same amount as public payment).
- 9. Adult education centres, libraries, academies.
- 10. Estimated as the half of the total expenditure of the academies for vocational education.
- 11. Estimated according to the average per employee in the enterprises (see note 12).
- 12. DEM 10.2 billion as estimated value for CET courses in 1992/93 and 1995 on the basis of enterprise surveys by the Federal Institute of Vocational Training and the IW. In a broader differentiation and including continued payment of wages, the sum amounts to DEM 34 billion.
- 13. DEM 3.6 billion as estimated value on the basis of SOEP including revenue from public establishments of other educational institutions.
- 14. Expenditure for the education process, *i.e.* without continued payment of wages by the enterprises and without payment of vocational academies for the cost of living during CET time. Including these opportunity costs would result in far higher figures.

Source: BMBF (1998), Bericht zur Technologischen Leistungsfähigkeit; Calculations and estimations of the DIW, Federal Ministry of Economics, Federal Office of Statistics, Federal Institute of Vocational Training and the Institute of German Industry (IW).

As for CVT support by the Employment Promotion Act, institutions financing off-the-job training dominate. The following developments are to be emphasised:¹⁰

- The share in CVT which is exclusively financed by companies has increased only slightly
 over the last few years, although an effort has been made, by virtue of the qualification
 offensive, to convince more firms to carry out such courses, since in-company trained
 participants show considerably higher reintegration than their colleagues trained off-thejob.
- In the last 15 years, the share of private financiers and the CVT¹¹ of their establishments have increased notably. The increase in private financiers came at the expense of the schools.

Table 6 gives an overview of the education expenditure in Germany for the period 1992-97. As for CET, which totalled DEM 31 billion in 1997, nearly one-third is financed by the FEO, and one-third by the enterprises themselves.

Table 6. Expenses of the Federal Employment Office for CVT
Thousand DEM

Länder	1990	1991	1992	1993	1994	1995	1996
Schleswig-Holstein	315	353	383	345	318	377	376
Hamburg	302	323	332	296	243	252	271
Mecklenburg-Vorpommern	25	626	1 455	1 502	1 169	1 114	982
Niedersachsen	883	973	1048	911	836	954	1 046
Bremen	139	162	188	153	114	126	125
Nordrhein-Westfalen	1 856	1 998	2 101	1 971	1 943	2 222	2 394
Hessen	498	506	539	507	418	594	702
Rheinland-Pfalz	333	372	406	402	397	459	478
Saarland	119	143	149	151	144	157	164
Baden-Württemberg	723	755	828	835	809	933	1 127
Bayern	888	897	967	994	946	1 156	1 346
Berlin (West)	194	203	205	204	196	269	327
Berlin (Ost)	30	636	997	685	430	461	449
Brandenburg	24	669	1 549	1 358	898	1 032	1 186
Sachsen-Anhalt	34	757	1 858	1 689	1 220	1 404	1 399
Thüringen	28	775	1 952	1 778	1 148	1 155	1 188
Sachsen	44	1 282	3 481	3 385	2 167	2 146	2 225
Total (West)	6 250	6 685	7 146	6 769	6 364	7 499	8 356
Total (Ost)	185	4 745	11 282	10 397	7 032	7 312	7 429
Total	6 435	11 430	18 428	17 166	13 396	14 811	15 785

Note: This table shows individual subsidies for vocational training and retraining.

Source: Deutscher Bundestag Drucksache 13/8527, p. 35.

After the peak of entries to AFG-subsidised CVT was reached in 1991 and 1992 owing to German unification (about 1.5 million entries), the number of entries evened out at 650 000, showing a ratio of 60:40 (West *vs.* East Germany). This ratio has stabilised since 1993. The reason for the approximation is likely to be the alignment of structures in the new *Länder*. Figure 2 shows the evolution of the entries to AFG-subsidised CVT in Germany.

1 600 000 1 486 000 1 400 000 East Germany 1 200 000 1 000 000 N T 800 000 R 659 059 642 286 574 031 647 670 593 754 ı 600 000 Ε S 400 000 200 000 0 1990 1991 1993 1994 1996 Years

Figure 2. Entries to AFG-subsidised CVT in Germany, 1990-96

Source: Federal Employment Office; ZEW (1999).

Chambers of commerce and industry associations

Chambers of commerce

The Chambers of commerce play a significant role in Germany in the realm of middle and higher management. Every year, they offer an extensive range of CVT (courses, seminars, workshops) particularly to employees of SMEs. The most important (and largest) chambers are the Chambers of Industry and Commerce (IHK) and the Crafts Chambers (HWK). In 1997, 506 000 employees followed CVT. These participants were spread over a total of 49 000 seminars. The chambers comply with instructions fixed by the government which transfers the task of CVT to the chamber in the particular area.

Industry associations

Unlike the state-regulated chamber system, industry associations are predominantly financed by the private sector. They play an equally important role in the field of CVT for business management in Germany. In 1997, about 718 000 participants were trained in some 45 000 CVT seminars offered nation-wide. The proximity to enterprises has to be pointed out; it enables the offering of CVT courses tailored to the particular demand of the company.

Private sector companies

In this study, two kinds of enterprises are subsumed in private sector companies:

- Enterprises which train their employees themselves, *e.g.* by the personnel department.
- Enterprises offering CVT as a service to other enterprises.

Enterprises offer a large number of CVT. At present in this sector about 20 000 CVT organisers exist, providing about 275 000 CVT offers in Germany. 12

Recent public policy initiatives for CVT and CET

Federal level

Financing for CVT is available within the bounds of subsidy programmes (with an incentive character), provided by the Federal Government, the *Länder* and the European Union. Different department competencies, various financing modalities and changes therein render it rather difficult to give a comprehensive overview of their volume.

Some parts of the governmental subsidy programmes are motivated by SME policies. They aim at supporting:

- Information and training courses.
- Seminars on business management.
- Workshops on "environmental protection" in the craft professions.
- Workshops in the area of "new technologies".
- Seminars to prepare for the craftsman's certificate in the craft's professions.
- Technical workshops for trainers in inter-firm vocational training establishments.
- Information and training courses for employees of industry promotion.

There are, furthermore, promotion programmes for vocational education, which partially include CVT. Subsidised programmes include:

- Qualification of the training personnel and other skilled workers in vocational education.
- Improvement of facilities in vocational training establishments.

There are, moreover, investment bonuses and exceptional write-offs for new plant and equipment that are taken up for the acquisition of commodities serving CVT. Further subsidy programmes target initial training (including CVT) in East Germany.

As for SMEs, the German government has initiated two programmes supported by the European Union: The "Programme for the Promotion of Human Resource Development" was launched in East Germany for the period 1995-98. In both West and East Germany, the programme "Location Assurance through Competence Development: Structural Changes in CVT" was carried out over the

period 1995-99. These programmes are designed to enable SMEs to develop and implement individual HRM concepts.

In order to qualify executive managers and workers' councils for forward-looking forms of HRM, the German government supports the development of corresponding models of CVT. The recently founded Institute for Innovation Management and Personnel Development at the Technical University of Chemnitz/Zwickau established additional study courses for graduates of different disciplines dealing with HRM issues related to their occupation.¹³

Subsidies for entrepreneurs and start-ups

Within the realm of start-up subsidies, the state supports the decision to start up by way of advice and financial help (ERP/EKH programmes). For the prospective entrepreneur, CET opportunities are offered by state-subsidised institutions (CET institutions, chambers, schools, etc.) and private training establishments. Many CET establishments aim to award qualifications which, owing to current laws (code of the craft professions), solely make possible the setting up of an independent company (master apprenticeship, or the initiation of the process. Apart from the ongoing financial help, conditions for start-ups are to be improved with initiatives such as the EXIST competition, for example. At this point, ideas as to how research institutions, enterprises, associations, chambers, politicians, etc., could best co-operate should be promoted, favouring start-ups.

The aim of the government's subsidies for start-ups is a guarantee and relief for market entry by new enterprises. The view is that a large enterprise and economic structure forms, or rather is obtained, by a multitude of competitive small, medium and large companies. For each case, the start-up aid adds financial help for start-up investments and strengthens young companies' decision to start up. Support for the decision to found a company involves, in the first instance, the creation of a "culture of entrepreneurship".

Table 7. Registered and liquidated companies in Germany, 1990-95

	1991	1992	1993	1994	1995
Foundations	700 250	646 551	727 995	742 747	768 290
Liquidations	398 945	441 167	528 179	580 334	616 358
Balance	301 305	205 384	199 816	162 413	151 932

Source: Registrations of each Länder's Statistics Office.

In a bid to encourage the creation of new enterprises, the Federal Ministry for Education and Science (BMBF) introduced a competition in 1998 called "Start-ups out of University" (EXIST) which was aimed, above all, at students. This contest pointed out how students, others involved at universities and graduates could become interested in, trained and subsidised for starting up an enterprise or accompanied into self-employment. These measures set out to increase the small number of self-employed academics in Germany (15.5%). In 1998 over 200 universities took part in the contest and a total of 80 network concepts were designed. The BMBF subsidises the winning projects to the end of 2001 with around DEM 45 million. With this and similar initiatives, politics, economics and leading organisations target:

- The long-term establishment of an "entrepreneurship culture".
- Making full use of scientific research results on economic products.

- Targeted support for the great potential of business ideas and founder personalities.
- A clear growth in the number of technology-oriented start-ups.

State measures such as the EXIST programme aim to promote the realisation of start-ups in order to increase total economic start-ups. The support of start-ups is an aid to potential founders. Courses on starting up are offered by chambers, associations, schools and private providers.

Even if these support measures do not affect the correlation between foundation subsidies and the number of start-ups, they do represent a great help for the start-ups as a rule, giving them the chance to hold their own in competition and secure the survival of the company.

In fact, an offer of immediate and later preparation for starting up exists, involving around 340 adult education centres and 320 chambers in 1998. As far as the chambers are concerned, 206 are from the Chamber of Industry and Commerce and 114 are from the Crafts Chambers. Among the CVT offers which promote later entrepreneurial independence, one can differentiate between commercially technical and business trade CET:

- In the realm of technical CET, master craftsmen traditionally represent the greatest potential for start-ups. Preparation courses for the master examination are designed correspondingly. Likewise in CET courses to become masters of industry, some areas of the multi-subject part of the examination are suited to this goal (see below).
- In the area of business trade CET, "state-examined management expert" approaches perceive entrepreneurial independence as a further aspect of professional activity.

Experiments

The Federal Government has, since 1990, subsidised experiments in primarily in-company CVT on the theme of "work-oriented learning in in-company CVT". Experiments within this theme, which deals with computer-aided learning, are combined. Experiments and projects on the following themes are:

- Qualification of training personnel for the development and use of multimedia learning appliances in CET.
- New forms of organisation in the adaptation of CVT, with investment in multimedia learning technologies.
- Multimedia on-the-job CET on the introduction and use of information and communication technologies in the craft professions.
- Development and evaluation of computer-aided teaching modules for CAD-CET of older employees.

Reform initiatives by the Federal Government

Creation of modern framework conditions for "lifelong learning" in flexible CET structures includes:

- Quality of the offer, the comparability of degrees and developing and securing transparency in the training institution offers.
- Actual competence at time of entry into training examinations to be weighted more strongly than formal criteria.
- Multitude of significant chamber regulations to be contained in a few, flexible statutory orders.
- Extension of the dual CET and education in joint work between businesses and universities for applied science: more flexibility, differentiation and learning-by-doing.¹⁴
- More competition, orientation towards enterprises, internationalisation, closer focus on practicability.

Länder level

As a rule, support programmes of the *Länder* are characterised by the fact that CVT is closely connected to measures of the employment market and to economic, social or regionally political measures, and also by the fact that qualification refers to labour market target groups (such as the unemployed, for example). Several sources of finance (EU, particularly the ESF, Federal Government, *Land*) are combined. The following constitute the most significant target groups:

- Unemployed, long-term unemployed.
- Women (*e.g.* those returning to work).
- Employees in SMEs.
- Older employees (reintegration assistance).
- Younger employees (integration assistance). 15

Subsidised training courses in the various institutions, according to *Länder* analysis, are shown in Table 8.

Table 8. Länder-subsidised CET and various financiers

	Total	of which		
	(%)	Full-time courses	Part-time courses	
State schools ¹	32.	70.6	29.4	
Private schools	5.7	67.4	32.6	
Public edu. establishments ²	47.3	52.9	47.1	
Private edu. establishments	14.1	51.7	48.3	
Public correspondence course	0.1	15.4	84.6	
Private correspondence course	0.6	1.1	98.9	

^{1.} This table is not representative of the federal area, as the proportion of relationships in Baden-Württemberg is influenced by preparation for the master examination at universities of applied science which occurs more often than in other *Länder*.

^{2.} Included are many chamber training societies which, as civil law establishments, would be more correctly placed in the "private education establishments" category.

Almost half of all subsidised training courses are carried out by public education establishments, with full-time and part-time courses approximately balancing out. About one third of the subsidised training courses take place in state schools, where the majority are full-time courses (70%). Private education establishments represent the third largest group of these training courses (14%) in contrast to private schools, which have a much lesser significance.

The Upgrading Training Promotion Act (AFBG)

Along with the Upgrading Training Promotion Act (AFBG), the so-called "master BAföG", an all-inclusive means of support, was created which is supposed to make CVT possible for the individual, independently from his/her economic relations, corresponding to the individual's preferences, talents and skills.

Thanks to the AFBG, which came into force on 1 January 1996, qualified employees who prepare themselves for becoming master craftsmen or masters of industry, technicians, businessmen or management experts, or for following another training degree, are entitled to receive state funding. Training courses in the area of commercial economics, independent professions and housekeeping and agriculture are also subsidised when the person sets out to reach a higher qualification level than that of skilled worker – self-employed masters of trade, for instance. Many training programmes for health-related professions, such as social carers and social education workers can also be subsidised.

During the first year (1996), around 29 000 training participants were subsidised. The monthly maintenance contribution (full-time cases only) was on average DEM 1 004 (DEM 277 bursary and DEM 727 loan). As a contribution for financing the course and examination fees, an average of DEM 5 363 was granted for full-time cases and DEM 4 046 for part-time cases.

The total amount of funding granted in 1996 came to around DEM 234 million, of which DEM 24 million for subsidy payments (78% from the Federal Government and 22% from the *Länder*), about DEM 210 million was claimed as loans by the German Ausgleichsbank. Up until the end of 1997, subsidies initiated by the AFBG may well have crossed the DEM 450 million mark.

Almost 73% of those subsidised in 1996 were working towards a CVT degree in the craft professions, in which the share of those wanting to become self-employed later is especially high. Against the background of the generation change seen in many businesses – by the turn of the century 200 000 company take-overs are expected in the craft profession sector – this is a positive development. Positive effects for workplace and training placements are also expected. Experiences from the craft profession sector show that each start-up on average leads to up to five new work positions within the first five years. A total of 18.5% of CVT degrees in trade and industry are of second-class nature.

Two-thirds of all the subsidised junior members of staff on their way towards their upgrading goals, were between 25 and 35 and a good 20% were under 25. At 85.4%, men were clearly more strongly represented than women.

SME, CVT, CET and management training

SMEs in the German economy

There is no uniform definition with exact parameters for determining when a "small" company becomes a "medium-sized" or "large" company. Definitions vary with the objectives, the perspective (assistance funds, employment figures, turnover) and the larger framework (region, owner, capital). Nor would a rigid definition be appropriate in light of the pronounced heterogeneity of the SME sector.

Over the years, however, some rules of thumb have developed to define companies as "small", "medium-sized", or "large". The most important criteria are the size of the workforce and the turnover. Table 9 give an impression of the dimensions used in this study:

Table 9. **Definition and size of SMEs**

Companies (size)	Number of employees	Turnover/year
Small	Less than 9	Less than DEM 1 million
Medium	10 to 499	Between DEM 1 million and DEM100 million
Large	500+	DEM 100 million and over

Source: Institut für Mittelstandsforschung (1997/98).

This approximate division is drawn up for every branch, according to presently available statistics and is only corrected for those established mean values having too great a deviation from the norm.

According to this definition, Germany had 3.2 million SMEs, employing some 20 million workers in 1996. The data support the following: the German economy is strongly characterised by SMEs. Some two-thirds of all persons falling under the system of compulsory social insurance now work in SMEs. The contribution of such companies to the economy as a whole has greatly increased in recent years. The macroeconomic share of these companies is more than 44%, also in terms of gross investment and value added. And while western German large companies eliminated a large number of jobs, in part as a result of lower sales, restructuring and a focus on core operations, SMEs added 1 million new jobs in that year.

SMEs are leaders in the economy, not only in creating new jobs but also in making training slots available. The overwhelming share (80%) of all training slots are provided by SMEs.

The business start-up trend has continued to increase in recent years. Despite the fact that bankruptcies and insolvencies are rising, the number of companies active on the market shows a positive balance. With start-ups continuing to increase, the overall balance of start-ups between 1990 and 1996 is positive.

To summarise, SMEs are important for the German economy, because of their large number. SMEs constitute 99.6% of all companies liable to sales tax (Table 10). They account for 46.9% of total taxable turnover, employ around 68% of the total workforce and train around 80% of all apprentices. SMEs in Germany contribute 53.0% to the gross profit of all enterprises and 44.7% to the gross national product (including the state). They create 45.4% of all gross investments.

Table 10. Share of companies, by turnover in Germany, 1994

Size	Compa	nies	Turno	over
SIZE	Turnover (DEM)	in %	Units	in %
Small	25 000-50 000	12.5	12 172	0.2
Small	50 000-100 000	16.4	31 525	0.5
Small	100 000-500 000	40.0	253 718	4.0
Small	500 000-1 million	12.3	228 921	3.6
Medium	1 million-5 million	14.2	783 979	12.4
Medium	5 million-25 million	3.6	966 881	15.3
Medium	25 million-100 million	0.7	887 935	14.0
Large	100 million and over	0.2	3 163.309	50.0
Total		100.0	6 328 443	100.0

Source: Federal Statistical Office (1995).

Several studies show the importance of SMEs in terms of creating jobs and their role as suppliers for complex products and production methods. Moreover, there is their contribution to renewing the business and economic structure by start-ups, their contribution to creating private ownership and entrepreneurial thinking, and their positive social influence, particularly in structurally weak regions.

Besides their number, the economic development of these companies over time is also of great interest. Technology-oriented companies are particularly dynamic and growth-oriented. Recent studies on the development of business start-ups show that young innovative companies enjoy above-average business success. In these companies, the application of new technologies leads to a rapid rise in employment and net output. In the 1980s and 1990s, technology-oriented SMEs boosted employment numbers by roughly a quarter, while the number of jobs in other branches stagnated. Companies involved in leading-edge technology, with areas featuring R&D-intensive activities, show even higher growth rates relative to the other technology-oriented firms.¹⁶

The trend towards a service society has become the key to increasing growth, self-employment and employment. Services already account for nearly two-thirds of macroeconomic performance in Germany.

The significance of service markets will rapidly increase as a result of the increasingly interlinked global division of labour and the trend towards an information and know-how society. Nearly two-thirds of all gainfully employed persons in Germany are now employed in the service sector, which is largely made up of SMEs.

Management and hierarchy in SMEs

The management literature usually differentiates between top, middle and lower management. Top management is the highest managerial level of an enterprise (owner, managing director), middle management are heads of subject areas and lower management includes all other supervisors and members of staff.

It is the task of the top management to formulate the principles and aims of company policy. Following them, managers at middle management level have upward career expectations. Their central task is to carry out company policy decisions through programmes and concrete plans, as well as to monitor their realisation. Lower management forms the link between management positions on the one hand and those employees whose duties are purely executive on the other.¹⁷

Medium-sized enterprises often explicitly profess such managerial levels through "organigrammes" and "job descriptions". In contrast, in small – and above all in micro – enterprises, responsibility mostly lies on several shoulders and is not formalised. Here, there are implicit roles and functions in which employees differ from each other (Figure 3).

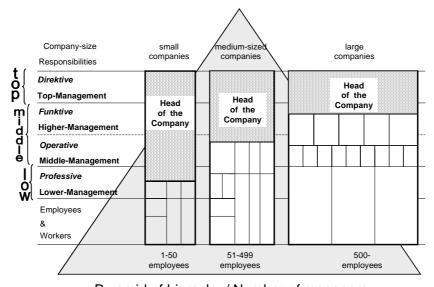


Figure 3. Management levels in small, medium-sized and large companies

Pyramid of hierarhy / Number of managers

Source: ZEW; and Bach (1996).

In terms of effects dependent on size of enterprises, three types of company (small, medium and large) with three levels of management (top, middle and lower) are differentiated in this study:

• In small businesses, "professive" tasks are frequently assigned to employees. The management still reserves operative, functional and directive exercises in these "professive businesses".

- In medium-sized enterprises, operative tasks are already delegated to the second level of management. The management of such "operative enterprises" is responsible for the functional and directive tasks.
- In large corporations, functional tasks are relinquished. The highest management of "functional corporations" is responsible for directive affairs.

Small companies

In small enterprises, the hierarchic possibilities are not fully exploited. The management works together on each of the issues passed down which can cover several levels of entrepreneurial action. Should growth occur, the managing director will then pass the task on to the next lower level of employees. The larger the company, the more levels appear and become evident from the outside. The second level of management indicates the hierarchic stages of extension.

Hierarchic divisions of labour in which the managing director also works on all professive tasks are, for example, workshops comprising of a master craftsman as managing director and several skilled workers. The vast amount of companies in the German economy are trade and service enterprises with hierarchic division of labour at the professive level. The leaders of such companies are responsible for all tasks and co-ordinate the work, as a rule.

The smaller and smallest enterprises are frequently integrated into their immediate surroundings. Owing to the fact that the leader makes all planning decisions, there is greater unity of objectives and assessments in small businesses. The efforts and purposes of the companies are obvious to every employee. Models and principles do not have to be worked out, formulated and drilled into each employee.

The immediate social environment reflects on the behaviour of the management more clearly than in large companies. For example, the employees come into contact with the products' purchasers again and again. Customer satisfaction thus also becomes the standard for employees.

By and large, supervisor-to-employee behaviour follows traditional roles as well as regionally applicable customs. Within this framework, however, division of labour and behaviour reflect the sites of individuals, and to a great extent formal organisations are only necessary for estimations. Every employee looks over the business. Tasks can be distributed according to individual preference and current needs. In truth, core competencies among employees exist in many businesses, but in case of doubt "everyone can do everything".

Frequently, small companies in the "occupational group" genre collaborate (HWK, AiF, IHK) and work on parts of their operative and functional issues together. Above all, this is true in the R&D sector, but also for CET.

Medium-sized companies

In medium-sized organisations, the managing director continues to co-ordinate the operative tasks but delegates them to the second level of management to be carried out. The managing director and his most important employees consider and discuss the operative issue and plan of action. Operative companies are characterised by purpose-orientated activities.

