



**Financing continuing
training:
what are the lessons
from international
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December 1994

Published by:
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The Centre was established by Regulation (EEC) No 337/75 of the Council of the European Communities, last amended by Council Regulation (EC) No 251/95 of 6 February 1995 and Council Regulation (EC) No 354/95 of 20 February 1995.

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THE STATE OF THE ART

CHAPTER 1 AXIOMS

INTRODUCTION

This report begins by considering what can and what cannot be said when comparing the experience of Member States in financing continuing training (Chapters 1 and 2). This assessment of the state of the art is followed by proposals about the next steps in the collective effort to learn from the Community's highly differentiated experience (Chapter 3). The second part of the report reviews evidence collected by CEDEFOP during the eighties. It begins with an illustrated guide to reading and using information about the financing of the Community's vocational education and training systems (Chapter 4). Then it exploits CEDEFOP's studies to crystallise out certain premises which may serve as foundations for further work (Chapters 5,6 and 7).

The taken-for-granted knowledge of readers from the other eleven Member States is frequently quite different from that of the author of a particular country study. The message which the reader receives is not the message which the author sends. Wherever key relationships are not made explicit or the context is not fully defined, readers have to make assumptions on the basis of their own experience and knowledge. Frustrating discussion at cross purposes ensues. In order to reduce this frustration it is necessary from the start to clarify what is at issue.

The most fundamental issue is also the central concern of CEDEFOP itself, i.e. the building of competences. To resolve any question concerning the finance of training it is necessary to go back to the basics of competence building:

- (i) How competences are formed
- (ii) The behaviour of those who contribute to the formation of competence, the individual stakeholders - employers, unions, public authorities, the workers themselves
- (iii) The inter-relationships between competence building and the behaviour of stakeholders, i.e. the process by which stakeholders collaborate in what is always joint production.

Competence formation

A competent person can demonstrate his or her capacity to reach levels of output, quality and speed in a particular job which might be summarised as experienced worker

standard. In order to do this a worker generally needs theoretical knowledge and appropriate skills. But she or he also has to know how to apply this knowledge and skill to the work process and how to solve live problems in the workplace. Competence formation is mere shorthand for a complex process which is as much a matter of successful application at the workplace as it is of acquiring measurable knowledge and skills. The ramifications of this intensely practical aspect of competence are so important to an understanding of the financing of training that it is necessary to spell them out.

Competence defined

Competence is defined and measured in terms of performance instead of the particular knowledge, skills and attitudes which are necessary but not sufficient conditions of effective performance. The ultimate focus of human resource development is not training (an instrumental activity), not skills (procedural knowledge), but competence.

Competence is a multi-faceted ability to perform activities satisfactorily, i.e. to a recognised standard, within an occupation. It includes the specific knowledge and technical skills needed for successful job performance. But CEDEFOP's attention cannot stop at the financing of skill formation. Beyond the acquisition of skills and of knowledge, competence includes a capacity to cope successfully with the uncertainties and irregularities of actual working life. This coping capacity is the basis of an effective worker's flexibility and adaptability.

The point has been made repeatedly over the years - but often ignored - that the newest competences, which both generate and absorb technical change on the basis of informal aptitudes, are not necessarily formally examined and certified. In some Member States qualification denotes paper certificates, sometimes of doubtful value. In other countries the term denotes capacity to do a job, i.e. competence, and that is the word used here. The effectiveness of either work experience or instruction as a route to competence is usually diminished if there is no real interaction between the two (Box A).

Box A Informal aspects of competence building

'Their acquisition happens more through day to day work than in the education and training system. They are crucially shaped by the organisation of work, and they permit the individual to maintain and develop capabilities for which formal education and training lay a foundation. Concepts of collective day-to-day learning are neglected in both the education and training systems as well as in the management and organisation of work forces. On the other hand, they are particularly needed in order to maintain the adaptability of the individual to new jobs and new contents of work.'

Sorge, 1983, p 36

There are many facets to the development of this coping capacity. One facet can be used here to illustrate its importance in understanding the financing of training. It is widely agreed that competent people learn a great deal about effective job performance unconsciously. This occurs when no one is consciously structuring their learning: there is no instruction. But, the learner at work is unconsciously counting the number of times that particular solutions succeed, and in what circumstances. In future trials he or she produces the most frequently successful solution. Performance is a process of situation matching (see Boreham, 1990).

There is support in many countries for the view that performance standards have to reflect an analysis of work functions which goes beyond the traditional description of a job as a bundle of occupational tasks and defines the required functions within the context of the team, the employing organisation and the industry sector. This perception needs to be brought together with the extension of our understanding of competence formation to include unconscious learning because more and more modern jobs - the ones most likely to survive - mix teamwork with discretionary procedures. Complex trial and error processes, involving automatic processing of frequency information, are tacit and cannot be verbalised (see Box B). They are a critical element in competence formation.

Box B Some types of expertise can be recognised but not defined by employers

'Some learning is unconscious and unverbalisable from the outset ... practice can improve performance without a corresponding increase in the ability to verbalise the procedures which have been learned ... giving verbal instructions in how to perform a task may increase the ability to explain it to others without increasing the ability to perform it ... a negative correlation has been found between the ability to perform a task and the ability to verbalise the relevant procedures.'

Boreham, 1990, pp 220-1

It follows that effective competence building requires an experiential dimension which is so 'real world' that it allows full scope for unconscious learning. Instruction alone is rarely enough. Training is not an effective route to competence unless instruction is married to the right kind of practical experience. Ryan has argued (1991) that any practical, on-the-job experience which is integrated with instruction has to be defined as training. To include structured practice on an equal footing with instruction is both common and technical usage (Box C).

Box C Training as instruction and practice

'Train' verb transitive 'bring ... to desired state or standard of efficiency etc by instruction and practice'

Oxford English Dictionary, 1974, quoted by Ryan, 1991, p 74

Two routes to competence

So competence can be achieved by either of two routes:

Experience-only:	Learning by experience, without benefit of instruction, which - eventually - produces a recognised standard of job performance.
Training:	Instruction complemented by structured experience in order to accelerate attainment of the same standard.

In reality, the experience-only route to competence comprises a range of learning activities, notably

- unconscious learning, to which reference has already been made; and
- self-conscious or reflective learning from one's own experience or from observation of other people's performance ('sitting next to Nellie').

Although it is still exceptional for work to be organised deliberately to assist learning, work and the way it is organised is so necessary to the effectiveness of this heavily-used alternative to training that the experience-only route will be referred to as work-led competence formation.

In order to build competence it is necessary for vocational education and training to use many of the same activities as work-led competence formation:

- on the job training relies heavily, but not exclusively, on learning by experience;
- off the job training, to be effective, is frequently related structurally to work experience, as it is in all forms of alternance.

But this route has one characteristic which distinguishes it precisely from work-led skill formation: it always includes instruction, i.e. the learning is planned, managed and monitored by someone other than the learner. It will be referred to as training-led competence formation.

In some jobs it would be difficult or impossible to become competent without training. But in a wide range of jobs, over all skill levels, there are many competences which can be acquired, albeit at different speeds and costs, either by experience-only or by training. In such cases, choice of the route to competence, and of the speed with which it is acquired, depends heavily upon the willingness of stakeholders to bear the consequential resource costs and to finance those resource costs which have to be financed.

What activity is being financed?

The costs associated with acceleration of learning may not be easy to identify. They are frequently difficult to measure. This is not the place to tackle so large a subject. But in this report it is essential to be very explicit about

- what activity is being financed (what training is)
- what cost is being financed (what is meant by cost) and
- where this activity fits within the total process of competence formation.

The cost which is being financed is material for Chapter Four on the flows of funds. But the activity which is being financed is not always clear in many of the financing studies. Despite the centrality of structured experience for on the job training, and of complementary experience for off the job training, very little information is available in the financing studies to show whether what is being financed is instruction alone, and all instruction, or whether it includes the financing of any practical experience necessary to the effectiveness of instruction. Ryan's very careful analysis of one of the largest and most successful of all surveys of on the job training (in the United Kingdom, 1986-87) shows that 'the estimates of durations and costs in OJT are highly unreliable and in all probability seriously upward-biased - almost certainly so for less skilled occupations' (Ryan, 1991, p 71). On the other hand, as Ryan also points out, the same employers' activities survey's exclusion of all the costs of learning by doing probably results in an opposite bias, i.e. an underestimation of employer costs.

The financing studies do report heavy expenditures on training by employers and by governments. It seems likely that they are a better guide to the financing of the instructional component in training than they are to the financing of training -led competence formation in its totality. There are two major reasons for exercising great caution about basing practical policy-making on the kind of data which is all that the authors of country studies had available to them:

Caution One: Financial cost has leverage over total resource cost, i.e. all economic inputs. But how this leverage works is generally quite specific to the firm or to the government programme in question. Certainly, the evidence is not available to generalise about this leverage in the way that would be necessary for policy-making.

Caution Two: There exists an equally great uncertainty about the relationship between financial cost and outcomes, i.e. training-led competence formation. It is the extent, role and cost of structured or complementary work experience, relative to instruction, which is the major source of this uncertainty.

Work organisation

Finance as a constraint in the training system

In terms of the demand for and use of competent people, work organisation is pivotal. The design of the financing studies could not ask for an account of contemporary changes in

work organisation. This was to risk misinterpretation since many of the changes in the pattern and volume of training which might be interpreted as a consequence of financial arrangements are likely to have been caused by quite other factors, not least by changes in work organisation.

It is a truism that the persistent and powerful feedback effects on skill production from the way that skills are used, misused or not used at all combine all the time with technological and market changes to influence the demand for skills, and to influence the inputs and outcomes from a training system, irrespective - more or less - of financing arrangements. It would be misleading to say, without qualification, that demand for training is not a function of cost. But, because of these powerful non-cost factors, and because so large a part of training cost is inseparable from production costs, demand for training is certainly not a direct function of cost. Some of the major training costs, especially the production lost while experienced workers act as trainers and while trainees learn, are frequently not accounted costs, the sort of costs which have to be financed.

So financing arrangements are in many cases best conceived as a constraint in the system, inhibiting the effect of some sources of demand for skills, amplifying the effect of others. Necessarily, the financing studies could only occasionally reveal tantalising glimpses of the way these arrangements interact with other factors to inhibit or to amplify.

A choice: high skills or low wages

It has been argued that mass production methods will continue to be important in many industrial sectors for a long time to come. But a growing proportion of the workforce must be in high performance organisations if they are to be paid high wages (see Box D). A necessary feature of these high performance work organisations is that they require an enhanced level of competence, and therefore of training, throughout their workforce (see Box E). Without this they cannot achieve the productivity and quality improvements which are the key to the economic success which is, in turn, the essential foundation for social progress.

Box D The mass production model of work organisation in the 1990s

'The premise is simple: break complex jobs into a myriad of simple rote tasks, which the worker then repeats with machine-like efficiency.

The system is managed by a small group of educated planners and supervisors who do the thinking for the organisation. They plan strategy, implement changes, motivate the workers and solve problems. Extensive administrative procedures allow managers to keep control of a large number of workers. This form of work organisation is often referred to as the 'Taylor' model.

Most employees under this model need not be educated. It is far more important that they be reliable, steady and willing to follow directions.

But in the world's best companies, new high performance work

organisations are replacing this 'Taylor' method. These companies are using a new approach to unleash major advances in productivity, quality, variety and speed of new product introductions.

Mass production methods will continue to produce high volume, inexpensive goods and services for a long time to come. But what the world is prepared to pay prices and wages for now is quality, variety and responsiveness to changing consumer tastes, the very qualities that the new methods of organising work make possible.

'Tayloristic' methods are not well suited to these goals. Firms struggling to apply the traditional methods of work organisation to more complex technologies, more frequent product introductions, increased quality requirements and proliferating product variety often create cumbersome and inefficient bureaucracies.'

America's Choice, 1990, p 2

Box E Skill requirements of new forms of work organisation

'The guiding principle of this new work organisation is to reduce bureaucracy by giving authority to direct workers for a wider variety of tasks ... Management layers disappear as front-line workers take over many of the tasks that others used to do - from quality control to production scheduling.

New forms of work organisation apply in some form to almost every industry. In a traditional American bank, for example, the functions of a teller are usually limited to accepting deposits, cashing cheques and recording loan and bill payments. The position is highly specialised. Some tellers deal with commercial clients, others with foreign currency transactions, other with travellers' cheques and still others with small account customers.

If a customer has a more complex transaction, seeks financial advice or is interested in bank 'products', the teller refers the customer to a back-up department, staffed in large part by college-educated customer service representatives. Some banks have even instituted different groups of back-up personnel who are organised by the complexity of the customer issue ... It is a highly 'Tayloristic' work design.

Most American banks have a turnover rate among tellers that averages more than 40 per cent a year, and in some branches can approach 200 per

cent ... Training for these jobs consists of four to six weeks of orientation and practice.

In a number of European banks, such as Hypo, Dresdner and the Bavarian bank in Germany, work is now being reorganised to assign greater responsibility to skilled financial 'clerks'. The individuals who fill these positions are actually viewed as 'front office' professionals rather than tellers. They handle all the functions of the average American teller, plus open new accounts, grant mortgages and loans, process commercial, foreign and consumer transactions, provide investment advice and sell stocks and bonds - functions performed by specialised departments in traditional American banks ...

The financial clerk position is regarded as an official profession for which one must train for three years in a competitive and rigorous apprenticeship program beginning at age 16. Learning does not end at apprenticeship: a university track or an industry supported professional banking academy provides considerable opportunities for advancement ...

Work reorganisations like this require big investments in training. Workers' pay levels often rise to reflect their greater qualifications and responsibilities. But the productivity and quality gains more than offset the costs to the company of higher wages and skills development.'

America's Choice, 1990, pp 39-40

The enabling technologies for this new type of work organisation are available. The choice which faces many companies and countries in the European Community is the same as that which faces the United States. It is a choice between high skills and low wages. As America's Choice put it (p 42):

'Work organisation changes drive the demand for high skills. But without a skilled workforce, most companies will settle into low wage organisations.'

Producing and learning

Apart from a few leading firms, there is a very long way to go before most employers in the Community can be said to have created a workplace which has a learning culture which is as effective as its producing culture. However, the need to reach international levels of competitiveness, and especially to raise quality, is forcing more and more large employers in the public and private sectors to reappraise their corporate cultures and priorities.

Over the last twenty years, the world has taken a different turning from that which was envisaged by the seers of the 1970s. Accelerating changes in demand, in competition, in production technologies and labour supply have generated unpredicted requirements for higher levels of competence at all levels of the workforce. The chain reaction is driven not merely by

change, but by uncertainty. Bailey (1990, p 41) reminds us that Schumpeter conceptualised technology as 'an open sea'. Twenty years ago, the fashionable response to accelerating change was to search for ways, as Daniel Bell put it, 'to iron out the indeterminacy of the future by means of charting the open sea.' Predictability was seen as essential to the retention of productivity gains from capital intensive production based on economies of scale. Technology would be used to make the world predictable.

It is necessary to recall these fantasies concerning the so-called post-industrial society. In its pure form the separation of thinking from doing was to be articulated organisationally into 'a separation from production of innovation, planning, research and learning' (Bailey, 1990, p 41). What actually happened (Box F) was the reverse of what was predicted. The unpredictability of markets and the non-determinism of technology and work organisations produced a growing requirement for competence formation which was more intensive and more extensive.

Box F More mental engagement at all levels

'... new technology, linked to innovations in work organisation and human resource management, has been used to adapt to the unpredictability of the world. This has also required a closer integration between innovation and production, so it has not been the universities that have emerged as the society's primary institutions, and higher skill levels are needed much closer to the point where production and services are produced. Rather than an intellectual "clerisy" directing fully automated production processes ... or a corps of elite managers and technicians marshalling an army of deskilled machine tenders ... the production system has evolved into one that calls for more mental engagement at all levels of the production hierarchy.'