Due to the combination of all functional and directive decisions being one level's responsibility (management), rash initiatives and reactions are possible throughout the entire company. On the other hand, employees with better education and qualifications are delegated to the operative tasks. The advantage of more uniform leadership is strengthened through the high clarity of operative businesses. It allows management to get by with low-cost methods of planning and information systems, if few executive tasks arise in the lower levels. Short-term improvisations lead to greater flexibility in the company as tasks can be distributed to employees according to needs, personal suitability and interests.

As a rule, a casual style of hierarchic co-operation predominates and applies to all levels of the company. Clarity, uniformity of leadership and flexible responsibility only require more time for organisational and management issues in times of a growing workforce.

Participation in CVT and firm size: assessment of different data

CVT can be divided into two parts, internal and external CVT (Figure 4). In the first half of 1997, CVT was carried out by 37% of firms in West Germany and 39% of firms in East Germany. Internal CVT was offered by 15% in the West and by 13% in the East. It takes place in the firm and can be accessed only by employees of the particular firm. The trainer will be an employee as well. The internal CVT has to be differentiated as CVT "on-the-job" and CVT in seminars and workshops exclusively within the firm.

External CVT was carried out by 30% of the West German firms and by 28% of the East German firms in 1997. It takes place either in the firm, in the institute of a CVT provider, or in another place like a conference centre, etc. The participants come from only one firm or from different firms if it is an inter-firm CVT. The trainer can be self-employed or part of a CVT institute.

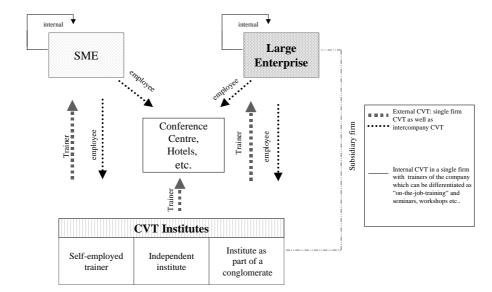


Figure 4. The mechanism of CVT in Germany

Source: ZEW (1999).

The advantage of internal CVT in comparison to external CVT is the time saved by not having to leave the firm facilities. In addition, costs are cut in travel expenses and in remuneration of the trainer. External inter-firm CVT is used if the target group in the firm is too small.²²

Big companies often have their own CVT institute (which is part of the company). They provide CVT for their own company but also for their customers and other companies. Therefore CVT in big companies is quite different from that in small and medium-sized businesses. CVT in SMEs is less institutionalised.²³ Normally, SMEs have fewer resources to provide CVT. However, in SMEs other structures of training within the work process (including on-the-job training) can be found. Usually the training process is closer to the actual job and its problems. This form of training is frequently used in SMEs.

In 1997, 28% of West German firms with 1-9 employees offered CVT, whereas in firms with more than 1 000 employees, it was almost 100%.

There are a number of factors which explain why CVT rises as firm size increases. First, for smaller firms, the opportunity costs of training appear to be higher simply because there is no one to replace a person who is off the job for training.²⁴ Second, as a rule there is no specific person in SMEs who is responsible for CVT. However, this situation changes as the number of employees rises. The size of a company can also be seen in the selection of participants for CVT and the planning of CVT. Through the measurement of demand for CVT, a firm can simplify its scheduling. However, owing to lack of competence, much of the time no CVT planning takes place in SMEs. Moreover, there is no official scheduling method to measure the demand for CVT.²⁵ One possibility is to ask the managers in a firm. Nevertheless, CVT in SMEs often takes place when there is already a deficit in terms of quality.

Another problem that SMEs have to face is the asymmetry in the marketplace. The firms can choose from a wide range of CVT events. This does not include a quality check of the CVT providers, however. Quality standards like DIN or ISO 9000 are alternative ways of reaching a minimum standard of quality for institutions offering CVT.

Looking at the different themes of CVT, they can generally be divided into two sections, the administrative and the technical. Both are included in the supply side of CVT. The administrative part usually offers the following:

- Business management.
- Accounting, controlling and financial management.
- Law.
- Marketing.
- Leadership and communication.
- Personnel, administration and working.

Participation in CVT: firm-level data

In 1997, the share of firms which carried out CVT in Germany was around 38% (Table 11). Compared to the previous study (1993/95: 30%) there is a notable growth considering the supply-side of in-firm CVT in Germany.

Table 11. Participation in CVT by German establishments, by qualification

First six months of 1997, percentage of all establishments in the group

Number of employees	Offering at least one CVT course ¹	External CVT	Internal CVT	Participation at trade fairs and conferences	Training through self-study
West Germany					
1-9	28.2	22.5	8.0	13.3	4.0
10-49	56.0	44.9	28.2	28.3	8.9
50-499	77.6	70.3	55.3	52.1	15.8
500-999	89.1	80.2	83.1	67.3	25.9
1 000+	99.7	96.7	96.5	87.8	48.7
Total	37.2	30.1	15.2	18.7	5.8
East Germany					
1-9	31.3	21.5	9.5	14.3	4.4
10-49	56.4	44.7	20.5	33.0	9.3
50-499	82.7	69.5	45.9	56.6	16.3
500-999	94.1	89.1	84.6	70.5	27.7
1 000+	97.4	90.3	93.5	84.5	33.0
Total	39.0	28.6	13.6	16.7	1.4
Germany: total	38.1	29.3	14.4	17.7	3.6

^{1.} Courses include: a) external/internal courses; b) on-the-job CVT; c) job rotation; d) quality circle; e) trade fairs and conferences; f) training through self-study; g) other. Source: IAB-Establishment Panel; Düll/Bellmann (1998).

In the size group of 10-49 employees, more than half of all establishments already offer CVT, whereas nine out of ten establishments with 500 and more employees do so. Dependence on firm size is especially strong for internal CVT, which requires personnel and the supply of materials. However, for external CVT medium–sized and bigger companies are more likely to be involved. Looking at "onthe-job training" (instruction and initial training), dependence on firm size is again evident in the different organisational forms. Again, medium-sized and bigger companies dominate.

The differences between the branches are considerable, though East and West Germany do not differ very much (Table 12). Branches with large activity in CVT are financial institutions and insurance companies, as well as the capital goods industry. For example, 58% of West German and 54% of East German financial institutions and insurance companies offer CVT.

Table 12. Participation in CVT, by industry

First six months of 1997, percentages

	West Germany			East Germany		
Branches	Offering at least one CVT course ¹	External CVT course	Internal CVT course	Offering at least one CVT course ¹	External CVT course	Internal CVT course
Agriculture and related	16.5	-	=	19.6	16.1	4.7
Catering	19.2	16.2	7.7	24.1	16.1	10.6
Consumer goods industry	23.6	19.7	3.8	20.2	11.5	4.8
Construction industry	30.3	24.1	4.6	35.6	28.5	7.7
Transportation and communications	30.5	21.6	16.3	34.3	21.2	17.4
Producing industry	34.3	28.2	12.1	28.3	19.8	10.3
Trade	36.4	27.4	15.3	32.0	20.1	14.7
Other business services	40.0	33.0	13.8	44.1	33.9	11.7
Non-profit organisations	41.4	35.3	19.1	46.8	29.5	17.0
Industry of capital goods	50.7	42.6	22.3	57.1	47.4	15.0
CET institutes	52.5	40.1	29.6	62.1	46.6	34.7
Länder government	56.0	43.0	40.1	65.6	50.4	30.8
Financial and insurance	58.2	46.4	43.7	54.1	29.8	45.9
Health-care	58.8	54.1	22.3	61.4	51.7	14.2
Mining, electricity and water management	88.3	80.2	49.1	65.0	55.5	27.0
Average of all branches	37.2	30.1	15.2	39.0	28.6	13.6

^{1.} Courses include: a) external/internal courses; b) on-the-job CVT; c) job rotation; d) quality circle; e) trade fairs and conferences; f) training through self-study; g) other.

Source: IAB Establishment Panel; Düll/Bellmann (1998).

Participation in CVT in Germany - Individual level data

Over the last few years there has been a significant rise in participation in CVT in Germany. This development can be confirmed for all qualification levels. CVT participation rates are highest for middle and upper management as well as for the self-employed (Table 13).

Table 13. **Participation in CVT, by qualification group, 1979-94**Participation rates in percentages

Qualification group	1979	1982	1985	1988	1991	1994
Unskilled worker	4	2	3	6	6	12
Skilled worker	11	12	7	16	20	28
Lower management	12	12	7	20	14	21
Middle management	19	20	23	31	36	39
Senior executives	27	25	37	32	44	49
Self-employed	12	20	16	25	26	34

Source: BMBF, Berichtssystem Weiterbildung VI (1996).

Financial institutions and insurance companies are the most active sector. In particular, they put their CVT emphasis on the middle management level. Within the industry sector it is above all in the capital goods industry where most of the employees participate in institutionalised CVT (Figure 5).

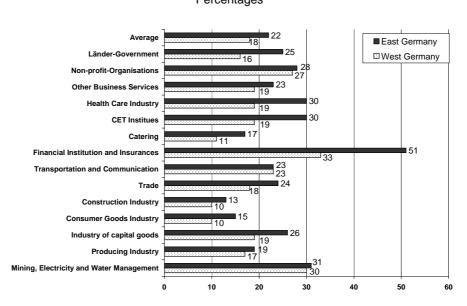


Figure 5. Participation in CVT in German firms, by industry, 1997

Percentages

Source: IAB Establishment Panel; Düll/Bellmann (1998).

Differences are noted in terms of participation according to firm size. There is a trend showing that CVT courses are more likely to be attended in small and big companies than in medium-sized ones. The latter tend to offer relatively little CVT and have below-average participation rates.

Evaluating the participation rate, it should be taken into account that the training and organisation structures of small and large companies differ significantly. In small and partly also in medium-sized firms, training within the working process are traditionally much more common than in big companies. In CVT surveys, these types of "soft" training are most likely to go unrecorded. In conclusion, no notable differences between firm sizes can be found with regard to participation.

Table 14. **Participation in CVT in German firms, by qualification level**First six months of 1997, percentage of all employees in the group

Number of employees	Unskilled worker	Skilled worker	Lower management	Higher management	All employees
West Germany					
1-9	3.4	21.3	12.4	33.5	15.7
10-49	6.6	18.6	19.8	32.6	18.9
50-499	7.1	15.3	15.7	28.1	18.1
500-999	6.4	14.5	11.0	23.0	15.7
1000+	8.6	18.9	12.4	25.2	18.9
Total	6.5	17.8	15.3	29.1	17.8
East Germany					
1-9	5.4	23.6	23.3	37.7	19.4
10-49	7.1	16.9	23.9	40.8	20.6
50-499	12.8	20.4	22.8	32.1	22.7
500-999	7.1	18.0	24.7	35.2	24.8
1000+	12.1	23.8	25.0	35.4	30.3
Total	9.1	19.8	23.6	35.8	22.3
Germany: total	7.8	18.8	19.45	32.45	20.05

Source: IAB Establishment Panel; Düll/Bellmann (1998).

When splitting up the participation rate according to qualification groups, it can be seen that the CVT participation varies considerably (Table 14). While unskilled workers participated in only about 8% of CVT, the quota for managers was around 33% in all of Germany in 1997. The data offer one interesting effect: the difference in CVT participation rates between small and large firms is more pronounced among low-skilled workers whereas SMEs' top management is more covered by CVT than the higher management of larger establishments.

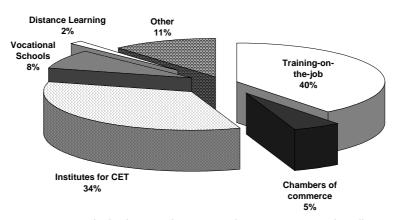


Figure 6. Participation of managers in CVT

Note: Includes middle management, desk planner, departmental manager, managing director, senior executive. No firm size information available.

Source: Unweighted Mikrocensus 1993-95. Sample n = 212 495 individuals.

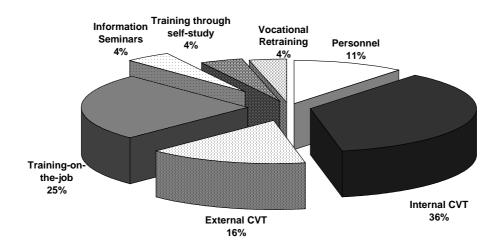
Looking at the different forms of CVT that managers take part in, "training on the job is the most popular. at 40% (Figure 6). However, this changes with a rise in the hierarchic position.²⁶ CVT in institutes for CET comes in second with 34%, followed by other forms of CVT with 11%.

Expenditure on CVT in firms

In contrast to the increase in participation, expenditures on CVT of all firms in Germany decreased from DEM 36.5 billion in 1992 to DEM 33.9 billion in 1995 (Figure 7).

 $\label{eq:Figure 7. Total expenditure on CVT of all firms in Germany, by type of cost, 1992 \\$

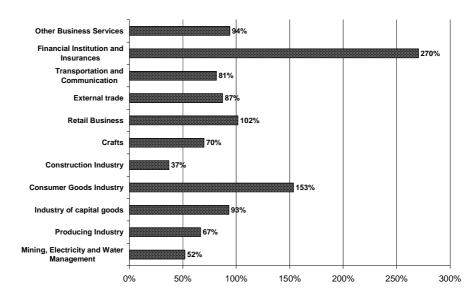
Total expenditure on CVT = DEM 36.5 billion



Note: A classification for total expenditure according to qualification forms in 1995 is not available. Source: Weiss (1994) and ZEW.

For 1992, internal CVT had the biggest share of the expenditure with 36%. Training on the job has the second biggest with 25%, followed by external CVT with 16%. Training on the job can be seen as part of internal CVT. Therefore, in terms of cost, internal CVT is the most important type of CVT (Figure 8).

Figure 8. **Costs per employee by industry** 100% = DEM 1 924-which is the average in all industries, 1992



Source: Weiss (1994) and ZEW.

Splitting up expenditures according to branches it is clear that big differences exist between branches, as is also the case for participation. Also concerning cost per employee, finance and insurance is the leading economic sector with 270% (Table 15). It seems remarkable that the consumer goods industry comes second in this ranking with 153%, whereas in the rankings concerning the supply by establishments and participation its importance was insignificant. The data for supply by establishments and participation and the data for expenditure and cost have been taken from two different sources, however.

Table 15. Costs per employee and costs per firm, by firm size, 1992

Firm size	Costs per employee (in DEM)	Costs per firm (in thousand DEM)		
1-19	4 428	39.2		
20-49	2 833	93.3		
50-99	1 761	122.9		
100-199	2 513	362.6		
200-499	2 780	858.3		
500-999	2 707	1 951.6		
1 000-4 999	2 666	5 230.5		
5 000 +	1 534	36 150.5		
Average of all firms	1 924	2 847.9		

Source: Weiß (1994).

Taking into account the costs per employees according to firm size, it is hard to see any correlation between the two variables (Figure 9). Small firms have relatively high costs, whereas for medium-sized businesses no common pattern is visible.²⁷

Looking at the average costs per firm, it is obvious that the cost per firm rises less than proportionally to firm size. However, when interpreting these facts, one has to take into account the rise in the share of firms participating in CVT.

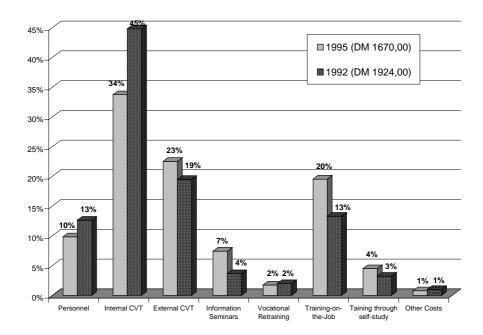


Figure 9. Breakdown of cost per employee by cost types in Germany, 1995 and 1992

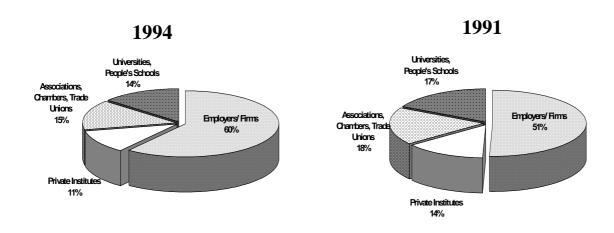
Source: Weiß (1997).

The decline in costs over time can also be identified in terms of costs per employees according to types of costs. From 1992 to 1995, the costs dropped by DEM 254. While the costs per employee for internal CVT decreased significantly, external CVT increased slightly and training on the job has seen notable growth. Reasons may be the decline in employment as well as a trend towards more efficiency. Overall, over time, CVT has been tightened. Training within the work process (including training on the job) has intensified as is clear from the cost increase of this type of training. Moreover, there is a tendency to carry out CVT outside working hours to save payment of wages.

Providers of CVT in Germany

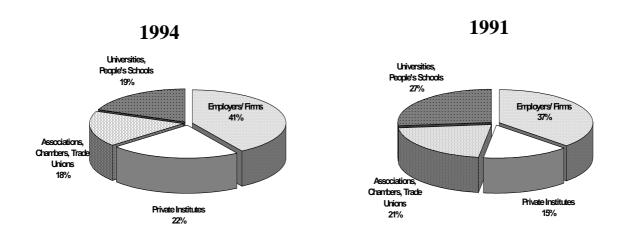
In Germany a large number of providers offer CVT (Figures 10 and 11). The structure of the providers of CVT will be described on the basis of participation rates and the volume of CVT, in a comparison of the years 1994 and 1991.

Figure 10. Providers of CVT in Germany, by participation rates



Note: Other providers (which make up about 12% of the participation rate) are not included. Source: BMBF, Berichtssystem Weiterbildung VI (1996) and ZEW.

Figure 11. Providers of CVT in Germany, by volume of CVT



Note: Other providers (which make up about 12% of the participation rate) are not included. Source: BMBF, Berichtssystem Weiterbildung VI (1996) and ZEW.

The participation rate concerns a percentage of the persons surveyed. A participant is someone who takes part in CVT at the time of the survey.²⁹ The volume of CVT is the total number of hours required for CVT or more precisely, the exact number of hours that someone spends on CVT in a given year.³⁰

Examining participation, it is clear that in 1994 employers/firms were the largest group of providers at 60%. Associations, chambers and trade unions follow at 15%, then come the universities and people's schools at 14%. The smallest group of providers in terms of participation is private institutes, at 11%. Basically this confirms the structure of 1991, though the share of employers/firms

has increased substantially to 10%, reducing the shares of all the others. This indicates that firms provide more CVT themselves, meaning more internal CVT. This trend is confirmed in other studies.

Observing the volume of CVT, the market share of employers/firms is 41% and private institutes are second at 22%. They are followed by universities and people's schools at 19% and associations, chambers and trade unions at 18%. Compared to 1991, the employers/ firms have gained 3% as have the private institutes (7%). Nevertheless, there is a more significant change in comparison to the participation rate of 1994. While the employers/ firms have the biggest share, it has gone down by almost 20%. In contrast, private institutes double their share. There is a trend for firms to offer less time-intensive CVT. In opposition, the private institutes offer more time-intensive CVT. This is confirmed by the reduction of their share in participation.

To conclude, there are four large provider groups in Germany, dominated by employers/firms which recently tended to offer more internal CVT. However, private institutes play an increasingly important role on the market.

Chambers of Industry and Commerce and Chambers of Crafts

Tasks and objectives

As mentioned before, the German system of CVT is largely influenced by the chambers. The reason derives from the fact that in Germany, companies are required by law to join a chamber.

These chambers are public corporations and are responsible for their own affairs, yet they are not public authorities. They are business institutions and the principal representatives of all commercial undertakings in their region. All companies pay mandatory subscriptions to their chamber according to their capacity. Moreover, the chambers receive a substantial subsidy from the Federal Government. Thus, the state has assigned to the chambers certain tasks which would be its responsibility if the chambers did not exist. Together with business managers, the chambers elaborate several concepts, which include upgrading training courses for employees, short seminars and more courses for adaptation training, as well as other in-company CET. These courses help to guarantee qualified CVT of managers in the economy.

According to the size of the chambers and their relevance to the German economy, the focus will be on the Crafts Chambers (the *Handwerkskammer* –HWK) and the Chambers of Industry and Commerce (the *Industrie- und Handelskammer* – IHK).

Members of HWK are as a rule SMEs (Table 16). Only a tiny fraction of HWK members do not belong to the SME sector. As a result, all activities of HWK can be seen as being relevant to SMEs.

Number and nature of establishments

All commercial enterprises operating in the field of industry, trade or service except for the crafts businesses, are members of the IHK. Currently, 83 Chambers of Industry and Commerce exist in Germany, representing over 3 million enterprises. Among many other professions there are the industrial engineer, the varnisher, and the scaffolder.

The most versatile economic field is the German crafts sector. With its SMEs, it represents a core within the German economy. Hairdresser, roofer and tailor are some of the professions here. About 6.5 million people work in 835 000 firms: this means that almost 20% of all German employees work in a crafts industry. The 1997 turnover was about DEM 1 000 billion. Presently, 55 HWK operate in Germany.

Both economic sectors mostly consist of SMEs. The crafts industry in particular shows that in East and West Germany about 80% of all crafts businesses employ fewer than 50 workers.

Table 16. Size of establishment in the craft sector, by number of employees

Number of employees	West Germany	East Germany
Up to 5	20.2	20.2
6 – 10	23.2	26.5
11 – 20	23.4	23.1
21 – 50	21.1	19.5
50-	11.6	10.2

Source: Creditreform, Neuss (1999).

Even though large companies are also members of chambers, their interest in CVT is of less relevance, since they mainly establish their own training institutions and they are not particularly interested in using the chambers for training. Therefore, the course range offered by the chambers refers almost exclusively to participants employed in SMEs. The following section gives detailed insight into management training in these two economic areas, which is always decentralised to the regional chambers.

Upgrading Training

Figure 12. CVT structure of the chambers

Source: ZEW (1999).

The chambers' management training system

The legally stated and recognised system of the chambers' CET distinguishes between two parts following the completed apprenticeship: upgrading training and adaptation training (Figure 12). Upgrading training increases an employee's vertical mobility and aims at pursuing more responsibility through more competence, whereas adaptation training aims to gain new skills on the job, in order to enhance horizontal mobility.

The following section deals with these two management training aspects more in detail. Therefore, the discussion is divided into upgrading training and adaptation training and into the two chambers.

Upgrading training

Upgrading training of the IHK

Through IHK management training for middle management, participants can obtain the title *Fachwirte, Fachkaufleute, Industrie- und Fachmeister*. They receive certified recognition of being qualified for becoming a functional or industry-specialised manager. They are certified Master in their fields. The prerequisite for being admitted to the final examination is business practice after apprenticeship of at least three years.

In order to acquire more and stronger qualification and competence for the top management level, the IHK offers further executive management training (Table 17). Through an intensive all-round CVT, the employee can thereby receive the *Betriebswirt IHK* certificate. The *Betriebswirt* candidates can gain more responsibility and knowledge in order to take a top management position. The course is supposed to build on earlier business experience yet lead to a more functionally oriented career. The duration of this CVT for the top management level lasts approximately 2.5 years.

Table 17. **IHK upgrading training, 1997**All courses

	Number o	Number of courses		Number of participants		Average course hours
Top management	349	13%	6 967	13%	95 032	272
Middle management	1 932	76%	39 133	71%	502 259	260
Other diplomas	437	11%	5 523	16%	53 930	123
Total	2 718	100%	51 627	100%	651 221	240

Source: DIHT, Bonn 1997/98.

The IHK offer the same CVT for more technically oriented employees who have completed and successfully passed a middle management level qualification in the industry. The so-called *Technische Betriebswirt IHK* is especially interesting to engineers, mechanics, etc., who have so far been educated very specifically and are technically oriented. The course offers the opportunity to gain more business knowledge in order to take up top management positions.

Both diplomas aim at gaining strong management skills, since the employees and managers in middle management (*Fachkaufleute/Fachwirte/Industrie- und Fachmeister*) have successfully operated and worked in their fields.³¹ Therefore, the candidates have to study several important business areas: strategic planning, business administration and economics, personnel management and law. Taking the final examination always requires a successful career through middle management, including another extra year of additional experience. This CVT is almost exclusively called for by SMEs.

The majority of IHK upgrading training is offered in the middle management level. In 1997, 1932 courses were offered, while only 13% of the classes were offered to the top management level (*Betriebswirte*). Hence, the lion's share of employees in industry, trade and services calls for upgrading training courses in order to gain a middle management position. About 20% accept another two years and study to qualify for a top management position through a *Betriebswirt* diploma.

Distinguishing between the business-oriented and the technically oriented IHK upgrading training shows which concentration is offered more and which is offered less. At the middle management level, almost 35% of all training participants chose the business administration specialisation whereas in the top management, the *Technische Betriebswirt IHK* courses were by far the most popular with a total number of 286 classes in 1997 (Table 18).

Table 18. **IHK upgrading training, 1997**Business administration courses

	Number	of courses	Number of p	participants	Accumulated course hours	Average course hours
Top management						
Technischer Betriebswirt	286	16.2%	5 599	15.1%	77 897	272
Betriebswirt IHK	63	3.9%	1 368	3.3%	17 135	272
Middle management						
Fachkaufleute	659	36%	12 459	34.8%	141 079	214
Fachwirte	520	31.4%	10 849	27.6%	118 385	228
Other diplomas						
Computer	41	1.8%	636	2.2%	6 985	170
Languages	70	2.5%	877	3.7%	16 657	238
Others	252	7.9%	2 753	13.3%	21 341	85
Total	1 891	100%	34 541	100%	399 479	211

Source: DIHT, Bonn (1997/98).

The courses in the field of industrial-technical courses for upgrading training (*Industriemeister*) are the leading group with a share of 85% (Table 19). Only 8% of the courses lead to a *Fachmeister* diploma, a master course for a certain field of specialisation.

Table 19. **IHK upgrading training, 1997**Industrial/technical courses

	Number	of courses	Number of participants		Accumulated course hours	Average course hours
Middle management						
Industriemeister	670	85%	14 497	81	214 979	321
Fachmeister	83	83	1 328	10	27 816	335
Other diplomas	74	7%	1 261	9	8 947	121
Total	827	100%	17 086	100%	251 742	304

Source: DIHT, Bonn (1997/98).

Upgrading training of the HWK

The upgrading training in the Crafts Chambers (HWK) is organised like the IHK upgrading training (Table 20). At middle management level, the HWK offer the single diploma of a master craftsman. This is the central and most important upgrading training course in the whole crafts business. Without this certification, the employee would not be able to open and run his own business in Germany. Some professions in this field are the roofer, painter and goldsmith. The prerequisite is always business practice after the completed apprenticeship of at least three years.

For top management, the HWK have developed the *Betriebswirt HWK* diploma. The course aims to qualify the master craftsmen for upper management positions through intensive business training. The courses help them to acquire a broader knowledge for taking responsible decisions in a crafts business. It gives the candidate more competence and prepares him for working in a more leading, important and higher management position.

Table 20. **HWK upgrading training, 1997**Total

	Number of	Number of courses ¹		participants
Top management				
Betriebswirt HWK	152	25%	3 046	2.6%
Sonstige	12	0.21%	236	0.21%
Middle management				
Master craftsman	2 375	39.5%	47 490	40.7%
Other diplomas	3 289	54.7%	65 771	56.4%
Total	6 016	100%	116 543	100%

^{1.} Courses with an average size of 20 participants. *Source*: KWB, Bonn (1999).

In 1997, about 40% of all upgrading training courses were taught in the field of the master craftsmen. Due to the fact that the Crafts Chambers offer a variety of other CVT, 55% of the whole HWK upgrading training is offered at a lower management level. These courses usually deal with new technologies. Only about 3% of the employees in the crafts sector attend a course for the top management level, *the Betriebswirt IHK*. Through this qualification the graduates are able to take higher positions in economic associations or larger crafts organisations.³²

IHK and HWK: costs of upgrading training

The decision to participate in CVT goes hand in hand with a financial burden for the individual employee. In taking time preferences into account, the chambers offer CVT for managers as full-time courses as well as part-time training. The costs are usually met solely by the participant. Only in very few cases does the employer provide the trainee with financial support. However, managers and employees who are willing to qualify for the middle or upper management level and receive a certificate or diploma (generally known as a "master-BAFöG") can – based on a special law – request a government loan. This support is stated in the Upgrading Training Promotion Act (AFBG) and requires a minimum training course length of 400 hours. During the training and for two years after graduation, the government covers all interest rates.

Adaptation training

In order to create horizontal mobility through adaptation training, the chambers offer a variety of different training courses each year. Thus, courses, seminars, conferences and lectures are offered, which address mainly the employees of companies who are members of the chambers. The chambers offer over 30 000 adaptation training courses annually. This type of training can be taken at any time during an employee's career in order to keep up with changes in *e.g.* technology or business environment. Hence, the target group for adaptation training comprises all management levels. A very significant difference in comparison to upgrading training is the length of an average adaptation training course. Adaptation training does not last as long per course, but is offered more frequently. Adaptation training is offered in the following broad fields:

- Management and strategic planning.
- Business.
- Law.
- Foreign trade.
- Technical aspects.
- Information technology and communication.
- Quality management.
- Languages.
- Entrepreneurship.
- Environmental issues.

Adaptation training of the IHK

The IHK counted a total of 277 973 seminar and course participants during 1997 (Table 21). A 66% share of the participating employees attended business courses, while 8% dealt with industrial-technical issues.

Table 21. IHK adaptation training, 1997

	Number c	of courses	Number of p	participants	Accumulated course hours	Average course hours
Business courses/seminars	13 088	60%	167 277	66%	334 984	26
Industrial-technical courses/seminars	1 965	8%	21 564	10%	113 240	58
Interdisciplinary courses/seminars	2 572	12%	32 757	13%	69 705	27
Lectures/conferences	2 010	20%	56 375	10%	14 473	7
Total	19 635	100%	277 973	100%	532 402	27

Source: DIHT, Bonn (1997/98).

Adaptation training of the HWK

The majority of HWK adaptation training courses were offered in the industrial-technical field (Table 22). In 1997, a total number of 6 514 classes were taught. About 2 501 seminars were held as interdisciplinary courses. 17% of those dealt with business administration subjects.

Table 22. HWK adaptation training, 1997

Number o	of courses	Number of p	participants	Accumulated course hours	Average course hours
1 827	18%	26 903	17%	77 148	42
6 514	59%	87 521	60%	376 304	58
2 501	23%	35 139	23%	358 279	143
-	-	-		-	-
10 842	100%	149 563	100%	811 731	75
	1 827 6 514 2 501	6 514 59% 2 501 23%	1 827 18% 26 903 6 514 59% 87 521 2 501 23% 35 139	1 827 18% 26 903 17% 6 514 59% 87 521 60% 2 501 23% 35 139 23% - - - -	Number of courses Number of participants course hours 1 827 18% 26 903 17% 77 148 6 514 59% 87 521 60% 376 304 2 501 23% 35 139 23% 358 279 - - - - -

Source: KWB, Bonn (1999).

In 1997, the German Crafts Chambers provided a total of 10 842 courses for adaptation management training. About 60% of the seminars accounted for industrial-technical training and 23% were on interdisciplinary topics. The business seminars and courses represent 17% of HWK adaptation training in 1997. The explanation of the 60% concentration in the industrial-technical field lies in the fact that the crafts sector is in general very technically oriented.

IHK and HWK: costs of adaptation training

Adaptation training costs are regularly shared by the employee's company and the participant. The fees are strongly dependant on the length of the training. Short seminars are offered in the range of DEM 150-450, courses lasting 9-50 hours cost about DEM 350-1 500, while classes of more than 50 hours cost up to DEM 4 800.

Considering this, a closer look at the average length of the chambers' courses for adaptation management training proves interesting (Figure 13). The majority of seminars ("one-day events") and classes last between nine and 50 hours. A quarter of all adaptation training courses take one day or less, and 15% of all training courses of the chambers have an average length of 50 hours and more.

Courses
60 %
15 %
Short Time
Courses
9 h)
Courses (9-50 h)
Long time courses (50 h and more)

Figure 13. Average length of IHK and HWK adaptation training courses, 1997

Source: ZEW (1999).

The role of the chambers

In 1997, the chambers offered a total of 8 564 seminars and courses for upgrading management training. Overall, 178 270 employees participated in those events: 4 307 courses were offered especially to the middle management, whereas only 531 in the IHK and the HWK addressed the top management. Only a small share of employees take the opportunity for top management training in the two chambers (Figure 14).

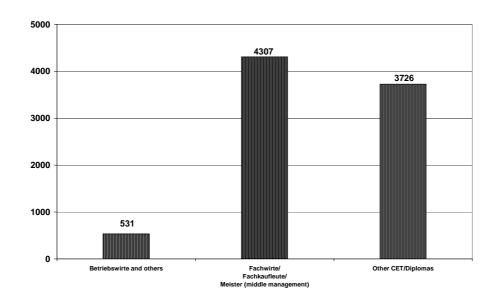


Figure 14. Total distribution of IHK and HWK upgrading training in Germany, 1997

Source: DIHT (1998); KWB (1999); ZDH (1999).

Both chambers held a total number of 30 477 adaptation training courses with 327 536 employees attending (Figure 15). The majority of those adaptation training courses were business courses or seminars followed by technical and interdisciplinary courses.

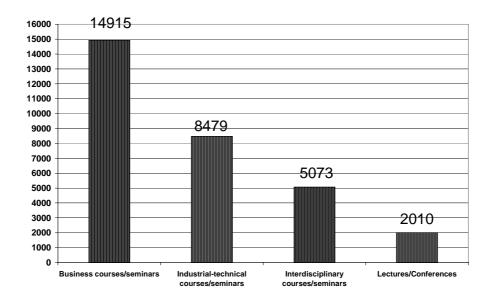


Figure 15. Total distribution of IHK and HWK adaptation training in Germany, 1997

Source: KWB (1999).

In 1997, the IHK trained 339 600 people, who attended 22 453 management training courses. During the same time period, 266 106 employees participated in 16 858 seminars and courses offered by the HWK. Therefore, in 1997 the two most important and largest German chambers provided a total number of 505 706 people with 49 311 management training courses.

It is almost exclusively SMEs that seek this CVT. Thus, the content is focused on SME-related topics and problems. Through the broad range of issues and a clear dedication to their members, the chambers offer training that becomes a valuable CVT for SME managers.

It should be recognised that courses that increase the vertical mobility of employees are primarily financed by employees, whereas courses enhancing horizontal mobility are objects of shared financing by employees and their firms. Both are in line with theoretical reasoning on the investment in education. CVT enhancing vertical mobility increases the expected income of employees as well as their interfirm mobility. Both go hand in hand with incentives for employee-financed investment in education. Increasing the horizontal flexibility of the workforce has value for the firm and therefore, firms finance part of the training costs, especially when the expected income of the employee increases only slightly as a result of a specific training course.

Industry associations

Tasks and objectives

For management training, branch, business and regional associations of German private enterprises also play an important role. They offer a variety of training courses at all employee levels and are important for companies that want to train themselves. Companies' interests are represented by the numerous societies and associations. The main difference from the chambers is the voluntary membership of companies in these organisations which are financed in particular by contributions from their members. Associations can arrange themselves socio-politically (employer's associations) as well as from the point of view of their main field of economic activity (industry and trade associations). As suppliers of individual services and representatives of collective interests, societies and associations are integrated into the system of German CET. They use the proximity to companies and actively support the demand for CVT. Often with the help of their own education facilities, they support the companies' personnel and education activities for qualifying employees as well as strengthening and giving a clearer image of the firm as a place of learning. They co-ordinate, organise and carry out offers and events beyond the regional level. Here, management training is also divided into upgrading training and adaptation courses.

The most important societies and associations in this respect are briefly presented in the following section, together with their offers of CVT. The share offered to SMEs is problematic and not explicitly identified.

Most important institutions

The following institutions are particularly important in the field of German societies and associations with relation to CVT on a management level:

Organisation of German Employer Associations (Bundesvereinigung Deutscher Arbeitgeberverbände – BDA)

The BDA is the umbrella organisation of all socio-political associations in Germany. BDA members represent their members in industry-wide and regional bargaining processes with the trade unions. It speaks for all organised employers and represents the common social and socio-political interests in negotiations with parties, the government, churches, universities as well as union umbrella organisations.

Federal Association of German Industry (Bundesverband der Deutschen Industrie – BDI)

As a top association in the field of economic policy, it has all important associations of the industry as members and represents about 10.8 million employees. The BDI represents the interests of its organised industrial companies and co-ordinates and gives advice to its member associations on all questions relating to economic policy.

Federal Association of German Wholesale and Foreign Trade (Bundesverband des Deutschen Großund Außenhandels – BGA) and Main Association of German Retail Trade (Hauptverband des Deutschen Einzelhandels – HDE)

The BGA and the HDE are the broad representatives of German retail, wholesale and foreign trade, and of services. Their task is to represent and support the general and professional interests and interests concerning social and economic policy of its members and companies. This is performed particularly by initiatives for initial and CET. It mainly carries out seminars for owners and management levels of German retail, wholesale and foreign trade.

Federal Association of German Volksbanken und Raiffeisenbanken, German Sparkassenorganisation (Bundesverband der Deutschen Volksbanken und Raiffeisenbanken, Deutsche Sparkassenorganisation – BVR)

The BVR as well as the *Deutsche Sparkassenorganisation* give advice to the *Volksbanken*, *Raiffeisenbanken* and *Sparkassen* on legal, tax, economic and commercial topics. Moreover, the top associations put extensive subject information at their member banks' disposal and offer special advice and education programmes.

Wuppertaler Kreis e.V.

The Wuppertaler Kreis e.V. is an association of institutes and institutions active in the field of management CVT. The organisation was established in 1954 as an initiative of the top associations and several employers. Today the Wuppertaler Kreis has 48 members. It represents the interests of its members towards ministries, authorities and associations and is a contact for questions concerning CVT for managers.

The associations' management training

Concerning CVT of the most important associations and societies in Germany the Wuppertaler Kreis receives the biggest share in CVT events and number of participants (Table 23). In 1997, 480 000 managers and skilled workers were trained in 23 819 separate events. Compared to 1995, there has been about 5% growth. Altogether in 1997, more than 700 000 participants in CET were counted in German associations and societies.

Table 23. CVT of associations in Germany, 1997 and 1995

	Number of courses		Number of participants	
	1997	1995	1997	1995
BDA/BDI	n.a.	13 007	n.a.	210 633
BGA/HDE	3 586	3 591	57 405	58 538
BVR/Deutsche Sparkassenorganisation	17 391	9 317	178 097	163 771
Wuppertaler Kreis e. V.	23 819	16 576	482 278	252 054
Total	44 796	42 491	717 780	684 996

Source: KWB, Bonn (1996, 1999).

The following sections discuss the areas of upgrading and adaptation education.

Upgrading training

In the area of upgrading training for managers and skilled workers the banks, BDA and BDI, as well as the Wuppertaler Kreis offer about the same number of education courses to their members' employees (Table 24). The trade associations represent the smallest – but nonetheless significant – share with about 1 000 CVT courses.

Table 24. Upgrading training of associations in Germany, 1997 and 1995

	Number of courses		Number of participants	
	1997	1995	1997	1995
BDA/BDI	n.a.	1 908	n.a.	39 711
BGA/HDE	1 010	902	18 189	17 638
BVR/Deutsche Sparkassenorganisation	2 221	1 841	31 842	40 076
Wuppertaler Kreis e. V.	2 983	2 335	48 545	36 335
Total	6 214	6 986	98 576	133 760

Source: KWB, Bonn (1996, 1999).

It is clear that only a small share of the associations' courses are for upgrading training. With a total of 6 214 courses and 133 766 participants, the main aim of associations and societies is not upgrading training.

Adaptation training

The majority of management training events of associations and societies are for seminars and courses for adaptation training (Table 25). In comparison to 1995, these numbers have grown by about 5-10%. The Wuppertaler Kreis offered most events: there were 215 000 course and seminar graduates. The BVR and the Deutsche Sparkassenorganisation were able to offer about 15 000 events, whereas BDA and BDI together offered 12 000 courses of adaptation training

Table 25. Adaptation training of associations, 1997 and 1995

	Number of courses		Number of participants	
	1997	1995	1997	1995
BDA/BDI	n.a.	11 099	n.a.	170 922
BGA/HDE	2 576	2 689	39 216	40 900
BVR/Deutsche Sparkassenorganisation	15 170	7 476	146 255	123 695
Wuppertaler Kreis e. V.	20 836	14 241	433 733	215 719
Total	38 582	35 505	619 204	551 236

Source: KWB, Bonn (1996, 1999).

Out of a total of 38 582 training courses for adaptation offered by associations, 47% were allotted to business administration issues; 22% to courses on information and communication technologies; 20% to technical subjects, and only 1% to foreign languages. The remaining 10% are in other fields, *e.g.* rhetoric exercises or the learning of certain work techniques. Further details can be found in Annex Tables A1.1-A1.5.

Conclusion

It has become clear that CVT for employees at middle and top management levels is attributed a significant role by the societies and associations. Explicit data on participation rates of SMEs are, nonetheless, not available. However, an increase in the use of CVT is clear. In 1997, about 5-10% more seminars and courses were carried out than in 1995. In absolute figures, there were 717 780 participants in 44 796 events in 1997. Higher numbers in the area of adaptation training confirm the general tendency to intensify horizontal mobility combined with flatter hierarchies.

Private sector companies

As stated in the first part of this chapter, the private sector segment is undergoing quite dynamic changes. However, data on this part of the supply of CET and CVT are not fully recorded.³⁴ Therefore it is impossible to give a complete overview. Providers in this sector range from self-employed one-person businesses to subsidiary firms of big conglomerates. An example could be Siemens and their "Siemens Business Services". They offer CVT for their clients (*i.e.* other parts of Siemens) as well as other firms. Nevertheless, the majority of providers in this sector are small institutes with fewer than five employees. The trend seems to indicate a further segmentation of this market.³⁵ Moreover, also relevant in the context of private firms is the role of exchange of information on best practice policy within the private enterprise sector.

An example of how firms and their managers can exchange knowledge apart from the usual seminars, etc., is TOP ("Technology-oriented Visitor and Information programmes"). It was initiated by the Federal Ministry of Economics in 1992. The programme seeks to encourage companies to exchange experience and knowledge. Companies have the opportunity to visit other successful companies for one day and learn from best practice examples. They get new ideas on innovative procedures and strategies. The programme is especially designed for managers of medium-sized and large companies. As a result, competitiveness is strengthened and companies can face the national and international markets with greater ease.

Evaluation of CVT courses and the CVT system in Germany

Data and general remarks on management training in Germany

Measuring expenditure on CVT is a problem. It is particularly unclear which CVT content forms the basis for a given survey and which cost types are included. Other obstacles are the interpretation of different data sets on the one hand and the willingness of companies to co-operate on the other. Most companies do not keep complete records of CVT expenditures. Representative data sets giving information on the expenditure on CVT within firms and within the whole population in Germany, particularly data that are comparable over a longer period of time, do not exist, except those from the Federal Employment Office. ³⁶

Some problems occurred while collecting data for this study. In some cases there was no information on sums and total numbers of expenditures, participants and content of CVT. Concerning the associations, only members of the umbrella organisation maintain statistical data on the supply and cost structure of CVT. First-hand aggregate data were almost impossible to find. In these cases secondary statistics were used. Among the associations, the revenues and expenditure structure of CVT has been particularly problematic on the supply side as well as on the side of the participants. Therefore, this study does not list the costs in this area explicitly.

Due to difficulties in accessing data on the situation of CVT for managers in SMEs, the so-called "Mikrozensus"³⁷ and the "IAB Establishment Panel"³⁸ were used. In these data sets, information on CVT can be found. However, the term CVT is, in part, used differently in the two studies. Another dilemma is the splitting-up by qualification groups and by firm size. In this sense the two data sets are not complementary. This can occasionally lead to different results.

Important studies and data used in this report

Betriebliche Weiterbildungsaktivitäten in West- und Ostdeutschland, IAB (ed.), Nürnberg 2/1998

In the investigation of CET in the 1997 IAB Establishment Panel, information on the diffusion and extent of different qualifications in companies, the participation of particular groups of employees as well as reasons for lacking CVT were gathered.

Evaluierung der Gemeinschaftsinitiative ADAPT in Deutschland, ISG Institut für Sozialforschung und Gesellschaftspolitik (ed.), Köln 1997

ADAPT is a programme supported by the European Social Fund and focuses on the adaptation of SMEs and their employees to structural change. The programme centres on initial and CET of skilled workers and managers.

Evaluierung der Ziel-4-Fördermaßnahmen des Europäischen Sozialfonds in Deutschland, ISG Institut für Sozialforschung und Gesellschaftspolitik (ed.), Köln 1997

The Target-4 study studies the evaluation of programmes supported by the European Social Fund. It rates SMEs and their CET qualification behaviour in particular by means of survey and case studies.

Grünewald, U. and D. Moraal, Betriebliche Weiterbildung in Deutschland, Bielefeld 1996

Complete report on the three-stage questionnaire-based study in the context of the EU FORCE programme. The survey examines the CET situation in Germany and other European countries, respectively. At the same time given indicators for CET are examined.

IHK-Weiterbildung: Karriere mit Lehre, Deutscher Industrie und Handelstag (ed.), Bonn 1999

By using 12 633 questionnaires and participants from 45 IHK, the success of IHK CET exams over the period 1992-1996 was examined. It is by far the most extensive survey of its kind.