Bailey, 1990, p 42

Under this incessant competitive pressure, reappraisal of the way goods and services are produced usually begins for an individual firm with the creation of a more flexible, adaptable and self-motivated workforce whose positive attitudes towards lifelong learning are matched by employer commitment to continuing development of their skills (see Berkeley, 1991, p 5). This mobilisation of the underdeveloped potential of the Community's citizens (Box G) has scarcely begun in many Member States. There is no reason for Europeans to share Konosuku Matsushita's pessimism about the possibility of change in the industrial West, although the task is an urgent one since the attitudes and values of stakeholders - employees and employers - cannot be changed overnight.

Box G Mobilisation of every ounce of intelligence

'We are going to win and the industrial west is going to lose out. There is nothing much you can do about it, because the reasons for your failure are within yourselves.

We know business is now so complex and difficult, survival of the firm so hazardous in an environment increasingly unpredictable, competitive and fraught with danger, that its continued existence depends on day-to-day mobilisation of every ounce of intelligence.

With you, bosses do the thinking while workers wield the screwdrivers. You are convinced deep down this is the right way to run a business. For you the essence of management is getting ideas out of the heads of bosses and into the hands of labour.

For us, the core of management is precisely this art of mobilising and pulling together the intelligent resources of all employees in the service of the firm. Only by drawing on the combined brainpower of all its employees can a firm face up to the turbulence and constraint of today's environment.'

Konosuku Matsushita to the head of the Apple Corporation in the USA, 1979, quoted Berkeley, 1991, p 5

The workplace may deliver planned production outcomes. Does it also deliver the planned learning outcomes which the modern employee needs to play his or her part in a high performance work organisation (Box H)? Increasingly, the workplace has to be managed so that it becomes, simultaneously, a learning enterprise and a production enterprise. Production agreements are common enough. Far less common are learning agreements, negotiated for each member of the workforce, which set out::

- what skills and knowledge the worker will acquire next;
- how this is to be done on the job and, if necessary, off the job;
- and how this tactical plan fits into a longer-term strategy of development for each individual.

Box H Brain-intensive employees

'An employee today is no longer a slave to machinery who is expected to repeat simple mechanical operations like Charlie Chaplin in the film Modern Times ... manual labour can be taken over by machine or computer. Modern industry has to be brain-intensive and so does the employee ... this

upgrading of workers is something that every country will have to be concerned about, and the idea of preserving old-fashioned jobs in the modern era does not make sense. This means educating new employees and reeducating older employees for new challenges.'

Morita, 1988, p 185

This reorganisation of work, and the complementary re-equipping of workforces as the only source of sustainable competitive advantage, is driven by forces quite other than arrangements for financing training. Financing arrangements may obstruct or facilitate the success of this campaign. The financing studies are one part of the process of uncovering the role of these arrangements in the training systems of Member States. Much more is at stake than an academic exercise in mapping another dimension of diversity. Successful policies depend on coherence of direction, of actions and of timing, combined with effective conditioning of the response of stakeholders to policy instruments. Since financial instruments always have a major role among policy instruments, an understanding of their limitations and of their role within the changing organisation of work is one of the prerequisites of successful policy-making.

Training systems: macro and micro

The continuing reorganisation of work is characterised as a fusion of thinking and doing. It is also a fusion of thinking and doing with learning.

Stakeholders face real choices

Investigators within the European Community (see Sorge, 1983) and outside it (e.g. Bailey, 1990) have come to broadly similar conclusions about the choices before us. The effect of new technologies of production and of communication on the organisation of work is not determined.

In each Member State, choice is constrained by a powerful inheritance which is institutional and customary - the way things are done. It is also constrained by present scarcities, i.e. by claims on the resources of households, employers and public authorities which compete with the claim on resources needed for competence formation.

Despite these constraints, the choices are generally more real than is suggested by a simple reading of events. For example, deskilling sometimes follows technological change. But it is not necessarily caused by it. Just as likely, it is the outcome of an attempt by employers to increase their control of the production process by simplifying and routinising work. There are real choices to be made by the stakeholders - employers, employees, unions and governments - concerning both the implementation of technical change and the organisation of work. These choices have powerful consequences for competence formation. Some of these consequences are readily identified. But, because the relationship between job contents and training is often indirect and complex, it is necessary for stakeholders to agree interconnected strategies on technical change, work organisation, training and education.

Financing arrangements serve the larger purpose of this division of labour, of costs, of benefits and of responsibilities between stakeholders. The inter-related human resource strategies of the partners have to combine the tolerances needed to cope with unpredictable change with a coherent grand strategy for building new competences in a speeded-up world. It is all too easy to read the existing evidence on a country's financing arrangements as a jumble of disparate programmes, each with its idiosyncratic financing system. But the interconnections between the interests of the stakeholders, above all between employees and employers, always establishes a synergy of some kind, which the country's financing arrangements re-inforce. It may not be a benevolent synergy. Some stakeholders have apparently locked their country into a low skills and others into a high skills equilibrium. For instance, after controlling for population difference, the United Kingdom has at least 6 million fewer qualified workers in its labour force than Germany (Rose, 1991, p 83) and seems to be stuck in its low wage/low skills equilibrium.

The need for knowledge of the workplace

The workplace is an epitome of the national training system. It is here that all the forces contributing to the demand for, production and use of competences, including finance, are resolved. That is why the way that work is organised is pivotal for competence formation. An understanding of the training system at micro level, such as employees, unions and employers have from experience, is essential to any understanding of the evidence from the financing studies, which is at macro level and highly aggregated. The questions which arise from cross-national comparison at macro level can only be answered by reference to knowledge of both micro and macro levels. This is one of the reasons why it is so difficult to understand national systems other than the reader's own. How does it really work? The question can only be answered from workplace experience.

Box I Enterprise training in Germany and Britain

	Germany	Britain
Training modes	* Dual system * Formal courses & qualifications * Opportunities for further training	* No predominant mode * Decline in traditional apprenticeships
Education system	* Selective * Broad curriculum * High maths attainment with small dispersion * High staying full-time & part-time staying-on rates * Vocational career guidance	* Comprehensive * Narrow curriculum with anti-industrial bias * Large dispersion in attainments * Low staying-on rates
Labour markets	* Occupational labour markets	* Youth labour markets exist

	* Payment by vocational qualification * Steep skill differentials in pay	* Payment by skills and experience * Narrow pay differentials by	age and skills
Inter-firm relations	* Network of business associations * Inter-plant training centres * Group training associations	* Absence of co-operative inter firm relations * Reliance on deregulated markets	
The role of the State	* A continuous role in corporatist decision making over training contents & standards	* A non transparent role, discontinuous and shifting between laissez-faire and regulation.	and some

Source: Sako, 1990, Table 4.1, p 85

The table in Box I summarises features of enterprise training modes and of supporting institutions in Germany and Britain. It is derived from a larger tabulated comparison in which Sako (1990) offered some 'stylised facts recorded in short hand', ignoring, as she pointed out, the intra-country variations which obviously exist between industrial sectors.

Even if readers wish to dispute some of the stylised facts in Box I as excessively oversimplified, it is difficult to deny that in broad terms such a characterisation of systems helps to highlight some of the relevant differences. By including Japan in her original table, Sako was able to pinpoint major points of similarity and of difference between what she regarded as two well-functioning systems, Germany and Japan, both in a high skills equilibrium. Differences between those two systems are with respect to apprenticeship, which is a fundamental mode of training in Germany, but not in Japan; and to labour markets, which are external and occupational in Germany and more internal in Japan. As a consequence, vocational qualifications are central to pay determination in Germany, where, although skill differentials are steep by age, this corresponds closely to skill levels. In Japan, vocational qualifications matter less and pay is linked to seniority and merit (intelligence plus effort). In both countries, the steep earnings profile by age enhances employers' incentives to invest in initial training. Sako pointed out that Germany and Japan shared a broad-based school curriculum, high staying-on rates, strong inter-firm relations (e.g. the Chambers and Keiretsu) and a corporatist structure to legitimise policy decisions.

The process of macro-level comparison of systems is a necessary adjunct to any attempt to understand the bewildering variety of arrangements used to finance continuing vocational training across the twelve Member States. Sometimes the problem is to understand

how two apparently well functioning systems manage to produce competences in completely different ways. That understanding is the necessary foundation for learning how to use differences, one of the most difficult but urgent tasks facing the Community. Sometimes the problem is to compare training processes which begin from entirely different premises. For instance, in the case of Germany, the role of regulated occupational labour markets and of qualification is very important, though less so in continuing than in initial vocational training. In Britain, despite some striking initiatives to improve and rationalise its jungle-style qualification structure, it is still unsurprising when a successful person declares 'I've never been qualified for anything I'm good at'.

However, macro comparisons are only a beginning. The responses of the social partners and of individual workers to system characteristics are not tabulated, yet they are critical to the formation of competences.

Conclusion

To recapitulate:

- training is one route, albeit a major one, to the formation of competences;
- the way that work is organised is pivotal in the requirement for, development and use of competences;
- so knowledge of the micro-reality of the workplace is one of the conditions of understanding the big picture of training.

The evidence presented in CEDEFOP's financing studies is a bewildering mass of largely non-comparable data whose relation to the formation and use of competences in producing goods and services is frequently obscure, even when the reader has experience of the micro-reality. In exploring these data it is necessary to steer a course between what has been described as 'the Scylla of sweeping generalisations and the Charybdis of individualised fact-mongering' (Sorge, 1983, p 9).

CHAPTER 2 AN AUTHENTIC COMPARISON : TOWARDS A REASONED ANALYSIS

In this second chapter it was decided to depart from the relatively simple issues which are common to different countries. It is more a matter of examining if the information contained in the FOCUS reports permits a response to this in a pertinent manner, while highlighting the coherence and dynamics of each vocational training system within the different countries of the European Community.

This chapter does not propose an examination through parallel comparison of information contained in the FOCUS studies topic by topic (cf. Chapters 6 and 7).

At this juncture we do not intend to create structures of strictly comparable data but rather to attempt to go beyond the limits of the available data. A great deal of work is required prior to this in order to succeed in bringing closer the national information systems on vocational training. There is a need to deepen comparative analysis, particularly through understanding the often very different reactions of each system to the problems which are frequently presented by similar phenomena.

The studies may be analyzed through highlighting the way in which in each country funding, the aims and the forms of organization of continuing training are described. It is not a matter of identifying what is comparable but, on the contrary, of attempting to understand the significance of differences in definition, presentation, and the absence or presence of certain phenomena in each national report.

In each country continuing training is not defined in the same manner or, indeed, is not defined at all or has not been measured or only partially quantified. Attempts to understand why this is so result in information and in useful elucidations of each of the training systems. But this should not culminate in statements which would prompt the conclusion that it is impossible to compare the very different systems. These systems can be examined together through formulating a common list of questions which may be answered on the basis of the information contained in the FOCUS reports.

2.1 Beyond the limits of available data

Data are often insufficient in order to provide a global view in each country of continuing vocational training.

The FOCUS studies show, yet again, the main inadequacies of available data on continuing vocational training in the various European countries. These data only rarely permit a clear global and coherent vision of continuing training efforts, of trends over a period of time and of the part played by each of the stakeholders (individuals, companies, state and public bodies) in funding training. This statement is certainly not original. But it must be stressed that the inadequacy of data is much more important here than in other areas such as economic activity or employment, for example, because "vocational training" is constructed in various ways depending on the country, and thus differs from the more "universal" and thus more standard principal economic concepts. Continuing vocational training is not a simple variable which can be classified by statisticians and which may be the object of normal statistical analysis.

The field covered by these data varies greatly from one country to another. The data are relatively abundant in the majority of countries when attempting to measure the effects and the costs of State intervention. Information is more sparse and even non-existent with regard to the part played by companies and specific bodies. Data on contents and the effects of training are also particularly sparse.

The data available are rarely formulated on a regular basis. Such monitoring would require heavy investment in training on the part of the State and on the part of companies which would justify assessment and monitoring of investment. The training effort itself is not sufficiently important in a number of countries to provoke statistical measurement which would ensure the production of data on a regular basis.

Data are abundant and compiled frequently in France with regard to State intervention and to the efforts of companies. Data are equally abundant in Germany and in the Netherlands but is less specific. With regard to data in Great Britain, these are abundant for 1986 on account of a particular survey. In the other countries information is often extremely dispersed and varies in quality.

In other words, in the majority of European countries, a standardized and regular information system on continuing vocational training has not been established in contrast often to initial training or employment.

The concepts linked to continuing vocational training differ greatly from one country to another. Data are seldom comparable.

The concepts used to generate data are often very different from country to country, even though the area covered is presumed to be comparable. For example, the expenditure of companies in the 1986-87 survey in Great Britain can scarcely be compared to that of French companies to the extent that the French data do not take into consideration certain structural costs or spending on on-the-job training or expenditure on certain forms of training, particularly for middle management.

This is particularly true for companies' expenditure on continuing training. As a result, the total amount of expenditure on training by companies is extremely unreliable and even unusable for making comparisons between countries. The inclusion or exclusion of on-the-job training, expenditure linked to practical training periods and to alternance training, on the salary costs of trainees, etc., differs greatly from one country to another. These differences are attributable largely to legislation and to the way vocational training is defined in the various countries.

The expenditure of the State would lend itself, in principle, to compiling comparable data. However, the large spread of activity on the part of the State between different ministerial departments and the various roles of the regions and territorial bodies require major technical work to ensure, at national level, comprehensive statistics and even more work to formulate comparable data between countries. For the present there are no data of this nature which may serve as a common reference.

The amount and significance of available data depends, to a large extent, on the formal nature of vocational training as the result of major intervention of the State (and the legislative body) and agreements reached between social partners. In this context, for example, Germany and France may be taken as opposing examples of where initial and continuing vocational training is highly classified on account of developed initial vocational training to such countries as Great Britain where initial and continuing vocational training have not been integrated in a formal

vocational training system.

For these reasons, the generation of comparative tables on spending on continuing training by the various parties and the participants benefiting from continuing training does not really seem pertinent today. They may even lead to misinterpretations of a very serious nature in disguising important differences in investment in training, in the design of vocational training and in the effects that are expected.

Comparative data are only of interest if the coherence of each vocational training system is known.

It does not suffice to have common definitions and similar continuing training measures in order to ensure comparability between countries. The various roles of continuing training, the context of training and qualifications and the place these occupy in continuing training must be understood in order to make relevant comparisons.

As a consequence, the formulation of indicators for expenditure, for the numbers of individuals trained, for the number of training hours is insufficient to allow useful comparisons. There is a need to establish step by step a picture of the coherence of each vocational training system.

In addition, for at least ten years major trends in vocational training have been taking place in the majority of European countries, the reasons for which are often identical: technological change, unemployment, the extension of compulsory education. Formulating information is really only meaningful if it permits a comprehension of this dynamism of the various forms in the different countries.

2.2 Four issues in reading the focus studies

In spite of the constraints of available data, the FOCUS studies reveal four common elements in the various countries which may prove to be working areas for a comparative analysis.

The nature and the scope of initial vocational training is one of the most important sources for differentiating continuing vocational training.

Continuing vocational training cannot be seen in isolation from initial vocational training. Depending on the importance of initial vocational training, the period, the moment at which it takes place, the ways in which it is organized, continuing vocational training will assume very different roles.

The nature and duration of unemployment strongly influences efforts made in continuing vocational training.

The rate of unemployment and the development of the economy is a very important factor in differentiating between the countries, particularly with regard to the fairly important emphasis placed on training for employment, on training the unemployed and training to produce qualifications.

The interaction between the State, companies and the training market is specific to each country.

The funding and distribution of continuing vocational training is highly dependent on the interaction between the market, management and the State in how they intervene in each country.

This is apparent and possibly quantifiable as continuing vocational training is different from one country to another.

Continuing vocational training can be classified by country. Only more formal training processes, particularly those on the initiative of the State, are relatively quantifiable. The importance attached to on-the-job training, the existence or absence of training activities within a company, the inclusion or exclusion of certain activities, produce a very different picture of continuing vocational training in each country. In the various countries the transparency of training itself varies greatly and even within one country it may change in the course of time depending on policies, on the outsourcing of training by the company.

Such elements may be viewed as elements of a reference grid for the national context which facilitate useful comparisons between countries.

This reference grid is based on a number of simple ideas:

Vocational training may not be studied in a country by making artificial distinctions between initial and continuing training. There is need for a global vision of vocational training.

Vocational training may take place throughout the life of an individual. It may occur prior to entering working life, upon entering or during working life.

Vocational training may aim to produce skills or a basic qualification (acquired prior to or at different points in time during working life) or it may aim more to retrain, to upgrade skills and to improve competences.

Four issues have been selected as a reading guide for the national reports.

The first three concern the various forms of vocational training and their inter-relationships. It would be useful to know where the various countries are located with regard to the division of training efforts between initial training, between training the unemployed or those tending to be excluded from employment and training those in employment, between the different aims which continuing training may have.

The final question focuses on the laws governing the way vocational training systems operate particularly how it is regulated by industry, the market or the State.

1. **How does initial training, its importance and its organization influence continuing training?**

The context of initial vocational training has a major influence on continuing vocational training.

Thus, similar continuing training efforts may have different meanings depending on whether initial vocational training is weak or strong. Continuing vocational training which is the cornerstone of basic training cannot be compared to continuing training which supplements initial vocational training in the course of working life. To the same extent, the contents of similar training activities may have different significance depending on whether they address the

target groups which have already acquired basic vocational training or target groups which have not undergone training.

The link between initial and continuing training is a common question for many countries.

Firstly, even if major initial vocational training exists, continuing vocational training may aim to make up for the shortcomings of initial training. If the role of continuing training is useful for individuals it hampers formulation of a real continuing training policy if only through helping to drain major funds. A possible indication of such a situation is the importance of young people in continuing training activities. Continuing training focuses largely on young people if there is a need to qualify them or to improve their training before or during their integration into working life.

Secondly, all training policies and all continuing training policies and activities oriented towards providing a second opportunity for the individual depend on the state of initial training. Within such a policy every individual, regardless of the training received and the qualifications acquired in the school system, should be able to continue initial training and to improve qualifications upon entering working life. If initial vocational training is broken up by companies or if it does not respond satisfactorily to the needs of the economy through giving individuals a technical and occupational basis which permits them to learn and increase their skills throughout their working lives, a policy providing a second opportunity risks paradoxically to be inefficient or unfeasible as it has no basis for providing supplementary training.

Initial vocational training is a basis: if it is not solid in nature, continuing training has great difficulty in filling the gaps. On the other hand, if initial training is well-developed, a policy of providing a second opportunity focusing on individuals who, on account of lack of guidance or academic difficulties could not benefit from it, is feasible. It may fill in "individual" gaps but not gaps in the initial training system itself.

2. What is the influence of unemployment on the choices made in continuing vocational training?

The unemployment of young people and of adults is an important element which determines how vocational training is financed. It is also of major importance in the choices in continuing

training policy, its contents, the ways in which it is funded and the overall importance of the training effort. Major youth unemployment provokes the State to intervene in training during initial vocational integration. It leads to a difficult balance between funding initial vocational training and funding measures to counter unemployment.

Depending on the nature of unemployment and on unemployment policies, funding of continuing training focuses on re-training activities, on producing qualifications or, on the contrary, funding oriented towards encouraging employment in the form of measures to help recruitment.

The importance attached to unemployment by continuing training may be understood with the help of a number of indicators on both the groups taking up continuing training and the unemployed themselves. The access of young people to continuing training is a good indicator of the extent to which unemployment is instrumental in implementing continuing vocational training.

3. What are the contents of continuing training?

As may be deduced from the various FOCUS reports, a large number of countries seriously question traditional distinctions between vocational and general education, between formal and informal training, between training through courses and training in the work situation. By way of example, it is known that, when the emphasis is placed on social competences and on behavioural competences, a large part of training content which is somewhat removed from vocational training may be used in companies but is not always taken into account when vocational training is discussed.

However, the national reports shed light on what this may be, that is to say formal training and particularly that which is ensured by the State and funded by the State. A part of continuing training is, thus, concealed in the national reports. Each country has its way of viewing or not viewing certain elements of vocational training where it is expedient to identify its importance. While it is believed that continuing vocational training is based initially on the initiative of companies and individuals, little is known of the latter as the State does not see the need to quantify these initiatives. Another example is on-the-job training which is seldom taken into consideration in France and which reflects both the influence of legislation in the joint definition

of continuing training and also the relative lack of involvement of the company in the actual act of training.

4. **What is the relative importance of the market, legislation, management in regulating continuing training?**

An examination of the national contexts reveals various forms of regulating vocational training and continuing training. Depending on the case, a training market will play a very important role, in other cases it is legislation or management within the companies which play the predominant role.

The major importance of legislation often means that the aims pursued by continuing training should respond to the higher national interest. The aims may vary depending on the time period and the state of the economy. But in every case regulation of continuing training is very centralized. The government decides on the higher interest and orients continuing training policy to respond to this. This may be to encourage the integration of young people, may be to counter unemployment or to avoid exclusion of certain groups from the labour market. The general interest takes priority over private interest. Economic preoccupations, particularly of a short-term nature, play a secondary role.

On the other hand, regulation of continuing training by management responds to the aims of productivity and competitiveness. Companies thus play a major role in pursuing this aim. State efforts are focused on companies through legislative or financial measures.

Finally, the training market may play the prime role in regulating continuing training. Trust is put in the market to regulate the supply of and demand for continuing training. In this case the major preoccupation is increasing efficiency, reducing bureaucracy and permitting local protagonists to implement initiatives. Generally the confidence placed in the market is concomitant with a desire to decentralize.

It is important to note that this distinction in the means of regulation cannot be correlated directly to the role of the protagonists and does not necessarily imply different aims. The distinction contributes to elucidating the methods of financing training and of implementing it. The same actor may reach a given objective in a different way depending on the predominant laws

governing training.

One example is the role of the State when aiming to encourage access to training for underprivileged workers.

When training is regulated predominantly through legislation and in the interests of the general public, the State will intervene to determine the right of access to continuing training and will organize training programmes, will fund training bodies for underprivileged target groups in order to re-establish equality in training.

Where training is regulated by the market, the State will intervene by trying to satisfy the needs of training of certain categories of workers through directly providing financial incentives to access training.

Finally, where the company plays the predominant role, the State will attempt to encourage the latter to develop training efforts through providing subsidies or tax incentives to train certain groups.

Naturally, in each country these various elements may come together and coexist.

The question raised at the outset of this study is to ascertain if it is possible to have a simple and clear view of the various European vocational training systems on these different topics and to ensure a clear comprehension of these. For each question we will present a global view of the response which can be made to the question asked and we will present more specific remarks on each country.

2.3 How does initial training, its importance, organization, influence continuing training?

Each country has its own borders between the general and vocational training and within vocational training between initial and continuing training.

Vocational training in its entirety, both initial and continuing, should be studied in each country.

In certain instances this will be split up into clear segments relating to different stakeholders, different training bodies and to different sources of funding. In other instances there are no clear borders between initial and continuing training as both have similar funding sources and similar bodies.

Initially a comparison of vocational training systems in various countries in the Community is only useful if this examines, at the same time, the different constituent parts of vocational training. The hypothesis is put forward that the choices made by one country with regard to initial vocational training determines, to a large degree, the role attributed to continuing vocational training.

2.3.1 General observations

Three major characteristics of initial vocational training should be taken into consideration before examining continuing vocational training.

The first of these is the importance of initial vocational training.

The importance of this can be measured through the proportion of young people who have followed vocational training before entering working life, by the duration and extent of this initial vocational training and, finally, by the finances devoted to it.

Evidently a similar level of expenditure on vocational training does not have the same meaning, depending on the importance of initial vocational training before entry into working life. The vocational training of those in employment will, in part, depend on the existence of initial vocational training. Providing training through courses during working life to respond to technological changes and work organization is an easier and more efficient task when individuals have already acquired basic skills and a good degree of initial vocational training. Even the content of training activities risks being modified by these. In particular, initial vocational training of poor quality or of minor importance can be compensated for by continuing training activities.

It is known that in almost all countries there are signs of trends towards greater efforts in initial vocational training. However, the gaps are large between countries such as Germany, France

and the Netherlands, where initial vocational training encompasses the majority of young people, and other countries such as Spain and Portugal.

The second is the juncture at which initial training is provided.

Initial vocational training may be provided before entry into working life, normally in a school environment similar to that of general education, or through training measures making use of alternance or apprenticeship and combining training in school and in the company. The vocational training provided by alternance also represents, for young people, a system of transition towards working life.

From this perspective France and Germany represent two opposing models of vocational training. Great Britain also provides initial vocational training when young people enter working life but to an extent which is less organized and more restricted than in Germany where apprenticeship is highly structured and formalized.

The involvement of companies in initial vocational training differs whether this be in terms of financing or in implementing training. In a country such as Germany initial vocational training is provided when young people enter working life. Thus, it is largely dependent on the activities of the company and tends to be confused with continuing vocational training from the point of view of the means deployed. The main distinction is, therefore, between vocational training whether it be initial or continuing and general education. In other countries, such as France, initial vocational training depends largely on the initiative of public bodies and the State, the companies are involved to a minor degree and through contributing to the funding of training, to defining its aims but not in implementing them. Here the main distinction is between school education, which distinguishes sharply between vocational and general education and continuing vocational training. The organization, means and methods of funding are clearly different for continuing vocational training and initial vocational training.

Recent years have witnessed a desire to increase the involvement of companies in those countries where initial vocational training is carried out primarily in centres and to increase theoretical and technical training in countries where companies' involvement and the emphasis on practical training has been strong.

In Great Britain the almost total absence of vocational training in schools leads to a view of vocational training where the major distinction is not between the initial and continuing training but between on-the-job and off-the-job training.

The existence of alternating initial training also helps make the company a place for training. In this respect the responsibility given to the company for training is, contrary to vocational training in schools, an important support for continuing training. In France, for example, it is well-known that materials (e.g. training equipment) devoted to initial vocational training can seldom be used for continuing training measures with the exception of those provided by the State school system which has an important advantage over other bodies providing continuing training. The regions refuse, at times, to fund the training equipment which may be used for continuing training within schools as this benefits but one component of the continuing training provision.

The third is a result of the existence or absence of a general system of diplomas and vocational qualifications.

The existence of such a system unifies vocational training and elucidates the aims of initial vocational training. It also provides a common language between trainers and employers. It also leads to clear distinctions between initial and continuing training as in Germany or in France. Continuing vocational training is defined in referring to the system as a means of adapting to employment and of maintaining a level of skills and as a means of progressing through the various levels of the qualification system.

In all likelihood an efficient vocational training system in industry and modern service sectors cannot develop without a relatively unified system of diplomas and qualifications making it possible to formalize training. It can be seen that in Great Britain the policy of developing vocational training goes hand-in-glove with a desire to unify and formalize the qualification and certification system recognized by the professions.

The need for this reflects the decline in on-the-job training on the basis of trades which can only ensure for themselves the generation of skill needs which jobs require today. The experiences of the various countries show that this formalization of certification and qualification systems is the domain of technical experts. It only has a real basis if it is based on a solid agreement between employers and social partners.

It may be assumed that all vocational training systems are subject to two opposing trends, the development of formal vocational training which is standardized and takes place outside the company and, on the other hand, the re-activation of informal training which is integrated into the company. Both have advantages and disadvantages: the major difficulty is that of finding the most efficient compromise.

The forms which initial training takes contribute to a large extent to explaining differences in defining continuing vocational training and the different means of funding.

Initial and continuing training are inter-related in a variety of ways.

a. One can identify countries in which initial and continuing training are clearly separated.

This is the case in France and, to a certain extent, in the Netherlands where a large number of young people benefit from basic vocational training which culminates in a diploma. This type of vocational training, which is highly organized and monitored, is matched by continuing vocational training which is more or less organized and clearly distinguished if only because different institutions are concerned with each.

In the majority of countries initial and continuing vocational training are much more mixed. It is often difficult to differentiate between the two as the same institutions are involved in both. In such a situation the general idea of vocational training is the predominant one: a distinction is not always made between initial and continuing vocational training. This is often the case in countries where initial vocational training is under-developed and particularly in countries where the generation of qualifications is primarily the responsibility of the company or the trade as opposed to the generation of qualifications in the sector.

The link between initial and continuing vocational training is obviously very strong in such situations. Frequently the same training organizations provide training for both young people and adults. Such a situation often incurs severe inconvenience. Initial vocational training thus is not a variable of activities carried out by the State. In addition, the companies have little interest in compensating for the lack of State involvement, at least on the short-term, in developing their own means of initial and continuing vocational training. This may result in a great lack of initial and continuing vocational training. In addition, the lack of harmonization and

formalization in vocational training may also render the labour market less flexible and hamper the elucidation of the aims of training and, thus, hamper possible efforts of the partners to develop these.

On the one hand, in countries where initial and continual vocational training are clearly differentiated, relationships between the two vary. The existence of a highly developed and formalized apprenticeship system benefits good interaction between initial and continuing training. On the other hand, a largely theoretical vocational training often leads to a large gap between the two which does not favour efficiency. Whatever the case, formalization of certification of initial vocational training makes the latter more rigid. Here one need only recall the period required in France and in Germany to modify this certification.

b. Developed initial vocational training of a theoretical nature or in an apprenticeship or alternance is an important support for continuing vocational training. The question may be asked if this is not a fundamental requirement for the efficiency of continuing vocational training, particularly if the training market is very open. The case of Portugal demonstrates this clearly. Paradoxically it seems relatively efficient to develop continuing training without a basis of initial vocational training although the majority of the working population has no vocational training or any sort of training.

It is obvious that initial vocational training acquired by individuals facilitates subsequent further training in working life through continuing training. The development of continuing training for individuals who do not have basic training is particularly difficult and expensive.

It is more difficult, often on account of pedagogical reasons and the effort required to reach the initial level, and more costly as training assumes that the salaries of the successfully trained are much higher than the salaries of apprentices.

Secondly, a highly developed initial vocational training structure is a resource for continuing training and also makes it much more profitable. The existence of tutors in Germany, of vocational grammar schools in France, are also means of developing continuing training. The organization of diplomas, of levels of training are also a means of organizing and defining the goals and clarify the different roles of vocational training both for companies and for individuals.

c. The existence or absence of a clear border between initial and continuing training, the

importance of initial training are obviously of major importance in understanding the methods of financing continuing training and of comparing training systems in different countries. It is evident that any quantitative comparison of continuing vocational training assumes prior knowledge of the overall vocational training effort in a country. In addition, the overall importance of initial vocational training and the way in which it is organized also help to modify how training is funded between companies, the State and the regions and individuals.

2.3.2 Remarks on each country

Italy

In Italy both initial and continuing training are under-developed. There is a high level of youth unemployment in comparison to adult unemployment. This enormous imbalance reveals a fundamental problem in the integration of young people into working life as confirmed by the average waiting time prior to initial employment (almost two years). There is a real obstacle to young people entering companies. The lack of initial vocational training organized by the State or the regions which bear responsibility results in the fact that the larger part of initial vocational training takes place, if at all, on entry into working life or during the period of unemployment preceding entry into working life.

In any case apprenticeship as employment-training contracts, although used to a large extent by companies, are of little training significance. These are mainly means for young people to enter employment by reducing the cost of manpower.

Companies are playing an increasingly important role, particularly large companies via their internal or external training centres but also through on-the-job training. On the other hand, small companies are in a particular situation. They cannot access manpower which has received training in the initial training system and do not develop major continuing vocational training activities. Outside large companies, which have set up internal training centres, the rapid technological change seems to lead Italian companies not to invest in training but to recruit highly qualified manpower thus leaving the lower qualified levels, the unskilled and particularly young people on the labour market. In addition, on-the-job training is a less efficient means of training than in the past on account of technological changes.

The importance of the ESF must be stressed as 75% of training activities are targeted towards young people.