Kurs-Direkt, the world's largest educational database

This database contains information on CET offers for companies and was ordered by the Federal Institute of Labour. The data are updated every two months and are retrievable over the Internet. About 35 000 suppliers of CET offer about 320 000 events.

Lebensbegleitendes Lernen: Situation und Perspektiven der beruflichen Weiterbildung, Deutscher Bundestag (ed.), Bonn 9/1997

The Federal Government states its view on selected questions about CET in Germany. Courses, legal regulations, suppliers of CET, etc., are revealed and supported with statistics.

Lechner, Michael, Training the East German Labour Force. Microeconometric Evaluations of Continuous Vocational Training after Unification, Heidelberg 1998

Evaluates the effects of participating in different types of training on subsequent labour market outcomes.

Modelle zur Finanzierung der beruflichen Weiterbildung Beschäftigter und Arbeitsloser – Berichte aus dem Leonardo da Vinci Programm, BIBB (ed.), Bielefeld 1998.

The programme Leonardo da Vinci supports the CET policy of the EU member states. The study contains a documentation of Leonardo projects of CET, Germany being one focus.

Qualification as a factor for success – initial and CET of companies in Germany, InMit/IFM Bonn (eds.).

In order to obtain a complete picture of initial and CET activities, a total of 1 200 questionnaires were sent to founders of new businesses in a study which was answered by 20% of the people questioned. In its results the study describes CET activities and the needs of this group of firms.

Seipel, Michael, Weiterbildungsszene Deutschland – Studie über den Weiterbildungsmarkt in Deutschland, Bonn 1994

The study presents the development of the German CET market over the period 1991-93 with the help of extensive data material. Three main topics are dealt with: profiles of seminar suppliers, career outlines of the profession of a CET trainer, and future development on the CET market.

Wahse, Jürgen and Maritta Bernien, Betriebliche Weiterbildung in ostdeutschen Unternehmen im Jahre 1993, Berlin 1994

The survey by the QUEM (Qualification-Development-Management) Berlin Initiative of all Treuhand companies and already privatised former Treuhand firms in East Germany was first carried out in 1992. With the assistance of repeat questionnaires, the study attempts to present tendencies regarding the branches, type of enterprise, regions as well as qualification and CVT structure of employees in those companies.

Weiss, R., Betriebliche Weiterbildung: Ergebnisse der Weiterbildungserhebung der Wirtschaft, Institut der Deutschen Wirtschaft (ed.), Köln 1994

In 1992, the IW carried out an analysis of CET focusing on structures, range and cost of CET.

Zur technologischen Leistungsfähigkeit Deutschlands, Bundesministerium für Bildung und Forschung (ed.), Bonn 1999.

On behalf of the Federal Ministry of Education, Science, Research and Technology, a report on Germany's technological performance is published every year. With complex data and analyses, these reports cover an important part of the set of problems with regard to Germany. Among other aspects, the educational *status quo* and initiatives by the state or the private sector in the field of education are presented as a key determinant for Germany's innovative potential.

Summary and preliminary conclusions

The system of management training in Germany is firmly based on the provision of initial vocational training. Like the educational system, the system of continuing education and training is governed by federal and *Länder* laws. Especially with regard to management training, in-company training is regulated by federal laws whereas continuing education and training in vocational schools, public and private schools and universities is ruled by *Länder* laws.

The major motives for companies to engage in continuing training and education is to strengthen their international competitiveness in a changing world, to adjust competencies to the challenges of new technologies and organisational changes and to prepare young managers for more demanding jobs. However, SME managers in particular often have strong time constraints. Current work load often is seen as the main obstacles in preparing for future tasks. Moreover, the large number of public, semi-public and private suppliers of CET and CVT courses creates significant information problems with respect to this market. SMEs that do not have special units responsible for CVT had to select courses without obtaining clear-cut quality signals from the market. Sometimes this induced firms not to take part in management training.

Several government initiatives seek to enhance the market for CVT by providing information about curricula, courses and suppliers of CVT. Moreover, *Länder*-level policy measures foster CVT for specific groups (*e.g.* women, entrepreneurs). Federal as well as *Länder* level policy stresses new media and distance learning as a way to improve the provision of CET and CVT.

When looking more closely at the participation rate of different employee groups in CVT, the management level shows the highest participation rates of all groups of employees. The probability that at least one employee takes part in CVT increases in step with increasing firm size. However, when looking at management level only, we do not find differences by firm size in the provision of CVT. Moreover, at the level of individuals we find that engagement in CVT strongly increases with the initial human capital endowments of the individual. The higher the human capital endowment, the lower the marginal cost of acquiring additional training. Similarly, the higher the position of an individual in the hierarchy of a firm, the more likely he/she is to take part in CVT. Consequently, we find the largest motivation for CVT in the top management group.

Although the smallest firms show the lowest probability of participation in CVT, they also show the largest cost per employee if they decided to start training. No firm size difference is found above the threshold of 50 employees. Measured in terms of the number of employees, we find a strictly non-monotonic relation, *e.g.* between R&D activity and firm size, using various other measures. In this respect, investment in training follows, in terms of firm size, a pattern similar to other forms of investment for the knowledge-based economy.

Training on the job is the preferred type of training within SMEs. Special CET institutions are the second most important form of training. Chambers of industry and commerce as well as the crafts chamber are especially important suppliers of training for the management of SMEs.

Recently, firms seek to enhance the productivity of their investment in human capital. This is done by reducing the share of external CVT and intensive in-house CVT which seems to be a more efficient form of CVT which also is of special relevance to SMEs. The role of schools, universities and private institutions has declined recently whereas on-the-job training has increased its share.

In-company continuing training typically takes the form of short courses of updating training (up to one week in duration). Target groups tend to be commercial and technical personnel, management-level staff and skilled workers. The findings of a preliminary survey conducted by the Federal Statistical Office and the Federal Institute for Vocational Training in preparation for a Europe-wide study of in-company continuing training (to be carried out as part of the FORCE programme) yield the following profile:³⁹

- Almost three-fifths of all enterprises offer their staff training courses and/or seminars.
- Nearly all enterprises that provide CVT offer their staff courses outside the company; large-scale enterprises are far more likely to provide in-house continuing training.
- CVT activities differ greatly from sector to sector. Virtually all banks and 90% of insurance companies offer their employees some form of continuing training. Only one in four enterprises in the hotel and catering trade include training courses or seminars in its continuing training programme.
- Four-fifths of all enterprises use information sessions, learning at the workplace and selfregulated learning by means of distance learning books, videos and computer programmes.
- Introduction through superiors is the most popular form of workplace-related CVT. More innovative types of CVT, *e.g.* quality circles, exchange programmes with other enterprises, job rotation or *Lernstatt* (learning teams on the shop floor) do not play a major role in CVT in enterprises as yet.

Upgrading training is mainly financed by participants themselves. The main reason is that upgrading training qualifies for better paid jobs. So, people can finance CVT out of the increase in wages induced by training. On the other hand, adaptation training is often subjected to shared finance by employers and employees. Here, the expectation of a wage increase after training seems less likely. Moreover, with this kind of training, an individual is less likely to change the jobs and move up the career path. So, share financing seems to be an adequate response.

Finally, we should point out that we were not able to uncover evidence with regard to the impact of training on firm performance. So, no reliable evidence exists to show whether the existing supply structure for SME management training serves to enhance competitiveness, growth and survival of firms.

NOTES

- 1. In 1950, about 4% of the college-age population enrolled in an institution of higher education. In 1960, the figure was 8% (1970: 15%, 1980: 20%, 1990: about 25%).
- 2. Commentary to the Vocational Training Act of 14 August 1969 *Berufsbildungsgesetz*, 3rd ed., Kölnm 1990, p. 14.
- 3. See Grünewald and Moraal (eds.), *Modelle zur Finanzierung der beruflichen Weiterbildung Beschäftigter und Arbeitsloser*, Bielefeldm 1998, p. 100.
- 4. For further theoretical discussion, see Peter McKenzie, "Education and Training: Still Distinguishable?", in *The Vocational Aspect of Education* 47 (1995), pp. 35-49.
- 5. Deutscher Bildungsrat 1970, quoted from Baumstümmler 1996, p. 22.
- 6. This Act, furthermore, created the Federal Institute for Vocational Training (*Bundesinstitut für Berufsbildung BIBB*), a federal body which brings together representatives of the central and state governments and the "social partners" to discuss and advise on vocational training issues. BIBB also conducts its own research into vocational training and runs "model projects" to innovate forms of vocational learning.
- 7. See DIHT, *Duale Berufsausbildung*, SR 246, December 1997, pp. 12-15.
- 8. BMBF, Berichtssystem Weiterbildung 1996.
- 9. The offer of the *RKW Länder group* of Hesse is, for instance, split up into external CVT and incompany CVT. The Hessian *Länder group* offered 42 different seminars for external CVT in the first six months of 1999 which are distributed over 67 days. There are exclusively one-day or two-day seminars. Subjects are: (a) business management, (b) leadership and communications, (c) marketing and distributive trades, (d) law, (e) finance and accounting, (f) personnel, administration, work procedures. As to the subject "project management", for example, about 100 seminars with more than 1 500 participants have been carried out.
- 10. See Grünewald/Moraal (1998), p. 100 ff.
- 11. Above all, the courses concerning adaptation training for the unemployed.
- 12. See Data bank *Kurs Direkt*, March, 1999; this number also includes the offers of public providers such as IHK.
- 13. See "Lebensbegleitendes Lernen: Situationen und Perspektiven der beruflichen Weiterbildung", Deutscher Bundestag Drucksache 13/8527, p. 39.
- 14. See BMBF, *Berufsbildungsbericht* 1998, p. 3; and statements by the Minister for Research and Education, Edelgard Bulmahn, on 12 November 1998, See GdWZ 10 (1999), p. 4.
- 15. See BIBB (ed.), Berufliche Weiterbildung in Deutschland. Strukturen und Entwicklungen, Berlin, 1994, p. 82 ff.
- 16. Innovation Assistance to Small and Midsize Companies, The German Governments' Comprehensive Concept, 1997/98.
- 17. Gutenberg describes typically: (a) long-term establishment of company policy, (b) co-ordination of large operational areas, (c) elimination of disruptions in the continual operation process, (d) business measures of extraordinary operational significance and (e) occupation of managerial positions in the company.
- 18. "Professional": lat. "professio", *i.e.* commercial profession.

- 19. "Interpreting": a precise working of concrete individual cases.
- 20. "Programme administering": the working of question formulations of a relatively more abstract and broader nature.
- 21. "Strategic": principal decisions on company policy.
- 22. See Döring, 1995, p. 81.
- 23. See Deutscher Bundestag Drucksache 13, p. 39.
- 24. See Geißler, H. et al. (ed.), Bildungsmanagement, p.78 ff.
- 25. See Döring, 1995, p. 65.
- 26. See Annex, Table A1.7.
- 27. Deutscher Bundestag Drucksache 13, 1997:
- 28. See Weiss ,1997, p.4.
- 29. See BMBF, Berichtssystem Weiterbildung VI, 1996, p. 21 ff.
- 30. See BMBF, Berichtssystem Weiterbildung VI, 1996, p.57 ff.
- 31. See Rudorf, Friedhelm: "Berufliche Weiterbildung der Industrie- und Handelskammern", in Handbuch der Aus- und Weiterbildung, 96th Supplement, July 1996, 4450, p. 5.
- 32. See Herwig, Rudolf, "Weiterbildung im Handwerk", in *Handbuch der Aus- und Weiterbildung*, 47th Supplement., February 1989, 4222, pp. 2-4.
- 33. See Thomas Vajna, *Verbandsfibel-Kammern und Verbände der deutschen Wirtschaft*, ed. by IW Köln, Köln ,1994, p. 16.
- 34. See BMBF, Berichtssystem Weiterbildung VI, Bonn ,1996, p. 238.
- 35. See *Training aktuell*, 1994, p. 33.
- 36. See Deutscher Bundestag Drucksache 13, 1997.
- 37. The Mikrozensus is a representative survey of the population and the labour market of Germany. It is carried out every two years by taking a 1% sample of the German population.
- 38. The IAB Company Panel is a stratification sample that is carried out every year. It includes all firms with at least one full-time employee. The sample includes 4 100 companies in West Germany and 4 700 companies in East Germany.
- 39. See The Federal Institute of Vocational Training, *Continuing Vocational Training in Germany*, Berlin, 1997, p. 14.

REFERENCES

- Acemoglu, D. and J.S. Pischke (1998), "Why do Firms Train? Theory and Evidence", in *The Quarterly Journal of Economics* 113, pp. 79-119.
- Alewell, D. (1997), Die Finanzierung betrieblicher Weiterbildungsinvestitionen. Öknomische und juristische Aspekte, Wiesbaden.
- Alt, C., E. Sauter and H. Tillmann (1994), *Berufliche Weiterbildung in Deutschland. Strukturen und Entwicklungen*, Bundesinstitut für Berufsbildung), Bielefeld.
- Ant, M. et al. (1996), Berufliche Weiterbildung in Europa: Zugang, Qualität und Umfang, BerlinArbeitsgemeinschaft Qualifikations-Entwicklungs-Management Berlin (ed.), Kompetenzentwicklung '97: Berufliche Weiterbildung in der Transaformation Fakten und Visionen, Münster 1997.
- Bach, O., Abbau von Hierachien Mehr Effizienz durch schlankere Strukturen, Heidelberg 1996.
- v. Bardeleben, R. et al., Weiterbildungsqualität Konzepte, Instrumente und Kriterien, Bielefeld 1995.
- Baumstümmler, D., Der Prozeß der "Reflexiven Weiterbildungsberatung", Aachen 1996.
- Bildungsprogramm Unternehmensführung I/1999 des Bildungs- und Technologiezentrums Handwerkskammer Region Stuttgart, Stuttgart 1999.
- Bildungswerk der westphälisch-lippischen Wirtschaft e.V. (ed.), Systematische Weiterbildung und Unternehmenserfolg, Bielefeld 1998
- Bleicher, K., Management, in: *Handbook of German Business Management, 2 Vol.*, ed. by Grochla, E. and Gaugler, E., Stuttgart et al. 1990, pp. 1390-1400.
- Birkle, W. and Beck, R., Personalentwicklung und Weiterbildung in kleinen und mittelständischen Unternehmen, in: *Grundlagen der Weiterbildung* 5 (1994), pp. 311-314.
- Brockhoff, K., The Measurement of Goal Attainment of Governmental R&D Support, in: *Resarch Policy* 12 (1983), pp. 171-182.
- Büchter, K., *Professionalisierung in der betrieblichen Weiterbildung: Anspruch und Realität Theoretische Ansätze und empirische Ergebnisse*, München 1996.
- Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie (ed.), *Berichtssystem Weiterbildung VI. Integrierter Gesamtbericht zur Weiterbildungssituation in Deutschland*, Bonn 1996.
- Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie (ed.), *Berufsbildungsbericht 1998*, Bonn 1998.

- Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie (ed.), *Faktenbericht 1998*, Bonn 1998.
- Clemens, S. (1998), "Personalentwicklung für den Mittelstand", in *Wirtschaft und Weiterbildung*, 5/98, pp. 20-21.
- Cockrill, A., and P. Scott (1997), "Vocational Education and Training in Germany: Trends and Issues", in *Journal of Vocational Education and Training* 49, pp. 337-350.
- Deutscher Bundestag (Drucksache 13/8527), Lebensbegleitendes Lernen: Situation und Perspektiven der beruflichen Weiterbildung, Bonn 1997.
- Deutscher Industrie- und Handelstag, Dual Vocational Training, Bonn 1997.
- Dill, H. and Bellmann L., Betriebliche Weiterbildungsaktivitäten in West- und Ostdeutschland, in: *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung* 31(1998), pp. 205-225.
- Dobischat, R. and Husemann, R. (eds.), *Berufliche Weiterbildung als freier Markt?*Regulationsanforderungen der beruflichen Weiterbildung in der Diskussion, Berlin 1995.
- Döring, O., Strukturen der Zusammenarbeit von Betrieben und Weiterbildungsinstitutionen in der beruflichen Weiterbildung, Aachen 1995. Federal Institute for Vocational Training (ed.), Continuing Vocational Training in Germany, Berlin 1997.
- Flüter-Hoffmann, C. and Pieper, A. (eds.), *Berufliche Weiterbildung: Erfolgreiche Kooperation zwischen Unternehmen und Bildungsanbietern*, Köln 1996.
- Geißler, H. and v.Bruch, Th. /, Petersen, J. (eds.), Bildungsmanagement, Frankfurt 1994.
- Grünewald, U. and Moraal, D. (Bundesinstitut für Berufsbildung), Betriebliche Weiterbildung in Deutschland Gesamtbericht. Ergebnisse aus drei empirischen Erhebungsstufen einer Unternehmensbefragung im Rahmen des EG-Aktionsprogrammes FORCE, Bielefeld 1996.
- Grünewald, U. and Moraal, D. (Bundesinstitut für Berufsbildung), Modelle zur Finanzierung der beruflichen Weiterbildung Beschäftigter und Arbeitsloser. Dokumentation eines LEONARDO-Projektes mit Beteiligung von Dänemark, Deutschland, den Niederlanden und Norwegen, Bielefeld 1998.
- Hager, P. and Laurent, J., Eduacation and training: is there any longer a useful distinction?, in: *The Vocational Aspect of Education* 42 (1990), pp. 53-60.
- Heberer, J. and Grap, R., *Betriebliche Weiterbildung in kleinen und mittelständischen Unternehmen Methoden und Vorgehensweisen*, 2nd ed., Herzogenrath 1996.
- Hentze, J., *Personalwirtschaftslehre 1*, 5th ed., Stuttgart and Bern 1991.
- Heuser, M., Weiterbildungsmanagement in den neuen Bundesländen Konzeption der Führungskräfteweiterbildung für die neunziger Jahre, Düsseldorf 1993.
- Jäckering, W., Methoden der Evaluierung von Fortbildung, in: *Verwaltung und Fortbildung* 26 (1998), pp. 206-217.

- Jaschinski, C. and Reddemann, A., Qualitätsmanagement für Non-Profit-Dienstleister. Ein Leitfaden für Kammern, Verbände und andere Wirtschaftsorganisationen, Berlin 1997.
- Kailer, N., Neue Dienstleistungen erfordern neue Strategien des Bildungsmanagements, in: *Grundlagen der Weiterbildung* 6 (1995), pp. 322-327.
- Kailer, N.: Neue Lernformen in der betrieblichen Weiterbildung und bei Bildungsträgern, in: *Grundlagen der Weiterbildung*, 5 (1994), pp. 242-245.
- Kailer, N., Bildungsmanagement von Weiterbildungsträgern für kleine und mittlere Unternehmen, in: Harald Geißler et al. (eds.), *Bildungsmanagement*, Frankfurt 1994, pp. 77-91.
- Keller, W., Weiterbildungsbedarf von Führungskräften in mittelständischen Unternehmen, Berlin 1998.
- Kintzelé, J. and Giampellegrini, D.: Einführung von Bildungsplänen in kleinen und mittleren Unternehmen anhand der Methode des Tutorats, in: *Grundlagen der Weiterbildung* 9 (1998), pp. 163-166.
- Kleinig, J., Philosophical Issues in Education, London 1982.
- Knopp, A. and Kraegeloh, W. (eds.), Berufsbildungsgesetz, 3. Aufl., Köln et al. 1990.
- Krug, P., Modernisierung der Aus- und Weiterbildung, in: *Grundlagen der Weiterbildung* 10 (1999), pp. 3-6.
- Lechner, M., Training the East German Labour Force. Microeconometric Evaluations of Continuous Vocational Training after Unification, Heidelberg 1998.
- Loebe, H. and Severing, E. (eds.), *Klein- und Mittelbetriebe als lernende Unternehmen. Formen der Zusammenarbeit von Bildungsträgern und KMU*, Bielefeld 1996.
- Maisberger, P., Weiterbildung skeptisch beäugt, in: *Grundlagen der Weiterbildung* 4 (1993), pp. 191-198.
- McKenzie, P., Education and training: still distinguishable?, in: *The Vocational Aspect of Education* 47 (1995), pp.35-49.
- Merk, R., *Weiterbildungsmanagement*. Bildung erfolgreich und innovativ managen, 2nd rev. ed., Berlin et al. 1998.
- Ministerium für Wirtschaft Baden-Württemberg (ed.), Weiterbildung in Unternehmen. Planung und Organisation. Stuttgart 1994.
- Ministerium für Wissenschaft und Forschung Baden-Württemberg (ed.), *Landesforschungsbericht* 1995, Stuttgart 1995.
- Peisert, H. and Framhein, G., *Higher Education in Germany* (publ. by the Federal Ministry of Education, Science, Research and Technology), Bonn 1995.
- Peters, R. E., Ethics and Education, London 1966.

- Römer, K., Facts about Germany, Bielefeld 1989.
- Rudorf, Friedhelm, Berufliche Weiterbildung der Industrie- und Handelskammern, in: *Handbuch der Aus- und Weiterbildung*, 1996, supplement July 1996.
- Schanz, H., Vocational Training, in: *Handbook of German Business Management, 2 Vol.*, ed. by Grochla, E. and Gaugler, E., Stuttgart et al. 1990, pp. 2445-2454.
- Scherrer, W., Qualität der Weiterbildung in Deutschland unter Kostendruck, in: *Grundlagen der Weiterbildung* 9 (1998), pp. 104-106.
- Scholz, G. and Thalacker, L., Technologiepolitik als sektorale Strukturpolitik: Die deutsche Computerindustrie, in: Hartwich, H. (ed.), *Strukturpolitik. Aufgabe der achtziger Jahre*, Opladen 1980.
- Schönfeld, M. and Stöbe, S., Weiterbildung als Dienstleistung. Die Zusammenarbeit zwischen Weiterbildungsträgern und Betrieben bei der Qualifizierung von Beschäftigten, Neuwied 1995.
- Schönfeld, M., Länderstudie "Berufliche Weiterbildung in der Bundesrepublik Deutschland", Hrsg.: Institut Arbeit und Technik, Gelsenkirchen 1996.
- Schütte, S., Weiterbildung als Erfolgsfaktor, in: Wirtschaft und Weiterbildung, 5/98, pp. 22-23.
- Schwuchow, K., Weiterbildungsmanagement. Planung, Durchführung und Kontrolle der externen Führungskräfteweiterbildung, Stuttgart 1992.
- Staat, M., Empirische Evaluation von Fortbildung und Umschulung, Baden-Baden 1997.
- Staudt, E. and Bestel, S. and Mühlmeyer, P., Das Management von Weiterbildungsprozessen für betriebliche Führungskräfte, in: *Grundlagen der Weiterbildung* 5 (1994), pp. 307-310.
- Staudt, E., Weiterbildung von Fach- und Führungskräften in den neuen Bundesländern, Münster/New York 1996.
- Über und außerbetriebliche Weiterbildung der Wirtschaft Statistik 1995, KWB (ed.), Bonn 1996.
- Über und außerbetriebliche Weiterbildung der Wirtschaft Statistik 1997, KWB (ed.), Bonn 1999.
- Vajna, T., Verbandsfibel Kammern und Verbände der deutschen Wirtschaft, IW Köln (ed.), Köln 1994.
- Verband der Vereine Creditrefom e.V. (ed.), Wirtschaftslage Handwerk Frühjahr 1999, Neuss 1999.
- Wahse, J. and Bernin, M., *Betriebliche Weiterbildung in ostdeutschen Unternehmen im Jahre 1993*, Berlin 1994.
- Weber, W., Advanced Vocational Training, in: *Handbook of German Business Management*, 2 Vol., ed. by Grochla, E. and Gaugler, E., Stuttgart et al. 1990, pp. 126-136.
- Weingärtner, M., Betriebliche Weiterbildung und Weiterbildungsberatung in mittelständischen Unternehmen, Bergisch Gladbach et al. 1995.