Data on vocational training in Italy are incomplete and of poor quality. A large part of initial training cannot be differentiated from continuing training. A great deal of data, particularly those of a financial nature, confuse both. A distinction between initial and continuing vocational training only takes place in people's heads. One symptom is the fact that evening courses and

recuperation courses are managed by the State and represent general academic training which is identical to initial training, the timetable being the only difference. It is not surprising that, in this situation, young people play an important role in continuing training activities when entering working life or during working life.

Finally, the borders are smudged not only between initial and continuing vocational training but also between employment policies and training policies although formally and administratively they are distinct. The State is responsible for employment policy and the regions for vocational training policy. But such a separation of responsibilities is far from simple. On the one hand, the reform of secondary education taking account of regional responsibilities in vocational training has not yet been effected. On the other hand, employment policies, the responsibility of the State, encompass vocational training programmes which render regional programmes meaningless. This separation of power between the decision-making levels seems to entail more competition than complementarity. In the absence of concerted policy with the State which harmonizes employment and vocational training policy, the regions at times concentrate on prestigious training activities in agreement with certain companies. In this they compete with the private market. This competition is particularly strong as the companies, which have no obligation to fund continuing training, have no interest in addressing a public service.

All this does not encourage the emergence of an accepted definition by stakeholders of continuing vocational training nor a clear separation of the roles of the State and the regions, of the training system and employment policy. The rupture between the educational and employment systems is becoming more acute to the detriment of a policy aiming to raise the general level of qualifications. These initiatives remain isolated and vary in both quality and quantity and are difficult to measure.

France

France has a highly developed initial vocational training system. Initial training is provided prior to entering working life in training institutions and culminates in national diplomas. Apprenticeship plays only a secondary role and focuses particularly on traditional trades (it covers about one-seventh of individuals receiving training).

However, a proportion of young people leave the training system (some 15%) without vocational

training following repeated failure at school. As a result, for a part of continuing training for integration into working life or during working life the aim is to compensate for the lack of initial vocational training. Young people play a relatively important role in continuing training activities (some 11% of young people in such activities, although they represent only 7% of the working population). They are also over-represented among the unemployed where a lack of qualifications does not provide sufficient explanation for this. Over the past 20 years public bodies have been developing training measures to promote the integration into working life of young people, measures in which vocational training is of major importance, particularly for the underqualified who are most hard-hit by unemployment.

Continuing vocational training is fixed by definition in legislation and companies are obliged to fund this. It is clearly distinguishable from initial training. The latter is usually carried out in training centres affiliated to the National Ministry of Education and there is little link to employment. This gap is the object of much criticism by the socio-professional stakeholders. The law of 1971 establishing an obligation for companies to fund training also aimed to create, around the Ministry of Education, an environment conducive to change and reform. This aim has only been attained in part.

Continuing training and initial training are separate viewed from the point of view of the means, the funds and the training methods. It should be noted that vocational training establishments also provide continuing training for the employees of companies.

The involvement of companies in initial training is relatively unimportant but their level of spending on continuing training is fairly high (if one includes the salaries of those undergoing practical training).

For several years governments have attempted to overcome the rupture between initial training, continuing training and employment by encouraging alternance training, whether this be in the form of apprenticeship or specific work contracts for young people or in the form of training in centres. There is also a desire to ease the standards laid down by the 1971 law on continuing training. France is a country which has a rigid definition and is attempting to make this more flexible. Paradoxically this is the aim of State activities particularly with regard to the training of young people. Vocational training directed towards them, which competes with training by the national education system, is steered by the Ministry of Labour and the social partners. The

involvement of companies in this form of training depends to a great extent on the incentives offered by the State: if their participation in initial training, including that of the national education system, is necessary today it has not yet become a reality.

The Netherlands

Initial vocational training is highly developed in the Netherlands as in France and in Germany. There is compulsory alternance training up to the age of 17 for young people not attending school full-time. This apprenticeship system is funded partly from sectoral training funds determined by collective bargaining agreements for the sectors and is financed partly by the State. The companies are involved in initial vocational training. This perhaps explains why unemployment of young people, while not being as low as in Germany, is relatively unimportant and not significantly higher than that for adults. Continuing training does not seem to specifically concern young people.

However, the proportion of young people in continuing training activities is very high. For 16-24 year olds it is 40% and only 21% for 25-34 year olds. This figure, which is high in comparison to other Community States, is attributable to the spectacular recent increase, particularly since 1987. There also exists a "training subscription" for young people over the age of 16. This seems to reflect a particular focus on young people the reasons for which are difficult to explain unless one assumes a strategy for circumventing initial training.

Germany

The German situation is unique. It is the country in Europe where initial training is particularly well developed. The proportion of young people entering employment without initial vocational training is much lower than in all other European countries. This vocational training, for some 70% of young people, takes place within a dual system. In contrast to other forms of apprenticeship, particularly in Great Britain and in Italy, training within the dual system permits young people to acquire certified training while granting major importance to theoretical and school learning.

The involvement of companies in training is strong and the level of funding high.

Continuing vocational training is clearly distinct from initial vocational training but the border between both is original as it runs through training content.

Germany distinguishes between retraining and training for career advancement which is, to some degree, an extension of initial training and which at times replaces it. Training as a skilled technician presupposes completion of the dual system and integration into employment. These forms of training only exist in continuing training. Conversion training is traditionally in the area of continuing training which imparts tangible skills and maintains or modifies qualifications without really generating them. The border is more distinct between these two types of continuing training than between initial and continuing training. The latter may also be used to correct shortcomings in initial training. But continuing training has a particular significance to the extent that it targets those in employment who have, for the most part, already acquired basic skills. In addition, companies benefit in continuing training from the practical experience gathered in initial training.

Portugal

The situation in Portugal is characteristic of southern Europe; there is no formal system for generating and recognizing qualifications. It is characteristic of a country where social policy has been in a state of paralysis over the past forty years. Portugal does not have a developed initial vocational training system. The working population bears the marks of a malthusian education policy; 20% illiteracy, 72% without any qualification. The development of initial training is faced with a dilemma. The elitist tradition and thus too high a level of qualification is incompatible with training on a broad scale. On the other hand, the desire for social liberation provides training with the attribute of providing a means of overcoming the working class situation. These two trends hamper training on a broad scale difficult or vocational training which generates basic occupational qualifications.

Continuing training is faced with a very difficult task. The whole of vocational training and even a part of general education depends upon this. Evidently it is difficult to see its role as anything other than providing minimum training for the working population. A fundamental problem is, however, the construction of a vocational training system for young people closely linked to continuing training. In all likelihood, only the strong involvement of companies could provide a

solution for initial training to resolve this dilemma.

Greece

The initial education system in Greece is underdeveloped and elitist, resembling that of Portugal. Some 20% of an age group undergo vocational training but the level of training is very low: only 30% of manpower have more than primary education. An apprenticeship system trains 5% of young people between 15 and 18 in an archaic manner as the young people work 7 hours per day in the company and spend 3 hours at a training centre.

The shortcomings of this elitist system have brought to life a parallel school system in the form of "small courses". This compensates for the shortcomings of the general training system but not for those of vocational training.

The education system is undergoing major reform. Although there is a relatively little division between initial training, which is the responsibility of the Ministry of Education, and continuing training, which is the responsibility of a large number of public and private bodies, it is evident that the tasks have not been differentiated. Both initial and continuing training are weak. Although certain bodies have been set up recently, training in traditional trades which is outmoded still predominates. Continuing training initiatives have grown immensely in the various administrative areas but there is lack of coordination.

There is a high rate of youth unemployment, it is twice that of adult employment (14% compared to 7-8%) and clearly continuing training, as is the case in Spain and in Portugal, has a two-fold task: to raise the general level of training of the working population and to provide training for young people.

Denmark

Denmark has a developed vocational training system, either through apprenticeship (some 45,000 apprentices) or in EFG (basic vocational training, comprising some 84,000 trainees), which is a public system initiated recently while apprenticeship has a long tradition in Denmark.

However, the link between the public system and companies is not satisfactory and the system in its entirety produces a high drop-out rate. It must be stressed that industrialization in Denmark and, thus, vocational training are recent phenomena. The training policy bears a social stamp, training should fulfil a social role and provide education. These requirements, which the apprenticeship system does not meet, have been satisfied by a supplementary training system which, while producing more satisfactory general training, detaches this from the companies.

This situation has many similarities with France. However, the important role of the social partners and the strong union involvement are the distinguishing factors. This produces a vision of vocational training which should continue throughout the individual's working life. Initial training is the starting point of this training.

Compared to other countries youth unemployment is low. Continuing vocational training in which young people play an important part aims less at promoting occupational integration than at compensating for certain shortcomings in initial vocational training.

Spain

Unemployment and in particular youth unemployment is a major problem in Spain: in the under 25 group half of young people are unemployed. The general education system has a large drop-out rate: 30% of pupils conclude general education without any certificate and a large number of these do not even complete compulsory schooling. The proportion of young people aged between 16 and 18 taking vocational training in Spain is one of the lowest in the Community.

The majority of young people do not acquire minimum basic qualifications in initial training. Efforts concentrate on compensating for this training deficit and in a recent reform of the education system (1990). The first "national plan for integration and vocational training" was launched in 1985. It has received substantial aid from the ESF since Spain's entry into the Community (half of expenses are covered by the ESF).

This plan has resulted in the training of 350,000 individuals in 1988, 75% of whom were

unemployed. 70% of these unemployed were young people in search of initial employment. Until reform of the education system bears fruit, the training of young people will be based largely on specific measures and will take place when they enter working life.

As in Italy there is a potential conflict between the centralized State and the regional autonomous communities over the sharing of responsibilities. While the autonomous regional communities, in principle, have no responsibilities in continuing training, certain of them launch initiatives in this area.

Great Britain

In Great Britain there is an uneasy division of responsibility for vocational training between the Department for Education and the Employment Department. Formal intermediate skill training is provided by further education colleges; the reform of vocational training qualifications and the training of unemployed young people is led by the Employment Department. By the age of eighteen, three quarters of young people have dropped out of full-time education and training.

2.4 What is the influence of unemployment in choices made in continuing vocational training?

The rate of unemployment in an economy has a direct bearing on the continuing training effort.

2.4.1 General remarks

In the majority of countries the rise in unemployment has led to the development of policies to combat this and in various respects activities linked to the need for employment and to the employment offer. This produces confusion between employment policies and continuing training policies.

Thus, activities on the employment side cannot only consist of support for recruitment or of reducing the costs of manpower, by reducing the social costs but also in support for re-training or support in developing training in the companies. On the demand side of employment, activities often take the form of training programmes aimed either to re-train manpower or to

produce qualifications.

Consequently, making a distinction between activities focusing on the offer and on the demand for employment does not lead to a separation of employment and training policies. Such a distinction is often meaningless. To distinguish between funding in one or the other is particularly difficult as, in this instance, one makes a distinction between the operational costs and the salary costs for trainees taking into the account the means of providing financial support for the unemployed.

The lack of clarity in evaluating continuing training is much more pronounced where young people have a high unemployment rate and where initial vocational training is under-developed.

In such a situation creating or extending initial vocational training or post-school training is inseparably linked to the struggle against youth unemployment. As was stated earlier, the transition between school and working life, often marked by unemployment, is an opportunity for the State to launch initial training measures to produce qualifications. This is largely the situation in southern European countries and to a certain extent in Great Britain.

In a number of countries the unemployment rate is such that a large part of continuing training activities depend upon it. In this case the State obviously plays the major role. The lack of obligation on the part of companies to provide funding, with the exception of France, does not produce mechanisms for compensation of the unemployed or other disadvantaged categories. The importance attached to training in policies to counter unemployment vary from one country to another. It is not simply a matter of making a particular choice based upon an analysis of the role of the costs of manpower which is unemployed. The type of unemployment, particularly the existence of long-term unemployment, helps to explain the major role attributed to training. In addition, certain countries regard unemployment as an occasion to progressively set up initial and continuing training activities. On the other hand, in the case of France, youth unemployment, which is particularly high in relation to adult unemployment, places in question initial vocational training carried out in centres and would point to favouring alternance training.

The treatment of unemployment differs fundamentally in the importance attached to vocational training measures. "Social treatment" is often juxtaposed to "economic treatment", the former is characterized by measures to change the unemployed through providing training and to use training to reduce the number of unemployed. The second treatment takes the form of an

integration policy into employment, the most common measure being financial incentives for recruitment, either directly or in the form of tax and social security cuts. However, the "economic" treatment of unemployment, targeted towards companies, also involves vocational training measures. The aim may be to integrate into employment while generating qualifications which are either missing or unsuitable. Consequently, distinguishing between incentives for recruitment and vocational training is both hazardous and, at times, meaningless. It is a matter of defining and describing vocational training. To act upon individuals or employment is not equivalent to making a distinction between training measures and employment policy measures.

2.4.2 Remarks by country

Spain

Spain is faced with a massive problem of youth unemployment and long-term unemployment. According to reports, since 1987, priority has been given to young people in search of initial employment. Statistics show that young people are indeed those who benefit from vocational training. A large part of programmes and funding by the National Institute for Employment is devoted to this. There is, however, a lack of descriptive evidence on their initial vocational training and continual vocational training.

The issue of unemployment has a strong bearing on vocational training. Not only are particular efforts being made with regard to training for those seeking employment, but some four-fifths of funding for vocational training is devoted to the treatment of unemployment. Employment and vocational training policies are being increasingly united under one body: INEM. INEM, which is jointly managed, is responsible for managing employment policies and training policies, for countering unemployment and more generally for regulating the labour market. It administers both employment offices and vocational training centres.

The national integration and vocational training plan set up in 1985, following agreement between the social partners in 1984, bears witness to the importance of those seeking employment for training activities. In 1988 350,000 individuals were trained, 75% of whom were seeking employment. Of these 70% were seeking initial employment.

The national integration plan focuses on four major areas:

- young people and long-term unemployed,
- the rural situation,
- retraining and self-employed workers,
- women.

Spain is faced with a major task to retrain its manpower and to set up initial vocational training systems. The report largely ignores the issue of unemployment to concentrate on activities on behalf of the employed and companies in spite of the major amount of training expenditure on those seeking employment. However, requalification of manpower cannot be achieved solely through activities directed at those seeking employment. The whole structure of economic activities is changing and vocational training policies must follow suit.

Denmark.

Traditionally Denmark is close to other northern countries. Its social policy has greater affinities with the Scandinavian model than with other countries in the European Community. The State plays an important role and one of the main areas of activity is the struggle against unemployment. But the treatment of unemployment is directed mainly towards employment, that is to say towards companies. Two phenomena bear witness to this: employment policy measures aim more to integrate into employment than at vocational training activities. On the other hand, the unemployed are involved in training activities after those in employment and only if there is sufficient capacity. Those seeking employment benefit less from training than the employed: 22% of them as compared to 24% of qualified workers, 20% of unqualified and 54% of white-collar workers and management. This only comes about because there is an efficient employment policy and a relatively low level of unemployment. It should be noted that the recent increase in unemployment has caused other European countries to implement "social treatment" of unemployment.

However, the training of unemployed as the training of young people is also education in a civic perspective: the preoccupation with "adapting training to employment" is unimportant when compared to other countries. This in all likelihood explains that faced with unemployment the reaction is geared more to employment than to training. Employment policy and training policy are clearly separated.

Italy

Italy has many imbalances in the labour market. Certain categories are extremely disadvantaged on this market in relation to others: women in relation to men (unemployment rate of 18% as opposed to 7%), young people in relation to adults (32% as opposed to 7%), the southern areas in relation to the north (21% as against 8%).

Employment policy and training policies to overcome these disparities are therefore very different.

Although the unemployment level is high and varies greatly from one category to another, employment and training policies have been strictly separated at least as far as principles are concerned, probably much more so than in any other country. Thus, the level of unemployment has little influence on continuing training policy. Even for young people, while unemployment is very high and long-term in nature, vocational training as part of employment policy activities takes place in companies, on-the-job, and seems to have little impact on the qualification of manpower.

Germany

The report shows an increase in employment and a slight decrease in unemployment.

Prior to reunification - which had a vast impact on the data - the proportion of unemployed in training activities as a result of the law on the promotion of work was decreasing. It was at a level of 56% in 1988. Some 362,000 benefited from it in 1988. Germany trains less to counter unemployment than to ensure that the level of qualification matches economic expansion.

France

The struggle against employment and exclusion is particularly important in France. Unemployment is at a high level and particularly so among young people. Unemployment has resulted not only in an increase in spending on vocational training on the part of the State on behalf of young people but has also led to progressive development of new forms of alternance

training as a form of transition between training and employment resulting from a highly school-oriented vocational training system.

2.5 What are the contents and aims of continuing training?

2.5.1 General remarks

The information available is sparse in relation to training content.

In the various countries two factors to differentiate continuing vocational training may be distinguished and which are particularly useful and should be elucidated. The first relates to the relative importance of basic training or training culminating in qualifications which are accessible throughout working life. The second refers to the recognition or lack of recognition of on-the-job training and the dimensions of this.

In a given country opportunities for basic training or training culminating in a qualification during working life depend on the existence of a formal initial training system and, equally, the existence of a recognized system of qualification. This is the case in France, Germany and the Netherlands. Yet even in these countries this remains relatively unimportant. Continuing training remains fundamentally training to adapt to employment or to upgrade competences in a given occupational area. Only Germany has a limited area of continuing vocational training culminating in certificates which is well organized and which replaces initial vocational training for technical workers.

The initiative shown by individuals plays a major role in accessing training culminating in qualifications; in France this is termed social progression or advancement at work.

Here the State plays an important role not only in ensuring a training offer which corresponds to this aim but also by developing specific financial support programmes, either for the unemployed or for those in employment in the form of evening classes. Similarly, the companies also play a considerable role through making provision to facilitate workers' participation in courses through paid leave or through permitting more flexible working time. This is the case in France in what is known as "training leave".

The consideration given to on-the-job training varies greatly between countries. In addition, its definition is unclear. It must be stressed that **on-the-job training is all the more important the weaker the initial vocational system** and the more informal its nature in terms of certificates and/or training levels.

On-the-job training can, therefore be a substitute for initial vocational training or supplementary training to more "theoretical" training. It should be noted that the decline in traditional trades and the labour markets and forms of apprenticeship linked to these, the trends in technologies, have made on-the-job training much less efficient. Such a trend should not be confused with what one witnesses today when examining the close interaction between training and work. In other terms, training at the workplace should not be confused with on-the-job training. On-the-job training, difficulties in measuring this accurately and the impossibility of distinguishing precisely the cost of training from other company costs today bear witness to the fact that on-the-job training is often less a specific training form than a reflection of both weak continuing and initial vocational training systems.

Mention is scarcely made in the reports of various experiences gathered in the workplace and research into work organization generating qualifications, which since the completion of the national reports has increased greatly in importance.

Funding measures for vocational training which include on-the-job training leads to attempts to measure entities which, strictly speaking, cannot be measured. Thus, in France, identification of the cost to companies of continuing vocational training includes, at most, only what the law has determined is attributable to continuing training expenditure, that is to say training which takes the form of periods of practical training either inside or outside the company. On-the-job training in the sense of making the individual acquainted with the tasks to be carried out and accompanied by a skilled worker directly carrying out his work is excluded, which can only lead to an underestimation of costs compared, for example, to Great Britain. Similarly, off-the-job training as witnessed in Great Britain does not correspond to the training activities existing in France as part of the company's legal obligation to fund continuing training. For example, the training courses offered to employees by suppliers of equipment do not fall under continuing training in France but are considered off-the-job training in Great Britain.

Finally, it should be noted that many of the reports demonstrate difficulty in even defining vocational training as opposed to general training. Thus, language training is unimportant with regard to its classification. More generally, one can detect a more general debate on the new competences required by workers faced with new technologies and new forms of organization and production. These new competences will be less technical and more social and behavioural in nature. The question arises if this is not another social qualification different to those previously acquired but now inseparable from new technical qualification.

2.5.2 Remarks by country

Spain

The report contains little on the contents of training in regard to the distinction between general and occupational training and the distinction between formal and informal training and on-the-job training or the distinction between basic training and further training.

One can assume that there is substantial internal training in companies the aims of which are to upgrade skills and to adapt to technical change. The induction of new staff is an important aim of this internal training. It may be deduced that on-the-job training is of minor importance.

Management also seems to be an important training area.

Germany

The distinction between general training/vocational training is lucid with regard to form (as funding mechanisms are different) but much less as regards content. By way of example, language training is considered part of vocational training.

One can distinguish three main areas of training:

- In-company training which is often of short duration and aims to adapt workers to the workplace. Such training schemes rarely culminate in certificates.

- Training as part of the provision of the law on the promotion of work and which is focusing increasingly on the unemployed. Here again adaptation to the work place and re-training predominate over upgrading skills which represents only one-fifth of training courses.
- Training taken by the individual often resulting in a certificate. As seen, continuing training seems to be a true extension of initial vocational training and is based on savoir-faire and the experience acquired after entering working life. This produces training paths from initial to continuing training. It helps to produce a high standard of technicians and engineers by means of recurrent training throughout working life. While this opportunity to progress from basic training and to increase skills exists in other countries in these they seem to be relatively unimportant. In the majority of countries the greater part of funds are invested to permit a part of the workforce to acquire basic vocational training which they were not in a position to obtain during initial vocational training.

It should be noted that skills upgrading in the company is a recognized statistical category. It accounts for 10% of measures under the provisions of the law on the promotion of work. The report provides little information on this.

Finally, computer sciences seem to be a dominant area (22% participating in such training). According to the authors of the report "the use of equipment controlled by computer may be considered as the main motive of continuing vocational training" (p. 82).

France

Ignoring the fact that continuing training, as in the majority of countries, is increasingly involving the better trained and the less trained, little is known of the contents and aims of continuing training. This is logical as information is drawn-up with the aim of ensuring that the level of expenditure by companies in vocational training conforms to the law.

However, France is probably the European country in which information on continuing training is most abundant in terms of the level of costs for the stakeholders. There have been few surveys on the content of training including training for young people aiming to counteract the insufficiencies of initial training.

The law of 1971 contributed to make the idea of continuing training much more rigid. Adaption to the workplace (when the young person enters working life and adaption to new equipment) is not considered part of continuing training as is the case in other countries. On-the-job training is not recognized as training while the desire to increase alternance training is very marked.

On the other hand, the distinction between training culminating in a qualification and certificates and training not culminating in a certificate is important although this is not always made clear in the available data.

The absence of information on training content may be linked to a concept of training in terms of levels of transversal training distinguishing between general and vocational training to the detriment of the content.

The Netherlands

The report is particularly hazy on this issue even though it puts forward some basic definitions on general and vocational training, formal and informal training and on the inclusion of apprenticeship in continuing training. Informal training seems, at times, to include all training within the company.

The study replaces the categories put forward by CEDEFOP with its own categories without making an effort to elucidate on these.

It is evident that computer studies all seem to play a major role in continuing training. Several national training programmes focusing on computers and new technologies exist. 17% of training activities in companies relate to automation.

Denmark

The report contains no information on training content. It indicates that there is a long tradition linking general and vocational training and regarding adult training as a social obligation.

Italy

There is no information on training content and no analysis of general and vocational training either formal or informal. As we have seen, the distinction between initial and continuing training is not clear.

The only clear distinction is the administrative responsibilities between general training, which is the responsibility of the State, and vocational training, which is the responsibility of the regions.

Portugal

The problems of content are specific in nature in a country where 20% of the working population is illiterate and 80-90% has no vocational training.

The distinction between formal and informal training, so important to the majority of experts in other European countries, is of no great significance in Portugal.

2.6 What is the relative importance of the market, the legal provisions, management in regulating continuing vocational training

2.6.1 General remarks

Three major factors influence continuing training: the law, management or the production system, the market.

The law makes provision on continuing training with the aim of ensuring equality between individuals.

It presupposes, generally, major intervention by the State in continuing training but it should not be confused solely with this. The State may intervene to a large extent in order to make the production system more efficient with regard to vocational training or to support the activities of the market.

The production system is motivated by the desire for efficient production.

It often assumes a major role in companies with regard to vocational training. Evidently its role is rooted in tradition. Either it is the product of industrial tradition or it is encouraged by the State.

The market which regulates the supply and demand for training.

The stakeholders, whether they be companies or the State, have confidence in the market which requires legal provision. The market ensures that supply meets demand. The demand for training by individuals is expressed in the market and should be met. The market is presumed to be an efficient mechanism.

One must be careful not to confuse these forms of regulation of continuing training in the different countries with the activities of the governments and social partners. Governments may attempt to support one or other of the mechanisms through legislation to increase equality between those benefitting from training and the continuing training effort, by supporting the role of the company or encouraging private initiatives with regard to the supply of and demand for training. With regard to the activities of the social partners, these are contained in these mechanisms. The social partners' activities culminate in formulating laws or regulations or they lead to a compromise between the desire for equality and the quest for industrial efficiency.

The relative importance of these regulatory mechanisms differs greatly from one country to another on account of their traditions, on account of the policies chosen by the governments or the idea of the role of the State.

The importance of each regulatory mechanism depends primarily on tradition. It is clear in the various countries that the State occupies a more or less dominant position which can be measured easily and the position occupied by the civil service. The more important this is the more the State intervenes directly. It is not content with providing impetus or tracing guidelines in vocational training policy but actually takes very important measures. At present we are witnessing a period where the relative importance of each regulatory mechanism is developing rapidly in each country. Analysis of American and Japanese models of industrial development bear witness to this. Generally, the quest for economic efficiency takes priority over policies aiming at equality of rights and training opportunities. The quest for efficiency leads to training being managed in an industrial manner and to strengthening the role of the companies including

their role with regard to categories of the population which are at risk or disadvantaged. This generally leads to reinforcing the commercial regulatory mechanism, that is to say in trusting that the market will regulate training by countering bureaucracy, by giving powers to local bodies and training institutions through allowing them to take on contracts, etc.

In a country such as Denmark or France the regulatory mechanism of the law is dominant. The quest for equality to ensure that all have equal opportunities in vocational training has led the State to develop its training offer, to intervene strongly among groups at risk, particularly among the unemployed, and to create a legislative framework for continuing training, including in-company training.

Germany is representative of a country where the industrial mechanism is the dominant one. Training focuses on the company but is based on the involvement of the social partners. The existence of agreements between the social partners on classifications and thus on the aims of vocational training has led to the construction of strong links between training and employment which are at the foundation of production activity.

England is in a state of transition. The importance of on-the-job training tends to create a situation where the industrial mechanism is the more important. On the other hand, the shortcomings of on-the-job training, linked closely to the collapse and disappearance of trade unions and the policies pursued will probably make England a country in which the market mechanism will predominate.

The trends over the past ten years show that almost every country is undergoing significant changes.

In France and Denmark the quest to ensure equality and productive efficiency has led to a certain decentralization of vocational training and to attempts to involve companies to a greater extent in initial training. The companies are given incentives and support in a variety of areas.

The mechanism of productive efficiency is expanding in many countries in the form of widening the training activities of large companies.

With regard to the market mechanism, it tends to develop in the majority of countries through

the development of a private vocational training offer and also by providing activities to ensure that the demand for training is met.

Evidently none of these mechanisms to date have removed inequalities in accessing continuing training which exist in all countries and which are fundamentally similar in large and small companies, between skilled and unskilled workers, men and women.

The countries which are constructing vocational training systems are currently trying to find a compromise of their own between these various regulatory mechanisms.

2.6.2 Remarks by country

Germany

The German constitution states that training manpower is the responsibility of the economy. Initial training, which is assured through the dual system, is to a large extent the domain of companies and company aims. The dual system responds to a civic and industrial aim. It aims to assure training of as large a number of young people as possible with the aid of a dense institutional network. The legislative provisions on the dual system help to attain this aim.

This is not the case with regard to continuing training. This is largely left to the market and to the free interplay of supply and demand even if one can speak of a "regulated market" as the authors of the FOCUS report do.

State intervention does not hamper the interplay of the market to the extent that the public bodies have little control over the contents, the development and the direction of training for workers. Even though programmes exist in favour of SMEs the State focuses its attention on the unemployed and on training officials who benefit more from continuing training than the rest of the population. Such activities do not suffice to counterbalance the inequalities of initial training.

Funds are directed towards persons rather than institutions in order not to interfere with the way the market operates. Decentralization is also a sign of operations which regulate themselves. The role of the market only produces satisfactory results as there is a strong basis of initial

training.

The more industrial efficiency and social aims seem to result in a satisfactory compromise in the dual system, the more the role of the market in continuing training leads to certain contradictions and a lack of available information. The market as a regulatory mechanism is only efficient because there is good initial training and strong social relations.

As a result of the importance of the market in regulating continuing training the information available on continuing vocational training is incomplete and sparse.

As far as what is known of training in companies - which makes up some 50% of total costs of continuing training - this is often pragmatic and designed to help manpower to adapt to workplaces and to changing technologies. There is a clear rupture between training activities for trades, which are basically initial alternance training activities, and training programmes to adapt individuals to work, which are principally continuing training schemes.

If initial training constitutes a compromise between the industrial and the social regulatory mechanism, continuing training forms a compromise between the market and the industrial regulatory mechanism. This compromise can only be efficient because good initial training exists which is accessible to a large number of young people. Evidently continuing training is inefficient in responding to social aims such as counteracting the inequalities of initial training or providing retraining for a large part of the workforce.

France

Joint responsibility for vocational training and its decentralization does not counterbalance the intensity of the activity of the State in continuing training. In contrast to a country such as Denmark (where the State's involvement is even greater) there is no reflection on how to give the market a greater role in regulating training activity.

Funds for training are directed towards the training offer and training bodies or even companies rather than towards the individuals requesting training. The State reaches agreement with the former in order to recruit trainees.

The activity of the State has, however, changed in the course of the past twenty years. The more the social objectives were to the fore prior to the law of 1971, the more this was based on concern to raise general economic efficiency and competitiveness. But this concern has not led to trust in the market but to giving companies a legal obligation to train and, in certain cases, to provide incentives for doing so.

The proportion of the expenses borne by the regions is low (some 6%) compared to that of the State (54%). The proportion borne by companies is high (some 38%). The State plays an important role not only on account of its involvement with groups that are at risk but also in its contractual policies which direct funds towards the regions or occupational sectors. These policies aim to reduce inequalities in the development of continuing vocational training or to ensure greater economic and industrial efficiency. But the activities of the regions have not led to a great deal of development in the continuing training market. Strict regulation of the activities of companies, which has not brought about greater equality of opportunities in accessing continuing training as in other countries, and on the other hand, a number of training bodies which are jointly managed or are affiliated to employers' organizations are not subject to the laws of the market. Paradoxically, the measure which shows the greatest equality in training, training leave, is funded by the companies and gives workers a free choice in training.

The French compromise is thus that of both the social mechanism and the industrial regulatory mechanism.

The aims of the State to increase the role of training in competitiveness and the quest for greater involvement of companies in training assumes a more important role of the market in regulating continuing training and greater importance attached to the industrial regulatory mechanism.

The Netherlands

"Tradition on the one hand and the current stance of the authorities on the other, that is to say deregulation and privatization, have strengthened the market trends", as indicated by the authors of the FOCUS report. Although it is difficult to identify clear conclusions with regard to the regulation of continuing vocational training, the conclusions drawn by the authors seem credible. The employment office encouraged privatization and regionalization and the

development of joint management. On the other hand, the training programmes organized by the State are moving from a "systematic funding of activities" to maximum funding ceilings or to a budget leaving more initiatives to the training bodies. The schools are free to undertake contracts as they often do with regional and local bodies. The latter, particularly the communes, benefit from a deconcentration of certain training measures, particularly in favour of those groups who have low qualifications or are at risk on the labour market. This deconcentration corresponds to a desire to better adapt decisions to the requirement of the area, to make these more oriented towards the latter and to enable all to undertake contracts in line with needs. It should also be noticed that regional structures have been set up on the initiative of companies. In order to construct a market for continuing training, the costs to the companies are fairly high (some 1.5% of total payroll) and seem to be increasing more rapidly than the cost to the State.