- Weiß, R., Betriebliche Weiterbildung 1995. Mehr Teilnehmer Größere Wirtschaftlichkeit, Köln 1997.
- Weiß, R., Die 26-Mrd.-Investition Kosten und Strukturen betrieblicher Weiterbildung, Köln 1990.
- Weiß, R., Methoden und Faktoren der Erfolgsmessung in der betrieblichen Weiterbildung, in: *Grundlagen der Weiterbildung* 8 (1997), pp. 104-108.

ZDH statistics 1999 (unpublished).

ANNEX

Table A1.1. Adaptation training provided by the associations, 1997

Commercial, technical, creative, scientific, consultant and others

	Number of courses	Number of participants
BDA/BDI ¹	2 368	31 211
BGA/HDE	190	3 762
BVR/Deutsche Sparkassenorganisation	10	15
Wuppertaler Kreis e. V.	7 476	120 687
Total	10 044	155 675

^{1.} BDI/BDA figures for 1995. Source: KWB, Bonn (1996, 1999).

Table A1.2. Adaptation training provided by the associations, 1997

Business, administrative, law and business consultant, medical, and others

	Number of courses	Number of participants
BDA/BDI*	5 551	78 563
BGA/HDE	1 270	21 669
BVR/Deutsche Sparkassenorganisation	12 646	123 590
Wuppertaler Kreis e. V.	4 181	67 748
Total	23 648	291 570

^{1.} BDI/BDA figures for 1995. Source: KWB, Bonn (1996, 1999).

Table A1.3. Adaptation training provided by the associations, 1997

Information and communication technology

	Number of courses	Number of participants
BDA/BDI*	3 180	61 148
BGA/HDE	383	4 446
BVR/Deutsche Sparkassenorganisation	1 052	10 945
Wuppertaler Kreis e. V.	7 040	77 810
Total	11 655	154 349

^{1.} BDI/BDA figures for 1995. Source: KWB, Bonn (1996, 1999).

Table A1.4. Adaptation training provided by the associations, 1997
Languages

	Number of courses	Number of participants
BDA/BDI*	n.a.	n.a.
BGA/HDE	16	202
BVR/Deutsche Sparkassenorganisation	40	134
Wuppertaler Kreis e. V.	516	2345
Total	572	2681

^{1.} BDI/BDA figures for 1995. Source: KWB, Bonn (1996, 1999).

Table A1.5. Adaptation training provided by the associations, 1997

Others (working techniques, leadership)

	Number of courses	Number of participants
BDA/BDI*	n.a.	n.a.
BGA/HDE	717	9 137
BVR/Deutsche Sparkassenorganisation	1 422	11 571
Wuppertaler Kreis e. V.	1 623	18 888
Total	3 762	39 596

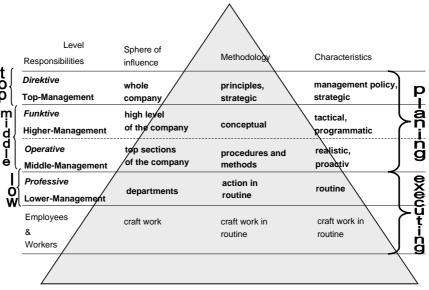
^{1.} BDI/BDA figures for 1995. Source: KWB, Bonn (1996, 1999).

Table A1.6. Companies and social security registered employees in Germany

		1995				
Size	Number of employees	Companies				
		West Germany	East Germany	Total	%	Employees (in %)
Small	1	484 820	95 398	580 218	28.7	29.0
Small	2 – 9	821 710	202 974	1 024 684	50.6	51.1
Medium	10 – 19	161 149	44 139	205 288	10.1	10.0
Medium	20 – 49	98 419	30 325	128 744	6.4	5.9
Medium	50 – 99	35 381	10 015	45 396	2.2	2.1
Medium	100 – 499	27 745	6 922	34 667	1.7	1.6
Large	500 – 999	2 974	633	3 607	0.2	0.2
Large	1 000+.	1 548	339	1 887	0.1	0.0
Total		1 633 746	390 745	2 024 491	100.0	100.0

Source: IAB, Institut der deutschen Wirtschaft, Köln (1997).

Figure A1.1. Characteristics of management levels



Pyramid of hierarhy / Number of managers

Source: ZEW, Bach, O. (1996).

Table A1.7. **Position in the firm according to CVT in Germany, 1993-95**Percentages

Position/ CVT	Training- on-the-job	Chambers of Commerce	Institutes for CET	Vocational schools	Distance learning	Other	Did not participate in CVT
Apprentice, student trainee, etc.	13	1	3	6	0	1	75
Clerk, white-collar worker	4	1	3	1	0	1	91
Skilled labour	6	1	5	1	0	1	86
Executive supervisor	11	2	8	2	0	1	76
Middle management	12	2	11	3	0	3	69
Departmental management	16	1	11	2	0	3	67
Managing director	13	2	8	2	1	4	71
Senior executive	9	2	10	1	1	4	73
Self-employed (up to four employees)	3	2	5	1	0	4	86
Self-employed (5+ employees)	3	3	6	1	0	6	81

Source: Unweighted Mikrozensus 1993-95, Sample n = 212 495.

Example 1. State-recognised Betriebswirt HWK

CVT course with a strong practical focus addressing all middle managers or entrepreneurs in the crafts industry, in order to build on previous experiences and knowledge and link them with the latest management skills.

Target group: Managers with a master craftsman degree

Duration: 2.5 years part-time, 500 hours **Cost:** DEM 5 630 including all fees

Location: HWK Education and Technology Centre

Content: Business Administration, Economics, Personnel Management, Law

Source: HWK Educationprogramme Entrepreneurship (1999), Stuttgart.

Example 2. Seminar: Direct marketing

Direct marketing – one of today's most important communications and sales instruments – can be a substantial help for SME product and service marketing. The seminar addresses SMEs in particular, in order to create a massive increase in efficiency of the already existing and established marketing resources

Target group: Senior manager, marketing managers and other SME managers

Duration: 8 hours

Cost: DEM 320 (incl. seminar papers)
Location: IHK Education Centre

Content:

- Direct marketing in the context of the complete working process
- Identification and characteristics of the target group
- · Database marketing
- · Successfully planning, implementing and analysing of direct marketing actions

Source: IHK Education Centre, Grundbach (1999).

ABBREVIATIONS

Institutions

AiF	Arbeitsgemeinschaft industrieller Forschungsvereinigungen e.V. (Confederation of Industrial Research Associations)
ATI	Agenturen für Technologietransfer (Technology Transfer Agencies)
BAM	Bundesanstalt für Materialforschung und -prüfung (Federal Insitute for Materials Research and Testing)
BDA	Bundesvereinigung Deutscher Arbeitgeberverbände (German Employers Association)
BDI	Bundesverband der Deutschen Industrie (Federal Association of German Industry)
BfA	Bundesanstalt für Arbeit (Federal Employment Office, FEO)
BGA	Bundesverband des Deutschen Groß- und Außenhandels (Federal Association of German Wholesale and Foreign Trade)
BIBB	Bundesinstitut für berufliche Bildung (Federal Institute for Vocational Training)
BMBF	Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie (Federal Ministry of Education, Science, Research, and Technology)
BMWi	Bundesministerium für Wirtschaft (Federal Ministry of Economics)
BVR	Bundesverband der Deutschen Volksbanken und Raiffeisenbanken
DFG	Deutsche Forschungsgemeinschaft (German Research Society)
ESF	European Structural Fund
EU	European Union
FhG	Fraunhofer-Gesellschaft
HDE	Hauptverband des Deutschen Einzelhandels (Central Association of German Retail)
HWK	Handwerkskammer (Crafts Chamber)

IAB	Institut für Arbeitsmarkt- und Berufsforschung (Institute for Labour Market and Vocational Research)
IW	Institut der deutschen Wirtschaft, Cologne (Institute of German Industry)
IHK	Industrie- und Handelskammern (Chambers of Industry and Commerce)
ISG	Institut für Sozialforschung und Gesellschaftspolitik (Institute for Social Research and Social Policy)
KWB	Kuratorium der deutschen Wirtschaft für Berufsbildung (Council of the German Industry for Vocational Training)
PTB	Physikalisch-technische Bundesanstalt (Federal Institute of Physics and Metrology)
RKW	Rationalisierungskuratorium der Deutschen Wirtschaft e.V. (Rationalisation Council for German Industry)
TBG	Technologiebeteiligungsgesellschaft (Technological Associate Company)
TOP	Technologieorientierte Besuchs- und Informationsprogramme (Technology-Oriented Visit and Information Programmes)
ZEW	Zentrum für Europäische Wirtschaftsforschung, Mannheim (Centre for European Economic Research, Mannheim)
Acts	
AFBG	Aufstiegsfortbildungsförderungsgesetz (Upgrading Training Promotion Act)
AFG	Arbeitsförderungsgesetz (Employment Promotion Act)
BAFöG	Berufsausbildungsförderungsgesetz (Vocational Training Promotion Act)
BBiG	Berufsbildungsgesetz (Vocational Training Act)
BerBiFG	Berufsbildungsförderungsgesetz (Vocational Training Development Act)
Other	
CET	Continuing Education & Training
CVT	Continuing Vocational Training
ERP	European Recovery Program
HRM	Human Resource Management

Informations- und Telekommunikationstechniken (Information and Telecommunication technologies)

Zentralverband des Deutschen Handwerks (Umbrella organization of the German Crafts Chambers)

ΙT

n.a. SME

ZDH

not available

Small and medium-sized enterprise

Chapter 4

JAPAN

Introduction

In Japan, where the severest economic situation in decades has brought about a deepening recession, new business and job creation is the current top priority of the government. In this context, small and medium-sized enterprises (SMEs) are receiving increased attention, and a programme to support SME creation and growth is now one of the most important policy measures of the government. Under these circumstances, management training for SMEs, in conjunction with financial support and other support measures, has been recognised as an important tool for SMEs. In fact, the Industrial Revitalisation Plan, which was announced by the government in January 1999 as a recovery plan from the current economic slump, stresses the importance of management training for SMEs.

This case study of Japan has been prepared as one of six country studies in the OECD's research project on "Management Training for SMEs". It tries to give an overview of the current status of management training for SMEs based on information provided by the government of Japan. However, as various additional policy measures for SMEs, such as those in the Industrial Revitalisation Plan, are just now being implemented, management training for SMEs is currently in transition and is being strengthened. There is also little information available regarding management training provided by non-government organisations (*e.g.* private training institutes, universities and trading partners/parent companies).

This report focuses on training programmes financially supported by the central government (through the Small and Medium-sized Enterprise Agency or SMEA) in 1997 and 1998. The report contains five sections. The first gives background information. The next describes the current economic situation in Japan and explains the policy rationale leading the government to implement support measures for enhancing the quality of SME management training. The following section illustrates the position of SMEs in Japan, where they play a major role in the economy. The subsequent section briefly explains general SME policy and how it is implemented in Japan. It is followed by a section which presents a survey on management training for SMEs financially supported by the SMEA and also gives the results of research on current demand for management training programmes as well as characteristics of participants in the programmes. However, there is still little information concerning the evaluation of the outputs from or the impacts of the SME management training programmes.

Background

After a 51-month expansion of the "bubble economy" that peaked in February 1991, the Japanese economy has been through an unusually long recession. In the recent consecutive two years, it has even faced negative growth which is unprecedented in the post-war period. One of the most serious

problems has been the supply-demand gap, which swung from an estimate negative 3.1% in 1991 to positive 2.4% in 1995. A macroeconomic analysis explains this vicious circle in the Japanese economy where a sharp decline in effective private sector demand results in a crisis of the financial system, which in turn induces a further reduction of demand. Under these circumstances, the government announced in late November an economic package for restoring the economy to stimulate enough and immediate demand. This package shows the roadmap for demand recovery; from the first stage in which a budget injection from the government creates immediate demand in the public sector, to the final stage where the private sector takes over the main role for demand creation from public sector.

While these measures on the demand side can fill the supply-demand gap for a moment, the future trend of long-term economic growth depends on the potential GDP on the supply side. In reality, however, the potential GDP growth rate in Japan has been declining during and after the "bubble economy" period and is now supposed to be at a quite low level. This sluggish situation can be attributed to all of the three factors that comprise potential GDP growth; capital input, labour input and total factor productivity (TFP).

In its period of high economic growth, Japan enjoyed a high growth rate in both capital input and TFP. After the "bubble economy", however, the growth rate of capital stock has been reduced (6% in 1988 to 4% in 1994) and no recovery is expected. The growth of labour input has also decreased (1% in 1988 to -0.5% in 1994) and a constant negative growth rate is even possible because of a decline in the working population and the reduction of working hours. Therefore, long-term economic growth can be achieved only by the growth of TFP. With regard to TFP, however, its growth rate before the "bubble economy" (between 1978 and 1989) averaged 1.3%, but since (between 1994 and 1996) it decreased by almost 1%, to an average 0.5%. Moreover, the international comparison demonstrates that the average TFP growth rate of Japan between 1987 and 1993 was 0.8%, the lowest record ever and below the OECD average of 0.9%.

In January 1999, the government announced the Industrial Revitalisation Plan to recover from the current severe economic slump by improving productivity. While the previous economic measures had been short-term emergency responses on the demand side to reduce the supply-demand gap, this Plan is to challenge structural reform from the supply side to aim at long-term economic growth by realising high growth of productivity. The Plan focuses on two concrete objectives: "new business and job creation" and "doubling of intellectual assets". while "doubling of intellectual assets" is directed to the promotion of innovative R&D activities that lead to higher productivity in industry, "new business and job creation" is aimed at facilitating innovative SMEs (venture businesses) in new fields that shift the industrial resources (*e.g.* human resources, financial resources, technology) to new higher productivity businesses.

For this structural transformation to higher productivity industry, the Plan stresses the importance of support measures for innovative SMEs that rectify problems they currently face. One of the identified problems in the Plan is a lack of management skill. Therefore, training for entrepreneurs and SME management, together with financial support and deregulation of labour-related restrictions (to facilitate labour mobility), are currently a major target of economic policy in Japan.

Position of SMEs in Japan

In Japan, SMEs are defined for each industry sector by the Small and Medium-sized Enterprises Basic Law which was enacted in 1963. In the Basic Law, small-sized enterprises are also defined as a part of SMEs (Tables 1 and 2).

Table 1. Definition of SMEs

Industry sector	Number of employees and capital size	
Mining, manufacturing and other industries	300 or less employees, or JPY 100 million or less capital	
Wholesale	100 or less employees, or JPY 30 million or less capital	
Retail and services	50 or less employees, or JPY 10 million or less capital	

Table 2. Definition of small-sized enterprises

Industry sector	Number of employees
Manufacturing and other industries	20 or less employees
Commerce and services	5 or less employees

SMEs have played a major role in the Japanese economy. In fact, their economic importance can be proved by their large share of jobs in the whole economy (Annex 1). In 1994, for example, SMEs accounted for 6.47 million private business establishments (excluding primary industry), or 99.1% of the national total of 6.53 million. With regard to employment, SMEs employed 42.27 million people in 1994, or 78.0% of the nation's employment of 54.16 million (Annex 1). On the other hand, statistical analysis also illustrates that there is some difference in their position across industry sectors (Annex 2). Their share of shipments/sales in 1994, for example, shows that SMEs are more dominant in the service sector (76.8% in retail sector and 61.4% in wholesale sector) than in the manufacturing sector (51.4%).

These figures had remained almost constant over decades since 1963 when the Basic Law was enacted. However, the current severe economic recession in Japan has been changing the situation for SMEs. One of the most worrying trends is a declining rate in new company formation, combined with a rising rate of company closures, which indicates that Japanese business sector has been losing some of its dynamism of earlier decades. In fact, the current start-up rate in Japan is less than one-third of that in the United States. These trends are more marked for the manufacturing sector, where the start-up rate dropped to around 3% in 1994, compared with the service business sector whose start-up rate still remains at around 5% (Annex 3).

SME policy

Outline of SME policy

Overall objectives of SME policy are declared in the Small and Medium-sized Enterprises Basic Law. Article 1 of the Basic Law emphasises that its policy objectives are: *i*) to promote SMEs by rectifying their economic/social disadvantage and encouraging self-help; and *ii*) to enhance economic/social position of entrepreneurs and SMEs employees. In order to achieve these objectives, the Basic Law stipulates, in Article 3, that the government should take comprehensive measures needed in the following areas:

- Modernisation of equipment.
- Improvement of technology.
- Rationalisation of management.
- Structural upgrading of business.

- Prevention of excessive competition and establishment of proper subcontracting arrangement:
 - Stimulation of demand.
 - Fair opportunities for business activities.
 - Promotion of an appropriate labour-management relationship.

Actual measures currently taken for SMEs in these policy areas can be summarised into three categories: *i)* reinforcement of the management base; *ii)* support for structural reform; and *iii)* special support for small-scale enterprises.

The first category, reinforcement of the management base, includes such programmes as management guidance, support for organisational reinforcement, support for proper subcontracting arrangement and credit guaranty. Management training in SMEs is one of the services included in management guidance.

Measures to support structural reform are intended to strengthen SMEs' ability to adapt themselves to rapid changes in the current economic and social environment. This category includes support for creating a new business, support for smooth entry into new fields, promotion of R&D activities and promotion of information technology (IT) use.

Small-scale enterprises tend to have an especially weak management base. Therefore, in addition to the general support for SMEs, special support is provided for them in the third category. This support includes special financial incentives (*e.g.* no requirement for security or guarantor), small enterprise mutual relief projects (a retirement fund for entrepreneurs in small-scale enterprises) and special management guidance by "home doctors for small-scale enterprises".

Implementation of SME policy

In Japan, the Small and Medium-sized Enterprise Agency (SMEA), a bureau of the Ministry of International Trade and Industry (MITI), is responsible for SME policy making. However, it is virtually impossible for the central government alone to implement directly all the policies for SMEs. Therefore, the main role of the Agency is to plan and co-ordinate general SMEs policies, as well as to provide the budget for implementing these policies. Instead, individual measures are implemented through local governments, government-affiliated corporations and the SMEs' organisations. For example, the 47 prefectural governments provide managerial and technical guidance to their local SMEs with the help of eight regional bureaux of MITI.

Among the government-affiliated corporations, the Japan Small Business Corporation (JSBC) plays a major role for SMEs policy implementation. JSBC was established in 1980 by the Japan Small Business Corporation Law to implement comprehensive policies to assist SMEs, and its activities can be divided into five categories:

- Management training and technical training.
- Guidance and financial support for upgrading projects (*i.e.* consultation and financial service for SMEs that work together as an association to improve their management structure).

- Information service, technical upgrading and support for internationalisation.
- The Mutual Relief System for Small-Scale Enterprises.
- The Mutual Relief System for Prevention of Bankruptcies (*i.e.* a mutual relief system to prevent "chain-reaction" bankruptcies).

Management training for SMEs

Background

Successful business management of SMEs largely depends on the quality of human resources that support the companies. Securing and training high-quality personnel are therefore key factors for the growth of SMEs, which often have limited opportunities to utilise managerial resources. These needs for training were clearly recognised in Japan for the first time in the 1960s when the country was entering a period of high economic growth.

In the current business environment, training for reinforcing management strength has become even more important for SMEs. Business management must constantly adapt to the changing business environment to ensure the survival and growth of their firms. Since SMEs are normally owned by their management, management's abilities have a direct impact on firms' performance. This characteristic of SMEs can also be their organisational strength (Table 3). According to a recent survey conducted by SMEA, the strength of SMEs which is most commonly mentioned by SMEs managers themselves is "swift communication of management decision to employees (53.3%)", followed by "good grasp of employees' abilities and opinions (44.1%)" and "direct involvement of managers in their business (27.4%)".

Table 3. Organisational strength of SMEs

Organisational strength of SMEs mentioned by SMEs managers	Response (%)
Swift communication of management decision to employees	53.3
Easy grip of employees' ability and opinions	44.1
Direct involvement of managers into their business	27.4
Flexible transformation of business activity in response to an environmental change	20.6
Flexible transformation of organisational structure in response to an environmental change	15.2
Flexible delegation of decision making to employees	14.1
Others	0.9
No particular strength	4.4

Note: Totals exceed 100% owing to multiple responses.

Source: Small and Medium-sized Enterprise Agency, "Survey of Corporate Management in Japan (Management Attitudes)", December 1997

The survey also shows the self-evaluation of SMEs managers with regard to the qualities and abilities requisite for SMEs management (Table 4). What they believe to be their own strengths are leadership (43.0%), expert knowledge in their business fields (35.6%), administrative management capability (32.2%) and accurate judgement (27.0%). On the contrary, they recognise that their weaknesses are financial management capability (31.4%), accurate judgement (30.9%), capability of constructing a wide human network (28.3%), general knowledge (24.7%) and foreign languages (23.1%).

The difference between their perceived strengths and weaknesses can illustrate the existing needs of management training for SMEs. It is supposed that SMEs managers desire to strengthen their financial management capability, to acquire general knowledge, including foreign languages, and to construct a wide human network in order to adapt to rapid change in the financial environment and economic globalisation.

Table 4. Strengths and weaknesses of SME managers

Qualities and abilities montioned by SME managers	Response (%)		
Qualities and abilities mentioned by SME managers	As strength	As weakness	
Leadership	43.0	14.7	
Expert knowledge in their business fields	35.6	24.9	
Administrative management capability	32.2	16.6	
Accurate judgement	27.0	30.9	
Financial management capability	23.2	31.4	
Capability of constructing a wide human network	23.2	28.3	
Negotiation skill	18.4	18.4	
Planning capability for strategic sales and marketing	18.3	8.9	
Insight into future trend	16.1	11.6	
Attractive personality	15.7	7.8	
General knowledge	9.2	24.7	
Capability of developing human resources	5.5	15.6	
Knowledge of marketing	5.5	7.4	
Foreign languages	2.3	23.1	
Knowledge of regulation	1.9	3.7	
Others	1.7	2.8	

Note: Totals exceed 100% owing to multiple responses.