Denmark

State involvement is very pronounced. It is true that the report scarcely makes mention of activities undertaken by companies. A fund (AUD) regulates the involvement of the companies in continuing training. The State seems to wish to minimize its role. A tax has been replaced by contributions to finance the AUD fund. Certain funds are directed towards those requesting training rather than training bodies in order to meet needs and to reinforce the role of the market. There is a trend towards deconcentration and towards a localization of policies particularly with regard to the young unemployed.

A single concern seems to motivate different trends: to increase the efficiency of policies through giving the initiative to those stakeholders who are close to the potential individuals benefitting from training.

Italy

There is no breakdown of costs between State, companies and regions. It is impossible to assess the role of the various forms of regulation.

CHAPTER 3 THE NEXT STEPS

It has taken years to obtain useful comparative studies of initial training. Our experience with regard to continuing training is more recent and the task is certainly more difficult. The FOCUS studies and this summary report show clearly that data are often insufficient to give an overall view for each country of continuing training provision and to provide comparative data. As opposed to initial training which is often the responsibility of the national or regional public bodies and which is organized in successive stages which are clearly defined, continuing vocational training is the initiative of a large number of protagonists, of many sources of funding and has a large variety of forms which are neither provided for legally nor by the State. The formulation of comparative data is a difficult task requiring a long period.

However, the formulation of comparative information on continuing vocational training in each State of the Community is necessary. Such information responds to a number of aims:

- to identify the major trends and major innovations,.
- to help countries to take advantage of the experience of other Member States,
- to provide information necessary to draw up activities to develop vocational training at Community level.

The FOCUS studies, their insufficiencies and the large amount of information they provide, allow us to make several proposals to improve data and comparative work.

3.1 How to organize compilation of comparative information

It is evident that the national reports, although even when drawn up on a common specification, do not guarantee data which may be comparable. A follow-up to the reports on vocational training in each country does not constitute a comparative report. In other words twelve national reports do not in themselves constitute a comparative study or an entity of comparable data.

It must be stated, on the basis of many examples, that a report on one country, drawn up by an author who is a national of that country, always diverges from the technical specifications of the contract through using concepts which may be pertinent for the national situation but difficult to understand in other national situations. Identical words often mean very different things. Contract specifications often identify areas to be analyzed but rarely do they provide common concepts. Even where this is the case, each author of the national report has trouble in applying this common concept, either because the data are missing or because this common concept is often too imprecise. The complexity of generating comparative data is often underestimated as is cost and the time required to do so.

For these reasons it would seem expedient to identify two ways of organizing the formulation of comparative data between different countries.

The first, and more traditional, is to make use of the support of a network of experts who may be called upon at any time to analyze topical subjects and whose analyses and observations may be juxtaposed quickly and easily. Such networks may also draw attention to and explore new problems and identify innovation but they cannot really contribute to a thorough comparison of the national situation if they cannot generate comparative data which could be disseminated.

The second consists of making use of several teams, independent of decision-making bodies, whose role is to carry out comparative studies working on a number of countries. If such teams exist over a sufficiently long period they can make use of past knowledge of the situation in different countries, can gather data and information, can build upon the linguistic skills necessary to understand the work and the data in each country. It is utopian to believe that it is easy to produce a global, coherent, view of each country even in a limited field such as that of continuing vocational training. The quality of the studies and of the comparative data depends on the ability of the authors to acquire and to master varied and differing information on the situation in different countries. Only a team working over a lengthy period of time in a consistent manner can acquire and understand such information. In our opinion few such teams exist which aim to carry out comparative work on vocational training in a number of European countries.

3.2 The levels of comparability

The formulation of common data is a complex task. It has a number of aspects.

The first concerns the description: quantitative (figures) or qualitative description. This description of national situations and institutions in each country requires a good comprehension of the actual terms in order to facilitate a real comparison.

The second aspect concerns the formulation of common concepts for several countries, which often requires a great amount of debate. Such common concepts, which have to be clearly defined, are the necessary precondition for formulating common data for several countries and for carrying out statistical surveys.

The third aspect is an understanding and ability to explain the laws governing the operation of various vocational training systems as they contribute to producing qualifications and competences. While there is a certain homogeneity of national methods for economic regulation resulting from the single market, each country has its specificities and a social coherence of its own which is relatively stable. Even though technological trends, changes in work organization and the economic difficulties of the 1980s are common to the different countries in the Community each country reacted to these in line with its social coherence and the socio-economic means of organization. This is particularly true of continuing vocational training for which the organization, aims and roles of the various stakeholders are very different in the various countries. The problem of information on vocational training at Community level is not only a problem of producing homogeneous and comparable information but also one of recognizing and understanding the coherence of each vocational training system. It is not possible to construct a unique and comparative model for the different countries. A large number of possible approaches exist which may be the subject of debate as no single approach can claim to grasp the situation in its entirety. Within each country there no longer exists a single view of the dynamics of a vocational training system. The quest for explanations for the various dynamic factors of vocational training in different countries is a very important work area, both for formulating comparative data and interpreting it.

Each of these levels may result in work of a different nature which has its own requirements. The first leads to national reports provided that the descriptive elements are precise enough.

The second is the work of a group of experts or administrative body. The third is the responsibility of a research and study group.

In all these cases prudence is required. The most simple phenomena often require a great deal of study in order to adopt a comparative approach. One may, for example, take the example of on-the-job training. Even a national analysis is difficult as on-the-job training is not defined in the same way by everyone. It is, therefore, not easy to formulate a good description of the situation. To explain and understand the role of on-the-job training in vocational training is yet another issue. Defining a common concept of on-the-job training is a third aspect which is only meaningful for formulating legislation or carrying out an international survey.

All this points to the need to work in the comparative area of aims and to try to understand, as far as possible, the subject under review. Carrying out comparative work should avoid too wide an area and should focus on limited and common areas in different countries. Although the national situations are very different and institutions varied, a number of common issues remain for the various national vocational systems. Listing the important issues for each country (on which experts can often give advice) and finding issues which are common may be a pragmatic method to select approaches on which comparative work can be based.

3.3 Important areas for comparison

Here, only proposals can be made which result from work on the FOCUS studies. Essential areas for carrying out comparative work and formulating homogeneous data should also be the preoccupation of bodies formulating vocational training policy and of the social partners.

EVIDENCE

CHAPTER 4 A GUIDE TO THE EVIDENCE

'Nel Mezzo del cammin di nostra vita
mi ritrovai per una selva oscura
che la diritta via era smarrita'.

'In the middle of the journey of our life I came to myself within a dark wood where the straight way was lost'.*

The situation and feelings of Dante strike a chord with all investigators of continuing training. Here is another dark landscape, illuminated from time to time by flashes of light, but for the most part with uncertain contours and dimensions and no 'straight way'. Yet, because of the acknowledged importance of continuing training to all Member States, there is a common determination to press on and try to learn from each other's experience. For this enterprise a means of comparing, organising and communicating experience, a grammar, is essential. One purpose of this study is to identify key elements of such a grammar while reviewing the findings from the last programme of CEDEFOP reports on the financing of continuing training in the Member States.

Reviewing the findings from the Member States makes it clear why comparison is often possible and valuable, while comparability is rare. It will be seen why, the more that is known about continuing training data from Member States, the less comparable they become. By applying the elements of a comparative grammar it becomes possible

- (1) to demonstrate what can safely and usefully be said;
- (2) to show what cannot be said; and
- (3) to identify which information deficits it is feasible and desirable to repair next.

Review and synthesis of the financing studies is necessary because comparison of their findings, reading 'across', can increase the yield from the studies, compared with reading them simply as isolated country studies. The separate elements have to be analysed out and recombined in a way which challenges the experience of individual countries with that of their neighbours. The rules for analysing, recombining and communicating cross-national information constitute the elements of a grammar of comparison. Synthesis and grammar march together.

* Canto 1, opening lines, *The Divine Comedy: Inferno*, by Dante Alighieri, trans, John D Sinclair, New York: Oxford University Press, 1961, p 23.

To do this it is necessary to row against the stream. For a generation the intriguing metaphor of human capital has held sway. Its computer-assisted power has depended heavily on simplification and quantification. Applications in education and training have produced a rich harvest of errors and insights. To avoid some of the most insidious and common errors

associated with a naive human capital approach it is necessary to establish axioms for the comparative review, for instance:

- A common unit of measurement is by no means a sufficient basis for comparability of data between countries.
- For comparability, the object of measurement (continuing training) and its context (all competence formation, the host economy and society) must be essentially similar.
- Unless input and process measures of training are complemented by data on content and outcomes, comparability cannot be evaluated. Activity-based costing is a useful tool of management accounting. But the extent of comparability between systems cannot be assessed unless it is known what product is being costed, i.e. the cost of each system's outcomes.
- Reported training costs comprise a frequently unreliable and always partial basis of leverage for policy instruments compared with the implicit and explicit costs and benefits which actually influence the training behaviour of employers and employees.

Such axioms sit easily with the findings of financing studies whose authors point to the deficiencies of their data in disguising (i) the real heterogeneity of training, (ii) its heteronomy as a means of competence formation or an economic or social activity, and (iii) the specificity of the context within which it takes place. The most subtle but profound theme in their commentaries on national data is that robust conclusions depend on an extremely difficult blend of qualitative analysis with quantitative data - much of which is currently unavailable or of poor quality and partial coverage.

The nature of continuing training

Two modes of competence formation

The outcome of continuing training is competence formation. This is shorthand for the mix of skills, knowledge, attitudes and values which produce competence to perform a task, or that cluster of tasks which we call a job. The financing studies focused on training, as they were asked to do. But it is misleading to treat all competence formation as the product of training, since work-led competence formation is often more important than training-led competence formation. Many people learn more from work experience, especially from trial and error, than they ever learn as a result of formal or informal training. The base of skills and knowledge which a company deploys is an enabling asset which is produced mainly by means other than training, i.e. by research and development and by work-led competence formation.

There is a spectrum from formal, classroom-based instruction through to learning by doing the job, i.e. learning integrated with production. There is not, but there has to be agreement between Member States on where to draw the line along this spectrum. On one side of the line all will be described as training-led competence formation, on the other work-led competence formation.

Figure 2.1: Who knows what is the ratio of training-led (TCF) to work-led competence formation (WCF)?

For policy purposes, it is also vital to remember that the proportion of skills which are promoted by training rather than work experience may not be known but is not a constant. Sometimes, training is so clearly superior as a means of accelerating and guaranteeing skill acquisition, and minimising its cost, that experiential learning is not a practical substitute. But, over a surprisingly wide range of skills and in many different work circumstances, work-led competence formation is not merely a complement to but can be a serious potential substitute for training. Given the immense ignorance of the cost-effectiveness of work-led as against training-led competence formation for many tasks, it is highly unlikely that the balance between the two modes of competence formation at any one time and in a particular country is anything like optimal.

Further heterogeneity: modes of training

Among the Social Partners, many would argue that all modes of training - for instance on-the-job training and off-the-job training, face-to-face and distance teaching - are not perfectly substitutable, one for another, in terms of effectiveness. The nature of the learning may be affected by the mode of training. With only one or two real exceptions among Member States, the financing studies are unable to offer data on one of the most common and expensive modes of training, that which is on-the-job. There are some survey data. But these often provide a narrow base which then requires heroic grossing up, interpolation and assumption. Since on-the-job training may, according to circumstances, act as a complement to or a substitute for off-

Figure 2.2: Who knows what is the ratio of on-the-job (OJT) to off-the job training (OFJT)?

the-job training, its volume and quality is of great importance to the interpretation of the volume and quality of off-the-job training -and for comparability between formal training in Member States. Yet, with only a few exceptions, its size and relationship to off-the-job training remains unknown.

Further heterogeneity: personnel objectives

If the ratio of training-led to work-led competence formation is neither constant nor optimal it is no surprise that the object of training - the particular skills, knowledge, attitudes and values to be developed - varies in character within and between Member States. This heterogeneity of training is due in part to differences in the personnel objectives of training. Both content and outcomes from training are strongly influenced by who is being trained and for what purpose.

The financing studies are notably deficient in information on content and outcomes. But authors understandably warn that to assume homogeneity of activity and purpose in the absence of information would fly in the face of what is known. Reported data on objectives may be inadequate, but it is universally agreed that the main types of continuing training for personnel can be broadly classified as:

- deferred initial training
- updating
- upgrading
- retraining

The nature and outcomes of training with such diverse purposes are often so different that to treat all these varieties of training as additive would be a nonsense. The skills acquired may sometimes be the same; but, for instance, those which are the focus of upgrading are usually more advanced than those which are developed in programmes of deferred initial training or retraining. The training of a German meister is continuing training - *fortbildung* - and the skills and knowledge acquired are not those of a technician or a *facharbeiter*. Unless the data are available disaggregated by objective, content or outcome they cannot be treated as comparable with data from other countries which are so disaggregated or with data which are not - where the uncertainty is as great in both comparators.

Figure 2.3: Who knows what is the ratio of deferred initial training (DIT) to upgrading (UG), updating (UD) and retraining (RT)?

Where some two thirds of the workforce has successfully completed a quality-controlled apprenticeship - Germany's dual system - the content of continuing training may well be

considerably different from its content in a country like the United Kingdom, where the apprenticeship system was allowed to crumble away, or in Portugal, Greece and Spain, which never had comparable levels of initial training for skilled craftsmen. Unless the continuing training data are sufficiently refined to identify how much continuing training is being used to remedy failings in initial education and training, and how much to build upon such a base to provide workforce adaptability and flexibility, comparability is not feasible.

Further heterogeneity: training for strategic change

It is sometimes forgotten that mainstream continuing training - which is employer-sponsored - may have a purpose beyond immediate skill needs in the face of current production requirements. This purpose derives from the strategy of the firm. The business strategy looks beyond current production to define competence requirements in a longer-term perspective. It is constrained by but may envisage changes in competition in the firm's markets, the production possibilities of existing and emerging technologies and available methods of work organisation. It also reflects non-market influences emanating from population changes, from employment, company and tax law, and from the structure of education and training opportunities open to the national workforce.

Even Member States which have fairly similar industrial structures and product mixes in their national output have whole sectors and groups of employers within sectors who are cultivating different market niches, and pursuing different business strategies from those in other Member States. The strategic purposes and therefore the skill needs of such employers are not the same.

Policymakers in particular cannot afford to treat training as if its only contribution is to the efficiency with which given inputs of time and money are transformed into desired competences. The point is well made (e.g. PREST, 1988) that one of the reasons why training is so difficult to evaluate is that its contribution to creativity and flexibility is as great as its contribution to industrial efficiency. PREST defines creativity (too narrowly) as the 'ability to achieve technological capability for product and process improvements' and flexibility as the 'ability to respond to short-term shocks'. It is because efficiency effects - 'capability to produce products at particular costs' - are most frequently evaluated that the analysis of the objectives of and benefits from training has been so lop-sided.

With hardly any exceptions, the financing studies only report people in training or having undergone training. They certainly do not report outcomes in the form of people successfully trained and qualified, still less in terms of other benefits such as improved job performance, organisational change, changed product mix, greater profitability or competitiveness. Yet training is recognised to be more than a process, and the product is admitted to be more than mastery of a skill.

Competitiveness requires far more than efficiency, which, by itself, could lead to low cost production of goods and services wanted by no one. Competitiveness requires the capacity to change organisations and their products. It requires creativity and flexibility. Both factors depend quite heavily on training: (Box J)

Box J Competitiveness through training

'Competitive success requires a commitment to continuing change. Training is a vital element in building a firm's invisible assets particularly where there are rapid changes in technology or foreign competition. Training enhances the knowledge base of firms and strengthens their ability to maintain the momentum of technical change necessary to remain competitive'.