Source: Small and Medium-sized Enterprise Agency, "Survey of Corporate Management in Japan (Management Attitudes)", December 1997.

It is also essential for SMEs managers to train their successors to continue operation of their firms and to further improve their management. In fact, the most important issue for SMEs managers in terms of business succession are "training of successors as managers (59.2%)" and "making successors conscious of being future managers (39.3%)" (Table 5).

Table 5. Issues regarding SME business succession

Issues regarding SME business succession mentioned by SME managers	Response (%)
Training of successors as managers	59.2
Making successors conscious of being future managers	39.3
Business development	31.6
Strengthening of financial condition	20.7
Securing and training of human resources	17.3
Understanding of employees	7.0
Technology upgrading	6.4
Payment of inheritance tax	5.9
Others	1.3

Note: Totals exceed 100% owing to multiple responses.

Source: Small and Medium-sized Enterprise Agency, "Survey of Corporate Management in Japan (Management Attitudes)", December 1997.

Outline of management training programmes

In Japan, several organisations offer management training for SMEs. For example, Chambers of Commerce and Industry have 515 regional organisations and provide training programmes for SMEs. Commerce and Industry Associations, which have 2 818 regional organisations throughout the country, also play an important role for management training for SMEs in the regions.

In addition to these management training programmes, information exchange with their parent companies and trading partners can provide a good opportunity for SMEs to develop their management base. In fact, the survey reveals that the most popular method used by SMEs managers to develop their management capability is "information exchange with their trading partners (46.3%)", followed by "participation in seminars held by trade associations (25.0%)". This method can be best suited to the exact needs of an individual SME.

With regard to a nation-wide scheme in Japan, the Law concerning Guidance for SMEs was enacted in 1963 to provide SMEs with management training and technical training. Since then, their programmes have been continuously developed.

SMEA plans the overall structure of this nation-wide scheme and provides financial support for implementing it. The actual training programmes in this scheme are provided through two channels.

One is via local governments (*i.e.* prefectures and cities). In this case, the central government (*i.e.* SMEA) provides guidelines and financial support for the local governments that actually carry out the training programmes. Besides these programmes supported by the central government, the local governments can also provide their own training programmes for SMEs to meet their local requirements in their regions.

The other channel is the Institute for Small Business Management and Technology, the training institute of JSBC. Two types of training programmes are offered by the Institute. One is directly intended for managers of SMEs who need a higher level and more specialised training programmes than those offered by the local governments. The other is for personnel in local governments or the SMEs organisations (*e.g.* Chambers of Commerce and Industry, Commerce and Industry Associations, Federations of Small Business Associations) who are in charge of guidance for SMEs.

The Institute has nine branches throughout Japan (Tokyo, Kansai, Nogata, Asahikawa, Hiroshima, Seto, Sendai, Sanjo, Hitoyoshi). Their teaching staff are specialists such as university professors and business consultants. Each branch develops its training materials and training methods to meet the special needs it faces. Its operating costs are also supported by the central government.

The following gives some details of this nation-wide scheme (Figure 1) that is planned and financially supported by SMEA.

SMEA

Local governments

Training

(management/technical)

SME management

SME management

SME management

Personnel responsible for SME guidance in local governments or SME organisations

Figure 1. Nation-wide scheme by SMEA

Training provided via local government

Since 1963, when the Law concerning Guidance for SMEs was enacted, SMEA has provided support for local governments that perform management training and technical training for SMEs. The eligible local governments are the 47 prefectures and 12 major cities. In terms of financial support, SMEA pays one-third of the training expenses. Another third is borne by the local governments and the remainder falls on trainees. The curriculum and schedule of the training are provided in the ministerial ordinance of SMEA.

Management training

Management training is mainly designed for management and middle management of SMEs. Five major programmes are offered in this category (Table 6). In FY1998, SMEA provided its financial support of JPY 36 085 million for 21 prefectures and 11 major cities.

Management training (long-term)

Designed for	Management and middle management of SMEs
Objectives	To acquire basic knowledge and its practical application skill regarding administrative management
Training hours	95 hours or more
Capacity in 1997	300 trainees/10 courses

Management training (short-term)

Designed for	Middle management and management staff of SMEs
Objectives	To acquire basic and practical knowledge regarding administrative management
Training hours	36 hours or more
Capacity in 1997	2 400 trainees/80 courses

Information technology training (short-term)

Designed for	Middle management and management staff of SMEs
Objectives	To acquire basic knowledge regarding information technology
Training hours	36 hours or more (24 hours or more for lectures, 12 hours or more for exercises)
Capacity in 1997	450 trainees/15 courses

Training for SME retailers (short-term)

Designed for	Management, middle management and sales staff of SMEs retailer
Objectives	To acquire practical knowledge regarding customer service and merchandise display, to learn case study of best practices in the field and to acquire basic knowledge regarding public support that SMEs retailers can take advantage of
Training hours	18 hours or more
Capacity in 1997	1 400 trainees/70 courses

Training for start-up (short-term)

Designed for	Management of start-up SMEs and entrepreneur who has an actual plan to start up SMEs
Objectives	To acquire basic knowledge for managing start-up SMEs
Training hours	36 hours or more
Capacity in 1997	3 000 trainees/100 courses

Table 6. Summary of management training via local government

Programme	Since	Designed for	Results in 1997
Management training (long-term)	1963	Management, middle management	177 trainees/7 courses
Management training (short-term)	1967	Middle management, management staff	1 683 trainees/61courses
Information technology training (short-term)	1987	Middle management, management staff	311 trainees/13 courses
Training for SMEs retailer (short-term)	1992	Management, middle management, sales staff	1 053 trainees/49 courses
Training for start-up	1995	Management of start-up SMEs, entrepreneurs with an actual plan to start up an SME	319 trainees/12 courses
Total			3 543 trainees/142 courses

Source: Small and Medium-sized Enterprise Agency.

Technical training

Technical training is mainly designed for management and technical staff of SMEs. Six major programmes are offered in this category (Table 7). The programmes are carried out with the help of public research institutes, industrial sector and academic sector in each region. In FY1998, SMEA provided financial support of JPY 140 348 million for 35 prefectures and 1 major city.

Technical training (long-term)

Designed for	Management and technical staff of SMEs
Objectives	To acquire overall R&D capabilities and R&D planning capabilities
Capacity in 1997	1 050 trainees/35 courses

Technical training (middle-term)

Designed for	Management and technical staff of SMEs
Objectives	To acquire R&D capabilities in a specific business field
Capacity in 1997	1 200 trainees/40 courses

Technical training (short-term)

Designed for	Management and technical staff of SMEs
Objectives	To acquire knowledge of specific technology
Capacity in 1997	2 430 trainees/81 courses

Specialised technical training for promoting regional industry

Designed for	Management and technical staff of SMEs
Objectives	To acquire specialised high-level R&D capabilities which promote regional industry
Capacity in 1997	600 trainees/30 courses

Technical training for new technology

Designed for	Management and technical staff of SMEs
Objectives	To acquire basic knowledge of new advanced technologies
Capacity in 1997	1 040 trainees/52 courses

Training for engineers

Designed for	Management and technical staff of SMEs
Objectives	To acquire creative R&D capabilities
Capacity in 1997	81 trainees/27 courses

Table 7. Summary of technical training via local government

Programme	Since	Designed for	Results in 1997
Technical training (long-term)	1963	Management, technical staff	448 trainees/25 courses
Technical training (middle-term)	1967	Management, technical staff	654 trainees/30 courses
Technical training (short-term)	1967	Management, technical staff	2 728 trainees/120 courses
Specialised technical training for promoting regional industry	1979	Management, technical staff	317 trainees/22 courses
Technical training for new technology	1983	Management, technical staff	2 478 trainees/137 courses
Training for engineers	1994	Management, technical staff	52 trainees/23 courses
Total			6 677 trainees/357 courses

Source: Small and Medium-sized Enterprise Agency.

Independent training of local government

In addition to the training scheme supported by the central government, local governments also provide their own training programmes for SMEs to meet the local requirements in their regions.

Table 8. Summary of independent training of local government

Programme	Provided by	Results in 1997
Management training	31 Prefectures, 10 major cities	13 307 trainees/252 courses
Technical training	24 Prefectures, 5 major cities	12 874 trainees/336 courses

Source: Small and Medium-sized Enterprise Agency.

Training provided via JSBC

In conjunction with the creation of the training scheme via local government, the Law concerning Guidance for SMEs also established in 1963 a government-affiliated corporation to implement another scheme for SME management training. This government-affiliated corporation has been reorganised several times since its creation, and is now part of the Institute for Small Business Management and Technology (ISBMT) of JSBC.

In terms of role sharing with local governments, ISBMT is supposed to provide higher-level and more specialised training than what can be offered by local governments.

As financial support, SMEA pays two-thirds of the training expenses, and the remaining one-third is borne by trainees. In FY1998, its financial support was JPY 1 159.12 million. The employers who send the trainees to the training programmes can also receive some financial support from other scheme (*e.g.* from Ministry of Labour and local governments) to compensate for their trainees' wages during the training period.

The programmes in this scheme can be divided into two types. One is a higher-level and more specialised programme tailored directly for SMEs management and their staff. The other is a training programme for personnel who are in charge of SMEs guidance in the local governments or the SMEs

organisations (e.g. Chambers of Commerce and Industry, Commerce and Industry Associations, Federations of Small Business Associations).

The overall objective of ISBMT's training programmes is not only to provide knowledge, but also to train for applying it in practice. For this purpose, ISBMT develops its own training materials and training methods, including case studies for SMEs and practices in the field. These materials and methods are also referred by local governments and the SMEs organisations. Since its start of business, ISMBT has accepted 220 000 trainees in total.

Training for SME management

The training for SMEs management is provided at nine branches of ISBMT. The applicants in 1997 were 1.67 times as many as the scheduled capacity number. The offered programmes are in two categories: *i*) management training programmes; and *ii*) technical training programmes. With regard to technical training, the programmes focus on overlapping areas of technology and management (*e.g.* commercialisation of R&D outcomes). ISBMT also provide residential facilities at each branch for the trainees.

Management training

ISBMT offers various kinds of menus for management training, from two-day programmes to one-year programmes (Table 9). Some of the major programmes are:

Management training (long-term)

Designed for	Management of SMEs
Objectives	To improve overall management capabilities of implementing business strategy
Training period	1 week/month for 12 months
Capacity in 1998	30 trainees at 2 branches (Tokyo, Kansai)

Management training (middle-term)

Designed for	Management of SMEs
Objectives	To acquire broad and practical knowledge to manage daily business
Training period	1 week/month for 6 months
Capacity in 1998	20 trainees at 7 branches (Asahikawa, Sendai, Sanjo, Seto, Hiroshima, Nogata, Hitoyoshi)

Training for successor

Designed for	Ownership successor and prospective management of SMEs
Objectives	To acquire business knowledge requisite for SMEs management
Training period	1 year
Capacity in 1998	20 trainees at 2 branches (Tokyo, Kansai)

Training for middle management

Designed for	Middle management of SMEs (production, sales)
Objectives	To systematically acquire expert knowledge
Training period	3 days/month for 6 months
Capacity in 1998	20 trainees at 6 branches (Sendai, Tokyo, Seto, Kansai, Hiroshima, Nogata) for production management, 20 trainees at 3 branches (Asahikawa, Sanjo, Hitoyoshi) for sales management

Training for start-ups

Designed for	Management of start-up SMEs and entrepreneur who has an actual plan to start up SMEs	
Objectives	To acquire practical knowledge for managing start-up SMEs	
Training period	3 days/month for 4 months	
Capacity in 1998	20 trainees at 2 branches (Tokyo, Kansai)	

Besides these major programmes, ISBMT provides short-term training programmes in some specific fields, which include management strategy, organisational behaviour, finance and accounting, production management, sales and marketing, product development, logistics, information technology and business globalisation.

Table 9. Summary of management training via JSBC (ISBMT)

	Capacity in 1997	Results in 1997
Number of training courses	240	251
Number of trainees	6 740	9 114
Total (person*day)	44 480	55 347

Source: Small and Medium-sized Enterprise Agency, JSBC.

Technical training

ISBMT also provides basic and advanced technical training for SME management and technical staff, some of which are offered as correspondence courses (Table 10). Followings are some examples of its technical training programmes.

Training for technology strategy planning

Designed for	Management and technical management of SMEs
Objectives	To acquire capabilities of planning technology strategy
Training period	1 week/month for 3 months
Capacity in 1998	20 trainees at 1 branch (Tokyo)

Training for factory management

Designed for	Management and production management of SMEs
Objectives	To acquire knowledge and method for improving factory management by using case studies
Training period	4 weeks
Capacity in 1998	20 trainees at 1 branch (Tokyo)

Training for information system construction

Designed for	Management and information system management of SMEs
Objectives	To acquire capabilities of constructing business information system
Training period	1 week
Capacity in 1998	20 trainees at 1 branch (Tokyo)

Training for new product development

Designed for	Management and business planning staff of SMEs
Objectives	To acquire capabilities of planning and developing new product
Training period	1 week
Capacity in 1998	20 trainees at 1 branch (Tokyo)

Correspondence course for technical training

Designed for	Management and technical staff of SMEs
Objectives	To acquire technical knowledge in specialised fields
Training period	6 months, 3 months
Capacity in 1998	300 trainees for each field at 1 branch (Tokyo)

Table 10. Summary of technical training via JSBC (ISBMT)

Canaaity in 4007	Describe in 4007
Capacity in 1997	Results in 1997
50	45
1 460	1 638
6 520	14 379
6	4
1 300	827
	1 460 6 520 6

Source: Small and Medium-sized Enterprise Agency, JSBC.

Training for personnel in charge of SME guidance

These training programmes aim at enhancing capabilities of personnel who are responsible for SMEs guidance in local governments and SME organisations. They are also divided into two categories: *i*) management training; and *ii*) technical training. Table 11 gives summary data for the programmes.

Table 11. Summary of training via JSBC (ISBMT) for personnel in charge of SME guidance

	Capacity in 1997	Results in 1997
Management training		
Number of training courses	61	61
Number of trainees	2 692	2 440
Total (person*day)	86 240	88 704
Technical training		
Number of training courses	9	8
Number of trainees	200	174
Total (person*day)	11 150	6 628

Source: Small and Medium-sized Enterprise Agency, JSBC.

Characteristics of trainees

The total number of trainees in 1997 at ISBMT amounted to 14 193. Among them, about 80% were SMEs management or their staff, and the remaining 20% were local government officials or the staff of SME organisations (Table 12). In terms of the size of SMEs, those having more than 51 employees accounted for 50% of the trainees sent from SMEs to ISBMT (Table 13). Considering that 90% of SMEs in Japan have fewer than 20 employees, larger SMEs seems to be more active for training that smaller ones. Furthermore, about 60% of the trainees were "repeaters" from the same SMEs.

Table 12. Breakdown of trainees by employer
Persons

Trainees sent	Results in 1997
Management training	
From SMEs	9 114
From local government	762
From SME organisation	1 678
Total (management)	11 554
Technical training	
From SMEs	2 465
From local government	174
From SME organisation	
Total (technical)	2 639
Total (management and technical)	14 193

Source: Small and Medium-sized Enterprise Agency.

Table 13. Breakdown of SME trainees by firm size
Percentages

Trainees sent	Results in 1997
From SMEs with 1-5 employees	4.1
From SMEs with 6-10 employees	4.8
From SMEs with 11-30 employees	22.5
From SMEs with 31-50 employees	16.6
From SMEs with 51-100 employees	24.6
From SMEs with 101-300 employees	21.8
From SMEs with 301+ employees	4.2

Source: Small and Medium-sized Enterprise Agency.

Output from training

In September 1998, SMEA made a survey by sending a questionnaire to the trainees of its two training schemes (*i.e.* via local government and via ISBMT). The result shows that SMEs management actively takes an opportunity to have other training programmes such as those provided by private training institutes, Commerce and Industry Associations and their trading partners (Table 14). With regard to the job title of trainees, the majority are management of their firms (Table 15).

Table 14. Other training provided

Other training courses used by SME management	Response (%)
Private training institute	50.3
Local government/commerce and industry association	43.5
Commerce-industry trade association	39.5
Trading partner/parent company	33.2

Note: Response is the percentage of the ISBMT trainees who took the training programmes of other institutes. Totals exceed 100% owing to multiple responses. Source: Small and Medium-sized Enterprise Agency.

Table 15. Job title of trainee

T'0-	Response (%)		
Title	Scheme via local government	Scheme via ISBMT	
President	27.1	20.1	
Executive	18.6	23.0	
Administrator	32.9	37.3	
Others	21.4	16.0	

Source: Small and Medium-sized Enterprise Agency.

The survey also asked the trainees about their satisfaction with 5 grades (from 1 = very unsatisfactory to 5 = very satisfactory). The results illustrate that the training programmes are more satisfactory to SME management than other support measures such as business diagnostic service by SMEA (average 3.74) or business consultation service by Chamber of Commerce (average 3.36) (Table 16).

Table 16. Trainee satisfaction

	Average of satisfaction		
	Scheme via local government	Scheme via ISBMT	
Total	3.90	3.97	
Curriculum	3.89	3.94	
Lecturer	3.80	3.90	
Comprehensiveness	3.89	3.79	
Training period	3.47	3.64	
Balance of lecture and practice	3.69	3.64	
Training material/method	3.52	3.64	
Facilities/equipment	3.35	3.84	

Source: Small and Medium-sized Enterprise Agency

REFERENCES

Ministry of International Trade and Industry (1999), Industrial Revitalisation Plan.

OECD (1998), OECD Economic Surveys JAPAN 1998.

Small and Medium-sized Enterprise Agency, Ministry of International Trade and Industry (1998), White Paper on Small and Medium-sized Enterprises in Japan.

Institute of Small Business Management and Technology, Japan Small Business Corporation (1999), Training Programme Guide of the Branches (Tokyo, Kansai, Nogata, Asahikawa, Hiroshima, Seto, Sendai, Sanjo, Hitoyoshi).

Institute of Small Business Management and Technology, Japan Small Business Corporation (1998), Training Programme Guide of the Institute.

http://www.miti.go.jp

http://www.sme.ne.jp

http://www.jsbc.go.jp

ANNEX 1

Table A1.1. Number of business establishments (non-primary industries)

	1963	1972	1981	1986	1994
SMEs	3 883 573	5 083 270	6 229 572	6 448 123	6 470 532
	(99.6%)	(99.4%)	(99.4%)	(99.3%)	(99.1%)
Large enterprises	16 605	30 453	39 499	46 218	61 448
	(0.4%)	(0.6%)	(0.6%)	(0.7%)	(0.9%)
Total	3 900 178	5 113 723	6 269 071	6 494 341	6 531 980

^{1.} SMEs are defined as establishments with: a) fewer than 50 employees in retail and service sectors; b) fewer than 100 employees in wholesale; and c) fewer than 300 employees in other industries.

Source: Management and Co-ordination Agency, "Census of Japanese Establishments".

Table A1.2. Number of employees (non-primary industries)

	1963	1972	1981	1986	1994
SMEs	21 526 247	30 400 491	37 206 159	39 505 716	42 273 745
	(79.0%)	(78.4%)	(81.4%)	(80.6%)	(78.0%)
Large enterprises	5 715 218	8 393 392	8 514 031	9 489 508	11 890 062
	(21.0%)	(21.6%)	(18.6%)	(19.4%)	(22.0%)
Total	27 241 465	38 793 883	45 720 190	48 995 224	54 163 807

^{1.} SMEs are defined as establishments with: a) fewer than 50 employees in retail and service sectors; b) fewer than 100 employees in wholesale; and c) fewer than 300 employees in other industries.

Source: Management and Co-ordination Agency, "Census of Japanese Establishments".

^{2.} Agriculture, forestry and fisheries are excluded.

^{3.} The figure in parentheses is the share in total.

^{2.} Agriculture, forestry and fisheries are excluded.

^{3.} The figure in parentheses is the share in total.

ANNEX 2

Table A2.1. Total retail sales

JPY billions

	1964	1972	1982	1991	1994
SMEs	6 926	22 756	75 121	109 668	110 131
	(82.9%)	(80.4%)	(79.9%)	(78.0%)	(76.8%)
Large enterprises	1 424	5 537	18 851	30 971	33 194
	(17.1%)	(19.6%)	(20.1%)	(22.0%)	(23.2%)
Total	8 350	28 293	93 971	140 638	143 325

Note: SMEs are defined as establishments with fewer than 50 employees. The figure in parentheses is the share in total.

Source: Ministry of International Trade and Industry, "Commercial Statistics".

Table A2.2. **Total wholesale sales**JPY billions

	1964	1972	1982	1991	1994
SMEs	21 987	58 326	233 416	355 807	315 966
	(56.6%)	(54.6%)	(58.6%)	(62.1%)	(61.4%)
Large enterprises	16 843	48 454	165 121	217 358	198 351
	(43.4%)	(45.4%)	(41.4%)	(37.9%)	(38.6%)
Total	38 830	106 780	398 536	573 165	514 317

Note: SMEs are defined as establishments with fewer than 50 employees. The figure in parentheses is the share in total.

Source: Ministry of International Trade and Industry, "Commercial Statistics".

Table A2.3. **Total shipments in manufacturing sector**JPY billions

	1963	1972	1981	1993	1994
SMEs	11 977	41 455	115 042	160 836	153 400
	(50.3%)	(51.2%)	(51.1%)	(51.4%)	(51.4%)
Large enterprises	11 845	39 507	109 670	150 363	145 300
	(49.7%)	(48.8%)	(48.9%)	(48.6%)	(48.6%)
Total	23 822	80 962	224 712	311 199	298 700

Note: SMEs are defined as the establishments with 4 to 299 employees. The figure in parentheses is the share in total.

Source: Ministry of International Trade and Industry, "Industrial Statistics".

Table A2.4. **Total value added in manufacturing sector**JPY billions

	1963	1972	1981	1993	1994
SMEs	4 578	15 726	41 147	65 107	62 763
	(51.4%)	(53.9%)	(56.2%)	(56.6%)	(55.9%)
Large enterprises	4 329	13 466	32 020	49 868	49 501
	(48.6%)	(46.1%)	(43.8%)	(53.4%)	(44.1%)
Total	8 907	29 192	73 167	114 974	112 264

Note: SMEs are defined as the establishments with 4 to 299 employees. The figure in parentheses is the share in total.

Source: Ministry of International Trade and Industry, "Industrial Statistics".

ANNEX 3

Table A3.1. **Start-up and closure rates, by sector**Percentages

	1966/69	1969/72	1972/75	1975/78	1978/81	1981/86	1986/89	1989/91	1991/94
Whole industry									
Start-up rate	6.5	7.0	6.1	6.2	6.1	4.7	4.2	4.1	4.6
Closure rate	3.2	3.8	4.1	3.4	3.8	4.0	3.6	4.7	4.7
Manufacturing									
Start-up rate	6.0	5.6	4.3	3.4	3.7	3.1	3.1	2.8	3.1
Closure rate	2.5	3.2	3.4	2.3	2.5	3.1	2.9	4.0	4.6
Wholesale									
Start-up rate	6.5	8.1	8.0	6.8	6.4	5.1	4.8	3.2	5.2
Closure rate	6.5	3.8	5.3	3.7	3.8	3.7	4.1	3.2	5.2
Retail									
Start-up rate	5.0	4.9	4.3	4.8	4.4	3.4	3.1	2.8	3.9
Closure rate	2.1	3.3	3.6	3.2	4.0	4.0	3.4	6.4	4.3
Service business									
Start-up rate	6.3	6.7	6.1	6.1	6.4	5.3	4.9	4.7	5.0
Closure rate	3.9	4.0	3.8	3.3	3.1	3.2	3.6	2.9	4.2

Source: Management and Co-ordination Agency, "Census of Japanese Establishments", "Report on Changes of Establishments".

Chapter 5

UNITED KINGDOM

Introduction

This chapter seeks to piece together from a variety of surveys, an estimate of the scale of the "market" for formal management training in SMEs in the United Kingdom. It then provides information about the key suppliers in this market.

The only market which we are able to identify is the "formal/external" market. It is recognised that this inevitably underestimates the true scale of training provision among small firms.

The chapter then reviews examples of management and worker training provided for small enterprises.

Data on training provision

Table 1 shows the results of seven, fairly recent, European surveys of the extent to which training provision is related to firm size. In some surveys, reference is explicitly made to managers, whereas in others the data refer to any workers within the business.

The first two studies by IKEI (1998) and by CVT (1994) are European-wide, whereas the remaining five studies refer exclusively to the United Kingdom.

All studies, with one exception, report responses from employers. Only Skill Needs in Britain (1998) reports the responses of individual workers.

Despite the diversity of approaches and coverage in these studies, several points emerge from Table 1. The first is the incomplete information available on the smallest sizes of enterprises. For example, although in the European Union as a whole, there are more workers employed in businesses with ten workers or fewer than in businesses with 500 or more, few surveys have focused upon training in the smallest size of enterprises.

Nevertheless, given all the comparison problems identified earlier, there is a striking consistency in the finding that the probability of an individual receiving, or a business providing, training increases consistently with firm size. However the differences between medium-sized and large firms are modest, compared with the differences between the medium/large on the one hand and the micro/small on the other. This makes the paucity of data on training activities within the micro/small firm a matter of real concern.

Table 1. Training provision by firm size: European studies

Firm size (no. of employees)	Training provided to any workers (percentage of firms)	Percentage of companies providing training	Percentage of companies offering training to managers in last 12 months	Percentage of managers who have ever received off-the-job training from their employer	Percentage of managers undertaking off-the-job training in last two years	Percentage of managers on external training courses last year	Percentage of firms using external courses for training any staff
0			7	n.a.	٦	n.a.	
			14		83		
1-9	27]	n.a.	J	48	37*
10-24	7	7	14	n.a.	٦	٦	44*
	56	36				56	
25-49	_		٦	51	75		
			30				
50-99	٦	63		57			
	84						
100-249		76	50	66		٦	
						81	
250-499		85	٦	75	90		
			62				
500+		93]	82	99		
Source	IKEI (1998)	CVT (1994)	Storey and Westhead (1997)	Skill Needs in Britain (1998)	Welch (1996)	CBR (1998)	F.P.B. (1998)
Country/ area	EU	EU	UK	UK	UK	UK	UK

Notes:

* Indicates "interpolation" between size categories.

n.a.: not available.

The European studies fairly consistently view training as being equivalent to formal training; it is less clear that if efforts were made to incorporate informal training, as does the Bureau of Labor Statistics in the United States, the results would be the same.

Finally, no study carefully examines the training of owner-managers according to firm size. Our patchy evidence is that, if this group were to be included, they would be less likely to report participation in formal training than for other managers within their business (Amos *et al.*, 1997). We are, however, not clear about the extent to which this would vary by firm size.

In conclusion, although it is virtually impossible to compare "across" the surveys, the message which emerges is that "within" surveys virtually all agree that formal training increases with firm size and that the key size "break" is between the small/medium-sized firm. In some surveys, the ratio of small to large is small (*e.g.* Welch, 1996), but in others it is very large (Storey and Westhead, 1997). Nevertheless the general finding is that the ratio of large to small companies providing training is perhaps 3:1. At the risk of massive over-simplification, large companies (500 or more employees) are perhaps three times more likely to provide formal training for someone than companies that are small (fewer than ten employees).

Since, however, almost a third of the EU workforce is in enterprises with ten or fewer employees, it means that this group will have difficulty in being up-skilled, given the reluctance of their employers to provide training. This has serious implications for competitiveness. This is not meant to imply that the individual worker or manager in a small/micro firm is three times less likely to receive training. The only "worker/manager" data are shown in column four of Table 1 and show that while 82% of managers in large (500+ employees) firms had received off-the-job training, only 51% of managers in firms with 25-49 employees received such training. Clearly this ratio is much less than 3:1.

Estimating the size of the small firm management training market in the United Kingdom

This section estimates, using some of the survey information discussed above, the overall size of the market for management training in the United Kingdom. The prime objective is to compare the small firm management training market with that of larger firms.

The basis for the calculation of the size of this market is presented in Table 2. Overall it is estimated that the annual "external" management training market in the United Kingdom is approximately GBP 536 million. This excludes training for self-employed individuals without employees.

Large firms, defined as those with 500 or more workers, provide 38% of UK employment. However they constitute 62% of the management training market, by value, or GBP 332.6 million.

If small firms are viewed as those with between 1 and 49 employees then this group provide 31% of jobs, but 22% of the management training market, or GPB 120.1 million.

In constructing Table 2, the following assumptions need to be highlighted. The first is the absence of information on the self-employed without employees. This group provide 2.9 million jobs, but there is a problem in deciding whether or not they are managers. In one sense they could all be considered as managers because they manage themselves, but if management is thought to include the management of others then none could be considered as managers. We also have no usable information upon their training habits. The only information is taken from the Labour Force Survey 1996 which shows the self employed as being much less likely than any other group to have spent time in the last week in job-related training. 64% spent 0-9 hours in training, compared with 39.3% for all people. However we are unable to "use" this information so they are therefore excluded from the table, other than being included in the first column on employment.

The third column identifies the proportion of managers going on external training courses during the previous twelve months. It will be recalled from Table 1 a number of surveys which could have been used here and that the results would have differed. Our judgement is that the Skills Needs in Britain (1998) and the Forum of Private Business (FPB) (1998) surveys are the most appropriate. This is because the former is the most comprehensive government survey of the topic and is recent. It also has the great merit of reporting the responses of individual workers/managers, rather than those of the enterprise as a whole. We can therefore use data on the number of workers participating in training, rather than the information on whether training is provided for some – but not for all – workers. Unfortunately coverage of the smallest firms does not exist.

The FPB survey is also recent, but has the disadvantage of referring to the business and not to individual workers/managers. Nevertheless, it provides data on the smallest sizes of firms, which are omitted from other surveys.

Table 2. "External" management training market in the United Kingdom

Firm size	How n peop emplo ('00	ole yed ¹		centage of nagers ²	Percentage going on external training courses last year ³	Total numbers going ('000)	Days per person⁴	Total person days ('000)	Daily charge (GBP) ⁵	Total cost (GBP million)
0	2 8	366			?	?				
1-9	3 5	502		22	37	285	2.2	627	50	31.4
10-24	7		7		44	161	2.4	386	100	38.6
	30	050								
25-49	_			12	51	187	2.7	505	100	50.5
50-99	1 (071			57	73	2.7	197	100	19.7
			_							
100-249	1 4	473			66	87	2.4	209	150	31.4
				9						
250-499	1 '	118			75	75	2.8	210	150	31.5
500+	7 9	993	(oot	7	82	459	2.9	1331	250	332.6
All Firms			(est.))						536

Sources:

The previous section showed that the likelihood of participating in external training – which was normally formal – increased with firm size. However, the UK studies suggest that, if managers do participate in training, the number of days taken varies only slightly with firm size. The column shows that the number of days per person varies from 2.2 in very small firms to 2.9 in large firms.

It has been difficult to obtain data on typical charge rates for firms of different sizes. We have therefore been forced to use highly subjective estimates from our own institution on these daily charges.

Finally, it must be emphasised that the Skill Needs in Britain Survey asked respondents whether they had ever received off-the-job training from their employer. We have made the assumption that this took place in the last year. Clearly, this is likely to be an overestimate but we have no basis for modifying the assumption.

Given these assumptions, we therefore estimate that the total external management training market in the United Kingdom could be as high as GBP 536 million. Using the EU definitions, we view the scale of the market for different sizes of firms as:

• Micro enterprises: GBP 31.4 million.

• Small enterprises: GBP 89.1 million.

^{1.} How many people employed: Small Firm Statistics, Department of Trade and Industry, 1998.

^{2.} How many managers: Cambridge Business Research Centre, 1998.

^{3.} External Training Last Year: Skill Needs in Britain (1998) and Forum of Private Business (1998) – linterpolations.

^{4.} Days per year: Welch (1996).

^{5.} Daily charge: Warwick Business School Estimates.

• Medium enterprises: GBP 82.6 million.

• Large enterprises: GBP 332.6 million.

Market suppliers

Table 3 shows the sources of formal training used by small and large firms, as identified by Welch (1996). Unfortunately it is not easy to "convert" the data into "market share" information, since the table simply shows, for the firms indicating some participation in management training, the type of "supplier". It is also clear that the supplier varies by firm size – despite the incomplete information on this topic. The fact that large firms are significantly more likely to be represented – because they are more likely to provide training – also has to be taken into account.

Nevertheless, it is clear that, for both large and small firms, the dominant supplier is the private sector, identified by about half of small firms. This, however, does not mean that the private sector has half the marketplace. In fact, there is a striking diversity of suppliers including universities, colleges, professional and trade institutions. For large firms, their own internal human resource departments are also used frequently.

Table 3. Training providers

		Total %	Small firms	Large firms
1.	Independent private trainer	57	54	62
2.	University business school	28	22	35
3.	Internal human resources department	28		
4.	College	26		
5.	Professional institute	24	19	29
6.	TEC Business Link	17		
7.	Trade association	17		

Taking account of these elements it is probably appropriate to divide the percentages in the total column of Table 3 by a factor of at least two to get "market share". The key exception for small and medium-sized firms is likely to be the internal human resource department, which is unlikely to exist in such firms.

If such a calculation is used, in the SME management training market of approximately GBP 200 million per year, the market would be "shared" in the following way:

• Private sector: GBP 60 million.

• University business school: GBP 25 million.

• Professional and trade associations: GBP 40 million.

• Other colleges/universities: GBP 25 million.

Who pays?

Although the dominant supplier of management training to SMEs in the United Kingdom is the private sector, it does not necessarily follow that there is no public financing. The key sources of public funds are Training and Enterprise Councils (TECs)/Business Links. These are publicly funded bodies with performance-related contracts with government, yet independent local companies led by local business people. Their mission is to encourage economic growth through effective training and enterprise. In 1997/78, TECs received GBP 730 million from the taxpayer, of which GBP 340 million was directed towards the adult unemployed. TECs/Business Links enter into contracts with colleges, private suppliers or other groups to provide training, and their funds are used to "subsidise" the trainee. Hence, although the trainees have the training *provided* by private or other groups, a *public* cost is being paid.

For 1999/2000, for England, while there will be possibly considerable public monies, spent on training in small firms, it is difficult to disentangle the extent to which, for example, work-based training for young people takes place in large or small firms. It also remains the case that our prime focus is upon examining expenditure on *management* training in small firms.

Given this focus, the prime stream of public money is provided from both the Department for Education and Employment (DfEE) and thDepartment of Trade and Industry (DTI) to cover the operations of Business Links. In 1998/99, the combined budget was GBP 142 million. For 1999/2000, the DfEE budget is forecast to rise but, at the time of writing, the DTI component had not been specified.

The bulk of this expenditure is likely to be devoted to a range of "support services" primarily to SMEs. Although it appears almost impossible to isolate this expenditure precisely, very little is devoted to formal management training of small firm owners/managers. The bulk of the resources are devoted to covering part of the costs of, for example, Personal Business Adviser (PBA) Services. PBAs provide specialist and general counselling and advisory services to small enterprises, with the long term objective of achieving a revenue stream from the client to make the operation self-financing. For a review of Business Links, see Ernst and Young (1996).

A second illustration of the intertwining of public/private funds in the provision of management training for small firms in the United Kingdom is illustrated in the Small Firms Training Loans Scheme, details of which are shown in Box 1.

Overall, then, it is difficult to identify the scale of public subsidies in this area, but given that the total SME management training market is only GBP 200 million, it is likely that the "subsidised" component is significant.

Small Firms Training Loans Scheme

The UK Department of Education and Employment (DfEE), in partnership with eight leading banks provides assistance to businesses through the Small Firms Training Loans Scheme. Businesses can obtain deferred repayment on loans from GBP 500 to GBP 125 000 to meet the costs of training and/or training advice bought in from consultants. No payments are made for up to 12 months from the start of the loan. The interest is paid by government (DfEE). Training has to be "formal", but can be full-/part-time, distance learning, in-house or external.

City of Norwich College Scheme

National Westminster Bank pioneered this scheme in Norwich. Individuals starting a business and seeking account facilities with Nat West were offered the option of undertaking a Start Up Business Course at the college, in return for lower bank charges or lower borrowing rates. The concept was that if the course could lower the failure rates of start up businesses the bank would benefit in terms of lower costs, hence financing the lower rates. The scheme has been extended, geographically, and participation by banks extended to include Midland and Lloyds TSB. An evaluation of the impact of the scheme is currently in progress.

What impact?

One of the conclusions of a review of some of the UK evidence on the impact of "training" on small firm performance was that the key UK reviews found it difficult to relate training provision for small firm workers to corporate performance, but there was evidence of individuals benefiting from training provision.

This section reviews, in more detail, one of the few UK schemes focused exclusively upon small firm training – the Small Firms Training Loan Scheme (SFTL). This scheme covers all workers, and is not limited to owner/managers.

The SFTL has recently been officially evaluated by UK Research Partnership (1999). SFTL has been in operation since 1994 and the loans made over almost four years until May 1998 were scrutinised. During that time 346 loans were made and the total amount loaned was GBP 2.1 million. The median loan size was GBP 3 671. Barclays Bank provides nearly half (48%) of all loans.

The positive findings of the study are:

- Those firms which participated in SFTL were appreciative, with 81% of businesses saying it works well.
- 79% of SFTLs went to micro firms with ten or fewer workers and 44% went to firms with fewer than three employees.
- Since being in receipt of the training loans, among a sample of survivors, 46% had increased employment, 35% have stayed the same and 18% had experienced falls in employment.
- The annual cost of the scheme is trivial (about GBP 56 000 per year), covering the interest repayment, holiday and staffing.

The less positive findings highlighted by the evaluation were:

- Awareness of the scheme by small businesses, their advisors and even their bankers is extremely low. SFTL has no budget allocated for marketing/publicity.
- Only in 17% of the cases would the training have clearly *not* gone ahead without SFTL. There is therefore considerable "dead-weight" in the scheme.
- The application form for SFTL is 12 pages long. Even the "standard" bank application form for a loan is only four pages long.

The above evaluation is very helpful in highlighting the extremely low costs of the scheme to the taxpayer and the considerable opportunities there clearly are in increasing take up by heightening awareness and reducing the bureaucracy associated with the scheme. It also illustrates that the small firms that participated in the scheme, and that survived, appeared generally to have increased employment.

However, it is also important to point to the issues which the evaluation does not seek to address. In terms of evaluation methodology this study reaches Step 3 in the "Six Steps" index of sophistication (Storey, 1999). It reports expenditure on the scheme and the views of recipients. It does not seek to estimate the "additionality" of the scheme by comparing the "assisted" firms with a group of "controls". It is therefore not possible to infer the benefits either from the SFTL as it is currently operated, or if it were to be expanded in scale.

Role of universities

Universities can play a key role in influencing attitudes to enterprise and entrepreneurship. As noted above, at least 10% of external formal management training in the United Kingdom is provided by universities – normally business schools. As an illustration, the box below shows the range of management training programmes offered by the University of Warwick, SME Centre.

Universities can also play a key role in influencing the attitudes of their students towards entrepreneurship and starting their own businesses, particularly in areas of technological sophistication. They can also be very important in providing a range of advisory and other services to small local businesses wishing to use the technical expertise available.

To encourage this development, the UK government has recently announced a fund of GBP 25 million, against which it will receive bids from up to eight universities to develop programmes to develop entrepreneurship. Clearly a key component of this will be teaching of students, but also the provision of management training for SMEs, their owners and their managers.

Warwick Business School

Business Growth Programme: For owners/managers of SMEs

Runs for ten months, comprising 12 participative

businesses - focused workshops

Management Development Programme: Seeks to enhance the strategic awareness

and management skills of key SME managers.

Duration one year.

Professional Development Programme: For "professionals" either in their own business or

in an organisation wishing to improve business

and management skills.

Customised Management and Development

Programmes:

These are focused on specific customer

requirements.

BIFFA Business School: The BIFFA Waste management programme. In 1999,

38 managers from the United Kingdom and Belgium

were scheduled to participate.

Conclusions

• The total annual value of this market for SME management training in the United Kingdom could be up to GBP 200 million.

- Just over one-quarter is supplied by the private sector, with colleges/universities and trade/ professional institutes also important.
- It is difficult to determine the precise extent to which this total market is "underpinned" by public subsidies because these are not "transparent".
- Without subsidies the market would differ markedly in scale and characteristics.

Evaluation of the impact of the public assistance is starting to take place and is becoming more sophisticated, but it is still difficult to measure "additionality" confidently.

REFERENCES

- Amos, E., J. Spiller and D.J. Storey (1997), "The Middle Market. How They Perform: Education, Training and Development", FMI/Coopers & Lybrand/Warwick Business School.
- Chrisman, J.J. (1997), "The Economic Impact of Small Business Development Centre Counselling Activities in the United States, 1994-5", unpublished report.
- IKEI (1998), "Training Processes in SMEs: Practices, Problems and Requirements", Leonardo Programme, European Report, Ref. E/12234.
- Storey, D.J. (1999), "Six Steps to Heaven: Evaluating the Impact of Public Policies to Support Small Businesses in Developed Economies", in D. Sexton and H. Landström (eds.), *Handbook of Entrepreneurship*, Oxford, Blackwell.
- Welch, B. (1996), "Developing Managers for the Smaller Business: A Report on Training and Development Needs", Foundation for Management Education, London.
- Westhead, P. and D.J. Storey (1997), "Training Provision and the Development of Small and Medium Sized Enterprises", Department for Education and Employment, Research Report RR.26.

Chapter 6

UNITED STATES

Introduction

Entrepreneurship and risk taking are often viewed as core values in US society. Small business – as a reflection of the individual seeking to better his or herself – is seen to reflect the aspirations of Americans, even though a smaller proportion of the US workforce is employed in small firms than in either Canada or the United Kingdom.

The attraction of the small business to Americans is that it reflects the cult of the individual who succeeds or fails through his/her own efforts. Such individuals learn for themselves and are motivated by a recognition that they can achieve through their own efforts. The role of government in this is modest. Currently the philosophy of the most important "arm" of government – the Small Business Administration – is to provide the environment in which small firms can thrive. It implicitly believes that Americans have the entrepreneurial urge and that, with the exception of "minority" programmes, its prime role is to ensure that natural entrepreneurship is allowed to flower.

This chapter examines the data on training in firms of different sizes in the United States, and how they vary by occupational groups, given that our prime interest is in managers. It then reviews the existing management training programmes for small firms, which are modest given the "philosophical" comments noted above. Finally, it presents some material on the entrepreneurial role played by universities in the United States.

Formal training for managers: by establishment size

Table 1 shows the provision of formal training by establishment size in the United States. It draws upon two surveys of employer-provided training, the first in 1993 and the second in 1995 undertaken by the Bureau of Labor Statistics (Frazis et al., 1998). The table is in two parts: the left-hand side shows the probability that an individual establishment will provide formal training to any of its workers. The right-hand side shows the probability that an establishment will provide formal management training to any of its workers. It should be noted that the word "establishment" is used and not "enterprise".

The 1993 survey included establishments of all sizes, including the very small with fewer than 50 workers. Unfortunately this was not the case for the 1995 survey which only included establishments with 50 or more employees.

Table 1. Formal training provision by establishment size in the United States

	Any form	al training	Any manage	ment training
Establishment size	1993 survey	1995 survey	1993 survey	1995 survey
0-9	0.61		0.14	
10-24	0.84		0.39	
25-49	0.89		0.42	
50-99	0.98	0.91 (0.62)	0.62	0.59 (0.08)
100-249	0.98	0.93 (0.70)	0.74	0.72 (0.21)
250-499	0.99	1.00 (0.78)	0.82	0.87 (0.16)
500+	1.00	0.98 (0.71)	0.91	0.95 (0.18)

Source: 1993: Survey of Employer Provided Training.

1995: Survey of Employer Provided Training: Employer Questionnaire and Employee Questionnaire.

Examining the 1993 survey results, it is clear that the probability of an establishment providing formal training (for any of its workers) increases with firm size, with only 61% of establishments with fewer than ten employees providing training, compared with 100% of those with more than 500 workers. For the provision of formal management training, 14% of the smallest establishments provide such training, compared with 91% of large firms.

Similar findings are apparent from the 1995 survey, and it is mildly reassuring that the survey results in 1993 and 1995, for those establishment sizes where it is possible to make a comparison, are broadly similar.

In broad terms, formal management training is very unlikely to be provided in businesses with fewer than 50 workers; here only about 40% or less of such establishments provide formal management training for any of its workers. However, this increases substantially with increasing size according to both the 1993 and 1995 surveys.

Such a finding is to be expected given that the question is about provision of formal management training for *any* workers. Hence, it is likely that this will increase with firm size, simply because there are more individuals eligible for formal training. To overcome this problem, the third column in each of the half of the tables – with the data in parentheses – refers to information provided not by the employer but by the employee. Individual employees were asked whether they personally received formal training between May and October 1995. Here the impact of establishment size is less clear. Nevertheless, it is the case that employees in establishments with between 50 and 100 workers are less likely to be in receipt either of any formal training, or of management training, than employees in larger establishments.