Source: PREST, 1988

Neither corporate nor social nor individual rates of return to training, nor profit and earnings profiles, can possibly capture this role of training as a change agent. A single indicator or summary statistic implies a spurious homogeneity where heterogeneity is the essence. The need for change, the mix of other factors necessary for change and the optimal change path vary widely from company to company, sector to sector, country to country. The relevance of training, defined as fitness for purpose, is part of its character - as it is for a machine tool.

Because its character as a change agent is so dependent on these different needs and contexts, the idea that such training is sufficiently uniform to be comparable in quality and quantity across the non-uniform contexts in which it functions reflects a profound misconception. The idea of comparability presupposes a homogeneity of contexts the absence of which is one of the few certainties in the entire field.

Of course, not all training serves this kind of strategic purpose. But such training is sufficiently important quantitatively to require wariness of the efficiency-dominated approach to training which emphasises - as do the data of the financing studies - financial costs and process measures (training hours or days) as proxies for training outcomes. It is the dynamic of economic life which galvanises many employers and individuals to train. Yet the efficiency approach is usually based on a fundamentally static view of the economy. There is no gainsaying that, for a high proportion of continuing training, economic change is either cause or effect. The directions and trajectories of corporate, sectoral and national change vary widely across the Community. So must the role of training as a change agent.

The second axiom proposed is that, for comparability, both the object of measurement (continuing training) and its context (all competence formation, the host economy and society) must be essentially similar. From the foregoing analysis it is already clear that this similarity is unlikely to be found among Member States. But it is argued that this condition is unnecessary, that there is no need for object and context to be essentially similar in order to establish comparability.

The argument is that figures for physical capital formation are treated as internationally comparable. There is no indication at all that the composition of the investment (buildings, infrastructure, equipment, stock etc) is the same in each country that is compared; nor that the pattern of savings (by firms, individuals or government) which accompanies the investment is similar. The object of measurement and the context are not essentially similar.

The analogy is fair. But the argument is upside down. It needs to be inverted. The analogy does not undermine the axiom. It supports it.

There is a circumstance in which the composition and context of physical capital formation is irrelevant. When its value is being established for the purpose of macroeconomic management it is the balance of savings, investment and income which is at issue. When the only interest in training expenditure (less transfers) is macroeconomic analysis, it does not matter whether the training which is being financed and the role of that training within the economy are comparable between countries.

The composition and role of training only become critical if industrial, social, employment or indeed training policies are at issue. The effectiveness of training is not the same irrespective of its composition. On the contrary, that effectiveness depends on the appropriateness of the mix of different types of training to the context, i.e. whether the mix of training being provided is fit for the purpose. An inappropriate training mix might be just as costly, but it would not improve productivity, competitiveness or social equity to the same degree. Without knowledge of the composition and context of training no judgement is possible as to its appropriateness to a country's circumstances and objectives. The same applies to physical capital formation. Much policy attention is devoted to increases or decreases in total investment; far too little attention is paid to the effectiveness of investment, i.e. to the relationship between investment outcomes and objectives. If outcomes and objectives are different between countries, how can the process be similar?

The role of training in the economy

Whether training is measured by participation, volume, expenditure or output, there is no good foundation for causal hypotheses in any cross-section correlation between training effort and economic growth or competitive performance. The reason is that the nexus of causal forces promoting economic growth or competitive performance are rarely the same from country to country, any more than they are within the same country at different periods in its history or between industrial sectors at the same moment in time. In its common forms, benchmarking against the training given by admired competitors - countries or companies - implies just this kind of naive causality hypothesis.

However, to reject naive comparison is not to deny that links exist between certain kinds of training effort, economic growth and competitive performance. The difficulty for policymakers is that this link is quite remote in the sense that it operates only in combination with other necessary or sufficient conditions. It is also quite variable between sectors and across space and time and hard to distinguish because there are so many intervening variables which are far more powerful.

Constraints on quantification and comparability

Expenditures on training are resistant to a purely quantitative analysis. Since the reasons for this are rooted in the role of training in the economy and act as a major constraint on comparability it is worth listing them:

- i) Training expenditures are a necessary, but not a sufficient condition for growth in output of goods and services and commercial competitiveness (see above).

- ii) It is not possible to characterise statistically the work-led competence formation which may be a substitute for training-led competence formation.
- iii) The immediate outcome of these expenditures, additions to skills and knowledge, is not easily measured except for that small part which is the result of provision by educational institutions.
- iv) The remoter economic effects of these expenditures -changed job performance, changed attitudes, organisational change, profitability - are even more difficult to attribute to preceding training than more immediate effects like trainee reactions, skill mastery and job competence.
- v) Social effects - such as value change, the development of human potential, the social re-integration of the unemployed, and the consequences of these for families and local communities as well as for individuals - are as difficult to measure as they are to attribute confidently to training.
- vi) All these remoter effects are widely diffused.
- vii) Such effects make themselves felt over long periods of time and tend to be cumulative. High training firms grow more than average and do even more training. The more initial training individuals receive, the more continuing training they receive. The families of the most highly trained members of the workforce are better-off than the average family and are more likely to produce highly educated and trained children.
- viii) Data aggregation quickly destroys the information on training objectives and content which is critical to any understanding of its economic and social role. The nature and quality of training are data dimensions which are essential to any evaluation of data comparability between countries.
- ix) Separation of investment in skills and knowledge from investment in physical capital is very common. It completely obscures the essentially complementary nature of much human and physical capital formation.

Misplaced aggregation and illegitimate isolation

Much of the oversimplified reasoning which underpinned rate of return analysis when it was so fashionable also underpins the naive comparability approach, i.e. setting training targets by reference to training indicators in benchmark competitors. This approach ignores the fact that training is not a single homogeneous input, nor an independent input to the production process.

As with the calculation of rates of return to training, unqualified statistical benchmarking suppresses value judgements in a pseudo-objective formulation - an indicator or table. As critics of rate of return analysis put it, this 'buries the factual judgements in misplaced aggregation and severs crucial connexions by illegitimate isolation' (Balogh and Streeten, 1963). As a basis for informing policy, the alternative to this oversimplified reasoning is a process of data collection, collation and - where appropriate - comparison which recognises both the heterogeneity of continuing training and the dependence of its effectiveness on complementary measures. This implies disaggregation into economically meaningful subsets and definition of

the economic role of training. The subsets are defined by objectives - personnel or strategic in the case of employers, workforce competence and flexibility and social equity in the case of governments - and by contents, i.e. skill levels related to sectoral, occupational or geographical labour market requirements.

Illegitimate isolation of training from the host economy and society is at least as serious a threat as misplaced aggregation. Both threaten that understanding of training which is the first step towards relating to each other the data sets in different countries. Policymakers are not playing with abstract and pliable models like economists. They are dealing with a production process which is integral to economic structures which are concrete and, in some important respects, idiosyncratic. Some of the most ineffective training is that which is not organic. It is a graft which has not really taken, like the BVY or the Youth Training Scheme in initial training, or a variety of training schemes for unemployed adults. Such training may have little more productivity value in its outcomes than no training at all, because it has never been embedded.

By contrast, most continuing training is deeply embedded in the private lives of firms. To characterise this corporate context is immensely difficult, although the task is embarked upon (see Maurice and Silvestre, 1982; National Institute, 1989; Mehaut and Villeval, 1990). When the outcomes of training seem to be unsatisfactory the reason may lie in the interaction between training and its context, not necessarily in the training itself. Policymakers therefore have to make some estimate of the way training functions in this context and whether action on the complements of training is as necessary as action on training. Likewise, comparison has to begin by attempting a working diagram of training within this context. Comparative analysis, like policy analysis, has to recognise that employer-sponsored training (most training) is not a self-contained system. Heteronomy, not autonomy, is its essential nature.

Employer-sponsored training is so totally integrated into the production process that dysfunction is frequently masked by the speed and flexibility of accommodating behaviour by employers. Many systems for producing goods or services are so flexible that they can accommodate problems like skill shortage by responses other than recruitment or training. They may substitute capital - especially labour-saving equipment - for labour, re-organise work to economise skills, contract production out, or change the product. The scope for and use of accommodating behaviour varies dramatically within a country as well as between countries. It is constrained not only by the production possibilities - availability of alternative technologies, ways of organising work and product strategies - but also by the demographic situation, employment practices and labour market conditions. To abstract training from this context is to isolate it from that which determines its rationale. To compare these abstractions is to juxtapose forms while ignoring the inner substance and dynamics of an organic part of an economy and a society.

The context of training

The environment of training is characterised by specificity, indeed by uniqueness. Wherein lies its originality? Legal, institutional and socio-cultural differences between countries are certainly an important aspect of the context within which the role and substance of training is defined (but see Box K). Moreover, there is now a substantial body of evidence and analysis which shows that employment systems are a very powerful source of difference between

training systems (e.g. Lindley, 1991).

Box K Perils of grand comparison: EC, USA and Japan

The absolute necessity to make a careful comparison of contexts, even before making any assumptions about comparability, can be illustrated using a set of indicators comparing the Community with the USA and Japan.

An international comparison				
1990	EC		USA	Japan
Stockmarket capitalisation, August, \$	2,040		3,350	2,841
Stockmarket capitalisation per head of population, \$	6,220		13,347	22,911
GNP at current exchange rates per \$ of stockmarket capitalisation	2.9	1.6	1.0	
Exports per head of population, \$	1,604		1,566	2,315
Population, m	328		251	124
GNP at current exchange rates, \$ bn	6,010		5,391	2,942
GNP at PPP exchange rates, \$ bn	4,664		5,391	2,130
Exports, \$ bn *	526		393	287

* excluding intra-EC trade

Source: The Economist, August 24, 1991, p 52

Despite the presence of the UK, with its highly liquid capital market covering an abnormally large proportion of productive assets, a much larger proportion of EC output comes from unquoted companies than is the case in the USA or Japan. Is this important for training? On the one hand, the liquidity of EC company assets relative to the US, and the greater pressure for short-term profitability in the US, is one factor which probably contributes to the shorter time horizon for investments in company training in American relative to European firms. But this is only one factor.

Japanese stock market capitalisation, though high relative to the United States, is actually lower in relation to the value of GNP. It would be even lower (at 0.75, like the European Community) at a purchasing power parity rate of exchange. Of course, the pattern of securities trading is very different as between the US and Japan. In Japan there is a far greater prevalence of almost untraded long-term cross-holdings than in the US. But Japanese companies are heavy investors in long-term human resource development, though not in accounted training since non-wage expenditures on education and training by manufacturing firms amounted to only 0.3 per cent of wage costs in 1984 (Dore and Sako, 1989, Table 6.1). Simple correlations between indicators of market capitalisation and levels of training investment by firms would not be illuminating.

Similar caution is necessary within the Community, between its Member States, when considering indirect influences on training. Cumulatively, and together, such indirect influences must have powerful conditioning effects on the decisions of employers and employees. But this influence is often difficult to trace clearly. The balance of evidence in the financing studies suggests that continuing training grew during the eighties both in Britain, with its high degree of market capitalisation and fierce imperatives on managers to produce short-term profits, and also in Germany, which is by comparison the land of the unquoted company, with a culture of training investment much closer to the Swiss notion of patient capital. It grew in France, where state-owned or state-controlled organisations account for one third of all employment.

For example, German provision of continuing training is not to be understood except in relation to its base, the dual system, and the particularities of the employment system of which it is a part. Neither France nor Britain has an employment system comparable to that in Germany, so any comparison of training in the three countries requires extensive treatment of employment differences (see, for example, National Institute, 1989). It is not merely that initial training is so differently organised in each of the three countries. In Britain and in France it is more common than in Germany to find parts of the training system which are disconnected from or only weakly connected to employment.

In continuing training it is necessary to dig below the surface of statutory interventions to the realities of practice. German continuing training is heavily employer-driven, and even the operations of the Federal Institute of Labour in retraining the unemployed are quite blatantly exploited by employers needing to reskill their labour force. The relative absence of statutory interventions in continuing training might appear to suggest a basic similarity between Germany and the United Kingdom in continuing training. Indeed, there is a similarity in the strength of the employer influence. But the immense differences in initial training, in the skill profile of the workforce and the skill mix in the workplace produce different consequences. In France, much of the formal continuing training which appears to be a consequence of statute would take place without it. But the degree of formalisation, i.e. the lesser reliance on on-the-job training, must be influenced by the law; and a margin of French provision, like some of the activities of the Construction Industry Training Board in Britain, represents training which, but for legislation, would be rejected by the immune system of the labour market.

Like the British researchers, French researchers argue that it is impossible to analyse, plan and manage the production of competences apart from the system for organising work and arranging employment. Alain D'Iribarne (Box L) argues that attempts to construct comparability

indicators are bound to be compromised by our inability to characterise the idiosyncrasies of the context within which competences are formed.

Box L Twelve idiosyncratic systems

'... Je fais partie de ceux qui considerent qu'on a au départ 12 construits sociétaux, 12 construits nationaux, qui sont différents les uns des autres. Et chaque fois qu'on voudra comparer les choses sur des bases techniques, ces exercices buteront chaque fois sur la faiblesse de nos constructions des caractéristiques sociales ... ce que l'on a à faire c'est construire un systeme de repères simples qui donnent un certain nombre de collages qui permettent un certain nombre de passages. Mais en réalité, derrière, chaque pays se reappropriera de manière particulière des caracteristiques des individus au delà de ce système de collage.'

Source: D'Iribarne, 1991, p 22

Any grammar of comparison must include procedures for analysing the components of this context and their interaction with continuing training, as well as procedures for analysing and communicating the nature of the training which is being given. How far it can go with this depends on the progress which has been made in understanding and characterising the context of training, not merely descriptively but above all understanding the dynamics of the economic and social womb within which training lives.

It has to be admitted that this enterprise has a long way to go before a satisfactory, i.e. a useful and practical understanding is available. The present state of the exploration is that many separate components within this context have been identified; and some of the important relationships between components, and between those components and training are now better understood. But the holistic approach which is seen to be necessary is nowhere near achieving a comprehensive understanding of the interactions between training and its context.

The comparative investigations already carried out produce a long list of context features which are probably more or less important according to circumstances. These features include:

- the way work is organised;
- the way people are paid and promoted;
- employer systems for developing the workforce (programmes of human resource development, career structures, the architecture of internal labour markets);
- the structuring of primary and secondary labour markets;

- technologies in use and available;
- product markets;
- law governing taxation of companies and individuals;
- law on company finance;
- relationships between the initial education system, labour markets and firms.

An understanding of the dynamics of the whole context of training depends on an understanding of relationships. For the most part, investigations have got little further than demonstrating the extraordinary complexity of these relationships and the difficulty of isolating related components in a way which yields useful answers to key questions. Examples of some of the key questions are:

- i) What are the effects of introducing labour-saving technologies on the learning contents of jobs? Does it reduce the stock of learning-poor jobs and increase that of learning-rich ones? What are the possibilities and costs of changing work to promote competences, irrespective of the effects of introducing new technologies?
- ii) How are a company's training decisions influenced by operating within the framework of company law and company financing which operates in France, or Germany, or Spain or Italy?
- iii) How does a shift towards more market-led flexible manufacturing, in place of Taylorist production, influence the skill strategy and training provision of firms?
- iv) How much are individuals influenced to invest jointly or independently in the acquisition of new skills by existing skill differentials compared with other job characteristics such as options for further advancement, freedom of movement on a strong occupational labour market, security of employment and income? How influential is it, for example, that job classifications appear in general to be broader in Germany than in Britain?

It is on the answers to such questions, and then on the credibility of hypotheses concerning the dynamics of each national context of training, that the possibilities for developing one major dimension of a grammar of comparison depend.

Cases in point

A series of comparative investigations (National Institute, 1989) have shown that the well-known fact that there are many more certified skilled workers in Germany than in Britain is in part due to two other phenomena:

- the way that work is organised is generally different;
- the way that skilled workers are counted is different; in Germany all skilled workers are credentialed and therefore counted, while in Britain workers who are equally competent may not be credentialed and therefore will not be counted.

In other words, some differences are spurious - a reporting phenomenon - but they are intermixed with real differences (in work organisation) which reflect the fact that there is rarely only one way of combining resources to produce goods and services. How to allow for the host of different interactions between training and its context which characterise one production function when compared with another?