Unfortunately, as noted earlier, we are not able to examine this relationship for establishments with under 50 workers since the data were not collected. This is particularly unfortunate since it is those establishments with fewer than 50 workers that appear much less likely to provide any training for their workers.

Overall, the probability of provision of formal training increases monotonically with size of establishment. However, it is less clear whether the probability of any individual worker receiving formal training is continuously and monotonically related to establishment size.

Occupational groups

One factor influencing the provision of formal training in general, and management training in particular, by establishment size, is the occupational distribution of the workforce. This issue is examined in Table 2, but only for the 1995 data covering establishments with 50 or more employees. It shows the probability of an individual, in the four identified occupational groups, reporting that he/she had received formal training.

The final row of the table shows that the two groups of workers most likely to report receiving formal training are managers and professional/technical staff, more than 80% of whom received formal training. Clerical and production workers were significantly less likely to receive formal training.

Perhaps of prime interest are the results for managers. Here Table 2 shows a clear and monotonic relationship between establishment size and the probability of managers being in receipt of formal training. Thus, 63% of managers in establishments with 50-99 workers report receiving formal training, compared with 100% of those with 500 or more employees.

Table 2. Occupational groups reporting receiving formal training

Establishment size	Manager	Professional/technical	Clerical	Production
50-99	0.63	0.82	0.58	0.72
100-249	0.78	0.82	0.82	0.56
250-499	0.94	0.86	0.62	0.79
500+	1.00	0.86	0.74	0.65
Average	0.80	0.84	0.71	0.66

Source: 1995: Survey of Employer Provider Training: Employee Questionnaire.

This contrasts with the other occupational groups. For example, irrespective of establishment size, the professional and technical worker is almost equally likely to receive formal training; as for clerical and production workers, the relationship with establishment size is very mixed.

Hours of training

In a separate survey by BLS a sample of employees were asked to log their training activities over a ten-day period and this was subsequently scaled up to cover the six months between May and October in 1995.

Table 3 reports the hours of formal training received by the four identified occupational groups and four establishment sizes for the six months in 1995.

Table 3. Hours of formal training, by occupation group, May-October 1995

	N	Managers	nagers Professional/technical		Clerical		Production	
Establishment size	All	Management training	All	Management training	All	Management training	All	Management training
50-95	0.18	0	0.76	0.36	0.17	0	0.16	0
100-249	0.11	0	0.73	0.01	0.23	0	0.66	0.01
250-499	0.34	0.26	0.70	0.01	0.71	0.34	0.37	0
500+	0.29	0	1.01	0.07	0.65	0	0.62	0
Average	0.14	0.03	0.86	0.04	0.42	0.05	0.51	0.01

Source: Employee Log: Survey of Employer Provided Training 1995.

The final row of the table shows the average hours of formal training undertaken by the four groups. It shows clearly that the professional/technical occupational group is likely to have had significantly more formal training during this period than any other. On average they will have received 0.86 hours of formal training. This is more than twice that of clerical workers who, on average, will have received 0.42 hours, and also significantly more than production workers who will have received 0.51 hours.

The clearest contrast, however, is with managers who reported receiving only 0.14 hours of formal training during the six-month period. An examination of the extent to which the hours of formal training for managers varies with establishment size is shown in the first column of Table 3. It suggests that larger establishments, on average, provide more hours of formal training for managers than smaller establishments, but again this is not a clear and monotonic relationship.

What the BLS survey does, uniquely, is to make a distinction between training for managers and management training. The workers who completed the training logs were asked to identify the types of formal training which they received. For example, they were required to separately identify whether they received professional and technical skills training, computer programming training, occupational safety training, production training, basic skills training, etc. Hence it was quite feasible for managers to receive formal training to enhance their computing skills, rather than formal management training. Equally, it was feasible that clerical workers could have received what they viewed as management training, in the sense of training to manage other clerical workers, even though they were not classified by their occupation as being managers.

The implications are seen in the second column, headed management training, for each of the four occupational groups. Managers, on average, received 0.14 hours of formal training, but only 0.03 hours of this was in management training. Indeed, of the four occupational groups, it was only production workers who spent fewer hours in management training than managers themselves. Thus professional and technical workers and clerical workers both devote more hours to formal management training than managers.

This therefore raises an important question as to whether the focus of attention should be upon training for managers or management training. They are clearly different, but given the fact that we do not have any comparable data for countries outside the United States for the amount allocated to training, our focus of attention will continue to be training of managers, rather than management training. Nevertheless it is crucial to realise that these are not the same items.

Formal and informal training for managers: by establishment size

Thus far the data presented have been for formal training but, in practice. much of the passing on of expertise in the workplace takes place informally. Sometimes this is highly informal – such as "picking up tips" from more experienced workers – the so-called "sitting by Nellie" syndrome. On other occasions it can be rather more focused, such as group discussions or demonstrations. Nevertheless it does *not* satisfy the definition of formal training as "planned in advance with a structured format and defined curriculum".

The survey evidence presented in Table 4 suggests that, while small establishments are (generally) less likely than large to provide formal training for their employees, the matter is less clear in the case of informal training.

The first two groups of columns show the proportions of workers reporting being in receipt of formal and informal training with their current employer. While formal training clearly is influenced by establishment size, informal training appears to be provided by all sizes of establishment.

		Percentage of workers receiving training		Hours of training received May–October 1995		Wage and salary costs (USD)	
	Formal	Informal	Formal	Informal	Formal	Informal	
50-99	79	97	8.2	31.9	110	352	
100-499	85	95	13.5	34.5	215	439	
500+	88	96	16.6	26.0	307	446	

Table 4. Formal and informal training

The second two groups of columns show hours of training received. Again, for formal training, this is clearly related to establishment size, being twice as high (16.6) as in small (8.2). However, for informal training there is no relationship with establishment size. Perhaps of equal interest is that the total number of hours devoted to *informal* training is substantially higher for all sizes of establishment than for *formal* training.

Finally the third two groups of columns suggest that the wage and salary costs per employee of training rise clearly with establishment size. Nevertheless, in relative terms, smaller establishments devote more of their resources to informal training, whereas larger establishments focus more on formal training.

Management training programmes for SMEs in the United States

Public expenditure on formal programmes to encourage and develop entrepreneurs through some form of managerial training in the United States is modest. As noted in the introduction, the implicit assumption is that everyone in the United States is an entrepreneur or a potential entrepreneur; that entrepreneurship is "taught" by the culture; that practical information is available to individuals running their businesses through, for example, the free-phone call system operated by private sector suppliers such as the large computer companies.

A second element is that the concern about business failure, which characterises many European countries, is almost non-existent. In essence, the US philosophy is that those individuals who are sufficiently entrepreneurial to start their businesses will do so. Once in business they will learn from

their own experience. In many instances these individuals will fail, and some will be put off starting their business again by realising that they did not have the necessary qualities to be a successful entrepreneur. On the other hand some (correctly or incorrectly) will view their business failure as bad luck or because of a failure which they can rectify. In this case they may be more likely to be tempted to start a business again. The US assumptions are that the individual, and society as a whole, recognises it is possible to have bad luck; it also assumes the individual learns particularly from the bad judgement which he or she exercises.

Only "minorities", such as immigrant groups that are not wholly immersed in the US culture, and women are currently the explicit focus of publicly funded programmes to enhance managerial learning in small businesses.

Table 5 shows that there are four primary organisations or types of organisations providing management training/information for SMEs in the United States.

The most relevant is the Small Business Administration. It has three mainstream programmes which it funds – Small Business Development Centre (SBDCs), Service Corps of Retired Executives (SCORE) and Business Information Centres (BICs). SBDCs and SCORE will be reviewed in more detail in the following sections.

Until recently the SBA had a relatively poor record in lending to women and minorities and so a number of new programmes have been developed, together with advisory services.

Table 5. Management training for SMEs in the United States

- 1. Small Business Administration:
 - Small Business Development Centres (SBDCs)
 - Service Corps of Retired Executives (SCORE)
 - Business Information Centres (BICs)
 - Minority Programmes (TBIs, OSCS, WNET, VET)
- 2. Department of Commerce:
 - Export Assistance Centres
 - E-Tap
- 3. Community colleges
- 4. Private sector

In addition, the SBA also funds business counselling and training from the Tribal Business Information Centers (TBIs) and One-Stop Capital Shops (OSCS). There are currently 20 TBIs serving native American-Asian communities. TBICs seek to offer entrepreneurs in those areas, state of the art computer technology as well as one-to-one counselling and business management workshops. The OSCSs focus their attention upon selected distressed communities, again providing the full range of SBA services.

Probably the only "mainstream" entrepreneurial activities receiving support from the SBA are the efforts devoted to women business owners. For example, the Women's Demonstration Programme provides women with long-term training and counselling in all aspects of owning or managing a business. In a separate programme (WNET), experienced women business owners act as mentors for other women and share their experience and skills.

Finally, the Veterans Entrepreneurial Training (VET) programme provides long-term (up to 12 months) in-depth entrepreneurial training to war veterans. This includes business planning, computing skills and marketing.

Table 5 shows that, in addition to the Small Business Administration, the Department of Commerce is active in seeking to encourage and facilitate SMEs to export, particularly to the adjacent countries of Mexico and Canada. Two programmes will be discussed below: the establishment of export assistance centres and E-TAP.

The education sector in the United States is a major provider of management training for SME owners. For example, the community colleges in the United States provide management training programmes – mostly targeted towards owners and managers of SMEs – and these are extremely popular. The community colleges often operate in conjunction with the Small Business Development Centres (SBDCs) to provide a wide range of courses, some for credit and others not. Community colleges also run specialist programmes for the training of managers in small enterprises.

Finally, Table 5 refers to the private sector as providing management training for SMEs. While the private sector's formal contribution to provision of courses, etc., is modest, it is actively involved in delivering programmes in conjunction with SBDCs. Much more important, however, is that the private sector sells products and services to SMEs. As part of that sale, the SME owner obtains access to "after-sales service" which involves the ability to contact the seller to address any problems which the purchaser encounters. This is particularly important where the purchase is of computer-related information/packages. This is particularly helpful to small business owners who require specific answers to specific questions, rather than having time to "read the manual". At a superficial level, these "after-sales services" appear much more available in the United States than elsewhere.

Small Business Administration (SBA)

The Small Business Administration (SBA) is the federal government department charged with responsibilities for promoting and developing small businesses in the United States. It has five key functions:

- Providing access to information.
- Business counselling and training.
- Lending programmes.
- Other financial assistance.
- Special focus programmes.

The Small Business Administration was established in 1953 and currently has a portfolio guaranteeing over USD 27 billion in loans to 185 000 small businesses. However our focus of attention is upon the second of the five key functions – business counselling and training. As noted in Table 5, the SBA activity in this area is undertaken through three programmes – the Small Business Development Centres, of which there are 950, and the 13 000 individuals who work as part of the Service Corps of Retired Executives (SCORE). In addition Business Information Centers (BICs) exist throughout the United States. They provide assistance either through computerised information searches or through SCORE volunteers.

Small Business Development Centers

Rationale and description

Table 6 provides a brief description of SBDCs. SBDCs seek to offer one-stop assistance to small businesses. The nature of that assistance is tailored to the needs of the community and its clients. It is a partnership between the SBA, the private sector, the educational community and central, state and local governments. The nature of that partnership however varies from one SBDC to another.

Table 6. Small Business Development Centres (SBDCs)

Function	To provide management assistance to current and prospective small business owners.		
Modus operandi	To collaborate with the private sector, the educational community and other public organisations.		
Scale	245 766 clients counselled) in 1997.		
	377 651 trainee attendees).		
	57 SBDCs – one at least in every state.		
	950 service locations.		
Funding	The Small Business Administration provides up to 50% of the cost of the SBDC.		
	The remainder comes either from public or private sources. The non-SBA public funding is mainly from state colleges or universities.		
	SBA funding currently is around USD 150 million.		
Evaluation/impact	Chrisman's recent evaluation of counselling (not training) suggests:		
	Due to SBDC activities:		
	i) 93 000 new jobs created at a cost of USD 1 388 per job.		
	 ii) Counselling activities generated USD 4.19 in tax revenues for every dollar spent on the entire programme. 		
	iii) USD 24.20 was leveraged from external sources for each dollar expended on SBDCs.		

SBDCs seek to provide up-to-date counselling, training and technical assistance in all aspects of small business management. The distinction between training and counselling is that training is a group activity, whereas counselling is generally viewed as one-to-one advice and assistance. It is therefore focused exclusively upon the particular needs of the SME.

The scale and changes in scale of SBDC activities since the end of the 1970s are documented in Table 7. This shows that in 1977 the prime focus of SBDC activity was in training activities which had 15 times as many clients as counselling. However, by the mid-1980s this had fallen to a ratio of about 3:1 and has since fallen to a ratio of about 1.5:1. This demonstrates that there has been a refocusing of SBDC activities away from formal training and towards placing a greater emphasis upon counselling.

Returning to Table 6, this emphasises the importance of partnerships between the public and private sector in providing training/counselling services. The SBA funds provide up to 50% of the cost of SBDCs with the remainder coming from public and increasingly, private sources.

Total SBA funding in the most recent year is about USD 150 million. This can be considered as approximately USD 3 per small business employee, where the small business is defined as having fewer than 500 employees.

Impact

The SBDC programme is fortunate in having been carefully appraised over a number of years by the external academic James Chrisman, whose work has been extensively documented both in reports and in the academic literature.

The Chrisman results for 1994-95 are reported in Table 6. It has to be recognised that the evaluation is conducted only for the counselling, and not for the training, services.

Nevertheless the results are extremely impressive. They suggest that SBDC counselling activities – both pre-start up and for existing business – have contributed significantly to job creation, to tax revenues and to the leveraging of external finance from the private sector.

However Chrisman's methodology has been subject to a number of criticisms over the years, many of which he has correctly rebutted. In essence Chrisman identifies the economic impact of counselling activity, comparing the increases in sales and employment experienced by satisfied SBDC clients, with average changes in performance for all businesses in the United States over the same period.

The key criticisms were by Ellstrott (1987) and Wood (1994). Ellstrott suggested that the methodology used by Chrisman of comparing SBDC clients with business as a whole was misleading. In particular SBDC clients may not be identical in terms of observable characteristics to US small businesses in general. For example, they may be in different sectors or be of different ages – all of which may influence their performance. Chrisman has attempted to respond to this by modifying his methodology, but essentially still continues to compare SBCC clients with small businesses in general.

The second criticism by Wood suggests the economic gains generated by small businesses which receive assistance are offset by compensating losses to other companies. Hence assistance programmes are always fundamentally flawed. Not surprisingly, Chrisman and McMullen (1996) reject this argument. Their view is that Wood's analysis is based upon a static economic theory whereas economic development is a more dynamic and complex process. They also argue that Wood's suggested improvements are equally suspect.

Using the criteria set out by the current author (Storey, 1999), there may be a tendency to overestimate the impact of SBDC activities using the Chrisman methods since his analysis reaches only Step four on the "Six Steps to Heaven" criteria. In particular it is necessary to take into account observable differences in the SBDC client population base – such as age, sector, ownership, size and geography – rather than assuming that SBDC clients have similar characteristics to the base population. These are called "observable" differences. Second, and equally importantly, there may be motivational differences between businesses seeking SBDC support and other businesses. These are called "unobservables", but if there are differences – such as SBDC clients being more motivated to grow, possibly having grown more rapidly in the past – then simply observing the differences between SBDC clients and "typical US small businesses" will attribute the difference in enhanced performance to SBDC assistance, rather than to the differences in motivations between the firms. It therefore runs the risk of overestimating the impact of SBDC's activities.

To take this into account it would be necessary to identify a group of businesses where a proportion had access to SBDC and the others were precluded. At a later point in time the performance of the two groups of businesses could be examined to determine the differences in performance, not only in terms of growth but also in terms of survival.

Nevertheless, while this would be a significant improvement over the current methodology, it is not possible to provide an indication of the impact which this would have upon the figures presented in Table 6. Currently the studies by Chrisman provide the best available basis on which to evaluate the impact of SBDC and suggest it has had a positive impact upon its clients.

Table 7. US Small Business Administration: Small Business Development Centre Program

Fiscal year	Clients counselled	Training attendees
1977	2 000	30 000
1978	2 600	34 000
1979	3 000	37 000
1980	17 482	36 618
1981	14 202	40 381
1982	24 025	54 594
1983	42 506	94 019
1984	50 115	102 384
1985	66 745	182 417
1986	72 153	258 991
1987	56.034	219 638
1988	128 514	248 298
1989	171 700	283 257
1990	191 865	274 437
1991	190 602	279 534
1992	222 497	319 535
1993	230 483	326 289
1994	224 995	331 987
1995	228 424	341 148
1996	237 107	333 513
1997	245 766	377 651
Grand total	2 423 815	4 206 191

Service Corps of Retired Executives

SCORE is a second key source of counselling to small businesses. This is a non-profit association of more than 12 000 volunteers throughout the United States who are trained to act as counsellors, advisors and mentors to potential and actual owners of small businesses.

While some of these counsellors are still working, many, as the name implies, are retired but with a vast amount of practical business experience which they are keen to pass on to aspiring entrepreneurs. They receive no fee for their input.

SCORE primarily offers advice and counselling in a one-to-one context, frequently focusing upon writing a business plan, market assessments or buying a business.

However, as shown in Table 8, SCORE also provides low-cost workshops and seminars.

No formal evaluation of SCORE is available, but given the extremely low budget (USD 3.5 million annually) – primarily because its counsellors are volunteers – it must constitute extremely good "value for money". Even when account is taken of the fact that SCORE is normally

located – free of charge – in SBA premises, the "real" budget of SCORE is unlikely to significantly exceed USD 6 million.

Table 8. Service Corps of Retired Executives (SCORE)

Function:	To provide personalised, confidential one-to-one counselling to help people start and operate a successful small business.		
Modus operandi:	Delivered in 389 local "chapters", primarily by 12 000 mostly retired men and women who volunteer their counselling services, mainly to pre-start-up businesses.		
Scale:	177 000 counselling cases.		
	116 000 workshop participants.		
Funding:	USD 3.5 million.		
Evaluation/impact	No formal evaluation.		

Export Trade Assistance Partnership

E-TAP finds groups of 10-15 small firms who are "export-ready" in the sense of having a product or service which could be sold abroad and where there is sufficient management skill to develop a new market. These firms are visited by SCORE or SBDC counsellors and appropriate counselling/training workshops organised to ensure "export readiness". After this a lead counsellor is appointed to each firm. One-to-one counselling then takes place and a recommendation made for an appropriate international trade event which the small firm may attend.

Table 9 shows that it is difficult to estimate the precise scale or impact of such schemes. Funding devoted to counselling and information provision for small and medium-sized firms in export assistance services is approximately USD 100 million. Impact evaluation is, however, recognised to be problematic. Nevertheless, it is in progress and less speculative results are expected in future.

University small business/entrepreneurship centres

In recent years there has been increasingly persuasive evidence presented about the link between universities and local economic development. In essence it is argued that universities constitute a stock of potentially commercially exploitable knowledge. The individuals who work in universities have, often highly sophisticated, knowledge from which they can develop business ideas, either for themselves or in conjunction with others.

The classic examples were the growth of technology-based businesses in the Boston area, often by graduates of Massachusetts Institute of Technology (MIT), around Route 128 (Roberts, 1991). The development of Silicon Valley also saw a major role played by Stanford University.

Table 9. The Export Trade Assistance Partnership - E-TAP

Function	To assist the export trade development of targeted small businesses.			
Modus operandi	Providing small businesses with customised training and on-going, in-depth, one-to-one counselling before and after recommended international trade shows.			
Scale				
Funding		Provision of export assistance services in 1998		
		Counselling	Generating and providing information	
	Small	USD 59 million	USD 19 million	
	Medium	USD 27 million	USD 9 million	
Evaluation/impact	Work is in progress to determine the economic benefit from all trade promotion programmes. However data on "additionality" are not available and the results of the studies are judged speculative.			

However, while the quality of the science is clearly important, it is also the case that the business needs to be managed. United States business schools therefore have strong links both with other faculties within the university and within the local business community.

Two illustrations of this type of widespread and growing links are shown in the box below. The Centre for Advancement of Small Businesses is part of the School of Business and Public Management at George Washington University. It is clearly linked to teaching programmes within the school, particularly the MBA. The Thunderbird Centre in Arizona is less linked to the student community, and is more focused upon the delivery, often by phone, of immediate advice from experts. In no sense do these examples fully reflect the range of links that exist between many of the universities and the entrepreneurial community, but they do constitute interesting "case studies".

Centre for Advancement of Small Business, The George Washington University

- Provides hands-on tactical assistance to entrepreneurs on their most urgent needs.
- Student consultants analyse urgent problems.
- Provides practical, low-cost workshops that provide knowledge about current issues and skills key to management.
- Undertake specialised research projects relevant to the greater Washington metropolitan area.

Thunderbird: Americas Graduate School of International Managers

The Trade Assistance Service was created to assist SMEs seeking to enter or expand into international markets. It provides:

- · An immediate consulting hot line to experts.
- Specific market information.
- · Seminars.

Conclusions

- Entrepreneurship, individualism and risk taking are at the heart of US culture.
- The "teaching" of this is viewed as appropriate only for minorities.
- Managers in small firms are much less likely to receive formal training than those in large firms. For "informal" training the pattern is less clear.
- It is important to distinguish between management training and the training of managers.
- SBA funding for SBDCs is USD 150 million.
- SBDC consulting activity has been cost-effective in job creation.
- Universities have played a key role in local economic development.

REFERENCES

- Chrisman, J.J. (1997), "The Economic Impact of Small Business Development Centre Counselling Activities in the United States, 1994-5", unpublished report.
- Chrisman, J.J. and W.E. McMullen (1996), "Static Economic Theory, Empirical Evidence, and the Evaluation of Small Business Assistance Programs", *Journal of Small Business Management*, April, pp. 56-66.
- Ellsrott, J. Jr. (1987), "Procedure for Improving the Evaluation of SBDC Counsulting Activities", *Journal of Small Business Management*, pp. 66-71.
- Frazis, H., M. Gittleman and M. Joyce (1998), "Determinants of Training: An Analysis Using Both Employer and Employee Characteristics", Bureau of Labor Statistics, Washington, DC.
- Storey, D.J. (1999), "Six Steps to Heaven: Evaluating the Impact of Public Policies to Support Small Businesses in Developed Economies", in D. Sexton and H. Landström (eds.), *Handbook of Entrepreneurship*, Oxford, Blackwell.
- Wood, W.C. (1994), "Primary Benefits, Secondary Benefits, and the Evaluation of Small Business Assistance Growth", *Journal of Small Business Management*, Vol. 32, No. 3, pp. 65-75b.

ANNEX

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