There is an inner and an outer environment of training. The totality of workplace competence formation and the way that work is organised are part of the inner environment. No less certainly, factors such as the way that companies are financed are much less direct influences on training and so are part of the outer environment. In Germany, as is the case in several other Member States, much of industry is in the control of private and unquoted companies, and even the rather small number of publicly-quoted companies have a structure of share-owning in which holdings by banks and cross-holdings by suppliers or customers constitute what is, in effect, long-term capital. By contrast, more than three quarters of Britain's gross national product comes from publicly-quoted companies (Diehl, 1991). In the appropriate phase of the share cycle, hostile takeovers are feasible and are executed in a very liquid and volatile capital market.

Other things being equal - which of course they are not - companies operating within a German company law and financing structure are able to pursue market share and long-term competitive pricing more easily than British firms. Managerial short-termism is a complex phenomenon. On the supply side there may be a greater scarcity of profitable investment opportunities and other investment inhibitors in one country than in another. If there is a generic difference in company investment behaviour between two countries, the differences in managerial time horizons, in managers' remuneration and reward systems, in the liquidity of capital markets and in company law can only be contributory to the picture portrayed by OECD statistics (Box M)

Box M: Investment in fixed capital formation in Germany and Britain

Country	Real GDP growth per capita, %				Capital formation % of GDP	R & D Indl Total % of GDP	
	60-89	60-79	80-89	60-89			
					87		
W Germany	2.8	3.3	1.7		16	1.8	2.8
UK	2.1	2.2	1.9		14	1.1	2.2

Source: Marsh, 1990, Table 1

The notable absentee from Box M is the investment record of both countries in the other major invisible asset of companies besides R and D, namely competence formation. It can only be hypothesised that, if the British record in company human capital formation is as inferior (quantitatively) as its record on industrial R and D, then the structural phenomena associated with managerial short-termism may be one of several key influences.

Of course, even if the data permitted an estimate of expenditure on training in two or more Member States, the problem of comparability remains: the metaphor of investment, and returns on investment, may be beguiling but also impractical for all the reasons adduced earlier. It is noteworthy that, in reviewing methods of quantifying economic benefits from another enabling asset, research, the US Office of Technology Assessment (Box N) became sceptical about a purely quantitative approach.

Box N Practical limits to quantified comparisons

'OTA finds that the metaphor of research funding as an investment, while valid conceptually, does not provide a useful practical guide to improving federal research decision making. The factors that need to be taken into account in research planning, budgeting, resource allocation, and evaluation are too complex and subjective; the pay-offs too diverse and incommensurable; and the institutional barriers too formidable to allow quantitative models to take the place of mature, informed judgement'.

Source: OTA, quoted PREST, 1988, p 28

A grammar of comparison

Strictly, a grammar of communication is intended to bring together vocabulary and the structures of language in order to promote easy access to and correct understanding of everyday usage. The difficulties of reading across the information provided in CEDEFOP's financing studies are both lexical and syntactical. To the extent that it is possible to articulate a grammar which begins to overcome some of these difficulties, it will become easier for people to shift from a passive to an active knowledge of a Member State's training. That is to say, the purpose of attempting a coherent account of the necessary vocabulary and structure of comparative language is not academicism. It is to enable people to make more use, and more accurate use than hitherto, of the experience of training in other Member States.

Comparison or comparability?

Consistent and precise use of language is a necessity. For example, the verb 'to compare' has as near-synonyms to juxtapose, to contrast and to differentiate, i.e. to classify as different. It implies the recognition of difference as much as similarity between whatever objects are being compared. It is perfectly neutral between findings of difference and similarity. The adjective 'comparable' unambiguously implies equivalence. Not surprisingly, comparison is common and comparability is far more rare.

Comparison is not a matter of degree; comparability is. As long as there are objects or activities to set side by side, it is possible to compare. The comparability of objects or activities,

or of data describing them, depends on the purpose of the comparison. If no more is intended than to distinguish that class of human attributes which develop skills and knowledge from all other human activities, then a vast array of data on the incidence and volume of training in the financing studies can safely be regarded as comparable and classified into the first group. If data are intended to inform policy initiatives which will seek to change the allocation of employer resources across the Community between one kind of training and another, between training-led and work-led competence formation, between human resource development and other uses of resources, then comparability will be much more difficult to establish. Why? Because, regardless of the desirability of the policy initiatives, their effectiveness in achieving the desired reallocation and the objectives of that reallocation will depend on the reliability and validity of the data as a measure of the same activity in an essentially similar context.

If data are unavailable or their quality is poor, low reliability and validity may render data from different parts of the Community non-comparable. Comparison will still be possible. As this review of the CEDEFOP financing studies will show, much can be learned from comparison even where comparability is lacking; and much can be deduced about what should be done to increase the degree of comparability of data.

The process of moving from comparison to comparability is a three stage one:

- 1) The strengths and limitations of the data from Member States have to be understood. They have to become transparent to those from other Member States.
- 2) The national data sets have to be related to each other. The contexts which determine the meaning of the data must be characterised in order to do this.
- 3) Comparability depends on convergence between the data sets, the nature and the contexts of training across the Community.

The time scale for this process may be longer than some people wish. Stages one and two are likely to be prolonged and achievements partial. At present, stage three, if it occurs, seems likely to take several generations before substantial achievement is evident, Rome was not built in a day.

It is necessary to be realistic about the nature and difficulty of this process because progress will be set back if wishes replace realism. In the face of such an agenda, modesty of purpose is in order. Other investigators have come to the same conclusion. For example, reviewing enterprise-related training, OECD (1991) concluded that:

'... it is not valid to compare measured levels of training incidence or expenditures across countries - but that, while considerable caution remains necessary, it may be more feasible to analyse the patterns of training participation and give them a comparative flavour.'

OECD's review found that 'international comparisons of the levels of widely used training statistics can be very misleading'. Prudence dictated that it would 'only examine variations in training between subgroups of the employed or subsectors of the economy to assess training incidence and provision within countries' (OECD, 1991). In other words, OECD stayed with stage one.

However, OECD took one step further, which reveals the difficulty of moving, however

hesitantly, towards stage two. This further step was a decision to give these observed patterns 'a comparative perspective on the assumption that they are more readily comparable' (our italics). The financing studies strongly support the argument made earlier in this chapter that to assume comparability is to ignore what must be demonstrated, that the reality of data match their face value and that the contexts which produce them are similar. Although it was not their principal focus, the financing studies reveal very considerable differences in objectives, structures and circumstances between countries. Had authors been asked to delineate the context more fully - including work organisation, industrial policy, business strategy, labour markets, employment, company and tax law, the structure of output and of the education and training system, government and Social Partner priorities - this would have emphasised the wide divergence between training contexts across the Community. Patterns in subgroups or subsectors are no more comparable than national aggregates or single indicators unless it is more feasible to characterise the context at that level than at any other level between the most macro and the most micro, i.e. the country and the individual. It is not.

Example: A two country comparison

Data on the incidence of training are relatively common and particularly treacherous (see Box O). The financing studies reflect all too well the reality in Member States: a general dearth of outcome or content data compared with input data. So much incidence data lacks matching outcome data that is often not known what is being compared. Comparison is therefore extremely difficult. Comparability is too remote a possibility to be a realistic objective.

Where it is possible to find outcome or content data, the more that is known about incidence data the less comparable they become. The specificity of training to its context becomes apparent. Paradoxically, data are non-comparable either because they say too little or they say too much.

Box O Comparison of enterprise training in France and Britain

In relation to the largest mass of continuing training, that which is enterprise-based, it has been pointed out by OECD that to express the number of employees being trained as a percentage of those employed in firms is not straightforward with respect either to the numerator or the denominator. Among examples cited by OECD are two large Community countries and their company training:

		Incidence of Formal company- sponsored training, %	On the training only, %	job training, %
France, 1988	26.6	26.6-		
GB, 1986/87	48.3	34.8	32.9	

The numerator presents two separate difficulties. The definition of training is not the same between the two countries. The French definition is statutory, defines training as formal, off-the-job training and imposes financial penalties on firms who do not declare sufficient training, as defined. The financial penalty is a considerable incentive for firms whose training is near to the benchmark level to find any shortfall. It gives no incentive at all to report formal training above the benchmark level. The best estimate currently is that French firms under-report participation and volume of formal training by about 20%.

The British definition depends entirely on a one-off survey of 1986/87 employers' activities with a somewhat different sectoral coverage from the French data. There is no likelihood that the British firms will have adapted either their behaviour or their reporting over time as there is with the annual declarations by French firms to the tax authorities.

So the numerator is not comparable both because of definitional and coverage differences and because of the entirely different methods of data collection. The denominator is a further source of difference. In France it is the number of permanent workers on the payroll at the year end who are counted. In Britain, the one-off survey of employers' activities counted the workforce, or the employer's best estimate, 'at present', at the time when the employer completed the questionnaire. The workforce included part-timers working

more than 10 hours a week but excluded casual workers. To take these problematic numerators, divide them by problematic denominators and treat the dividends as comparable would be rash even if the contexts of training were similar.

Source: ED:TA, 1989
OECD, 1991

The French and British financing studies explain the way that their data were generated and something of the strengths and weaknesses of this. They relate their data to some features of the training environment. Without that context it is quite impossible to begin to understand why their financing arrangements have the training outcomes and financial consequences they do have. Despite the best efforts of authors, much that is essential for comparability remains unknown. The data are unavailable. Survey data, for instance, rarely differentiate between deferred initial training, upgrading, updating and retraining. In other words, they rarely classify training by objective. To ignore over-aggregation, non-matching reference periods and coverage, and definitional inconsistencies leads to repeated erroneous conclusions, with mere assumption dressed as fact. It then becomes impossible to decide whether data differences or similarities are real or spurious.

Data quality

In reviewing the financing studies, and more generally in comparative analysis, data have to be classified broadly into three groups:

- i) In some areas - many areas in continuing training - data are either unavailable or are too sketchy to bear any sort of analysis.

This deficiency may afflict critical areas. For instance, the financing studies underline once again how very little is known about the financing of continuing training by individuals, either alone, at the expense of their household budgets, or in partnership with someone else, like an employer. The French study reports that households account for only 1.2% of training expenditures. Is this a mere reporting phenomenon, which will disappear once better-founded survey data are available? Or is it accurate information reflecting the superior access which French adults have to whatever training they want, at someone else's expense, relative to access in Germany or Britain, where reported household expenditures on training are greater. It is important to know. Much continuing training is already being done in non-work time and more will be done as non-work time increases at the expense of work time. The democratisation of training, the empowerment of the individual, has made rather little progress to judge from data on the take-up of rights to training leave. But the signs are that it is increasing

through the extension of market-driven training and an increasing propensity for individuals to invest in their own skills. It is necessary to signal both the non-availability of data and the significance of deficits.

- ii) In some areas it is possible to make reasonably reliable statements concerning a national system, but not to produce comparable data across Member States.

For example, it would be foolish to compare aggregate national data on continuing training expenditures. Neither the current data nor existing understanding of the contexts of training would support such a comparison. But it is both feasible and desirable to report on the different ways that funds are raised, allocated and spent, and on the training and cost consequences of deploying particular financial instruments within a specific national context.

- iii) In a few areas, data in reasonably comparable form may be available, such as those produced by a common instrument like the Labour Force Survey. In such areas it is the interpretation of the data which is the key to genuine comparability. An adequate characterisation of the contexts of training is a necessary condition of being able to link such data across Member States in a way which identifies similarities and differences in the activity which is reported. Where comparability in the role of training does not exist the nature and extent of this non-comparability at least needs to be understood.

What can be done at present?

At the present stage of development of a grammar of comparison - the earliest stages of development - what can usefully be done by way of comparison across countries? The answer is a great deal to promote mutual understanding (stage one above). It is even possible to make a good deal of progress towards relating data sets across countries, as long as there is as much readiness to acknowledge contextual differences as there is to acknowledge similarities. This applies to data sets which originate from national instruments of data collection, whether administrative or survey-based, just as much as it applies to data originating from Community instruments of data collection such as the Labour Force Survey or the proposed common employers' activities survey. As long as the inner and outer contexts of training remain as distinctive from each other, i.e. as nationally specific as they are at present, this powerful source of non-comparability will hold progress at stage two (relating data sets across Member States). Stage three, data convergence, requires comparability of the activity across Member States, and that is in nearly every case for the future.

This can be shown (i) by considering some specific examples of apparent comparability and (ii) by reviewing the use and abuse of indicators based on existing data.

Apparent comparability

At a certain level of generality, the data available both in the CEDEFOP financing studies and elsewhere in national data sets are sufficiently robust to support straightforward propositions:

- i) that women usually receive less training than men
- ii) that the less educated usually receive less training than the more educated
- iii) that those with less initial training usually receive less continuing training than those with more initial training
- iv) that the lower paid usually receive less training than the higher paid
- v) that those employed in smaller firms usually receive less formal training than those employed in larger firms
- vi) that most of those employed in the private sector usually receive less training than those employed in the public sector
- vii) that younger employees usually receive more training than the oldest employees

Many people, including some policymakers, are inclined to jump straight from such propositions into policy prescription either on a national or a Community level. The reasons for exercising some caution about such a jump may become clearer if a concrete example is considered in more detail.

Close scrutiny of the nature and use of technicians and supervisory skills in Germany, France and the UK (Steedman, Mason and Wagner, 1991, and Box P) reveals fundamental differences of competence which show up both in the workplace and in the classroom, i.e. in the two most common settings for additional learning. The same words are used to describe the total cluster of certificated competences which constitutes a technician. But the fundamental differences in competence lead to significant differences in future performance.

Box P Comparing qualified technicians in Germany, France and the UK

In the higher technical qualifications of the three countries, the balance which is struck between general and specific knowledge is judged to denote broadly equivalent levels of practical competence and technical expertise. The German qualification is likely to produce a quicker adaptation to workplace tasks, i.e. a shorter period of initial adaptation training in company. The French and British qualifications include a mathematics content which is certainly in excess of

the needs of the science and physics. Moreover, the excess content is of a sort which is necessary to continue studies at degree level. In Germany, progression from technician-level to degree-level studies requires successful completion of a substantial bridging course as a condition of entry.

The different trade-offs in Germany, France and Britain between speedy acquisition of full workplace competence and laying a foundation for subsequent study reflect a difference in priorities, i.e. of the weight given to competing objectives of competence and progression. Clearly there is not a single right way of deciding the content and objectives of training at a particular stage. A very defensible case can be made for either the German choice or the French and British choice. That such matters remain open questions is shown by the current debate in Germany which, to oversimplify, revolves around reducing apprenticeship to about two years and putting off the third year until several years of work experience have elapsed. By that time, of course, the delayed third year would become *fortbildung* and the nature of the training would inevitably have changed compared with the present consecutive third year.

For some purposes, qualified technicians in all three countries could be treated as comparably skilled. But for other purposes this would certainly not be the case, since their competence goes beyond what is written in syllabuses and tested in written examinations. In other words, the living context of training influences outcomes. Without a grasp of the non-comparabilities which lie beneath apparent comparabilities, and the consequences which this has for workplace practice and for skill mixes in the workplace, a simplistic interpretation of the data on technician skills is likely to lead to ill-founded policy recommendations. The fact that 'Britain produces proportionately as many technicians as France and considerably more than Germany' (op cit, p 73) may or may not be a matter for concern. Whether it is depends on the extent to which like is being compared with like in terms not merely of qualification, but in terms of the use and mix of skills at work, other factors making for productivity differentials, product mixes and the priorities of public policy.

Source: Steedman, Mason and Wagner, 1991, Appendix I

The remit of the financing studies and severe data limitations faced by authors explain why these studies say rather little, except in quite general terms, about the objectives of training and even less about outcomes, particularly competences. Without such data the evaluation of comparability can scarcely begin. Input and process indicators are a necessary but completely insufficient basis for comparability.

Use and abuse of indicators

Some dimensions of training, for instance acquisition of paper qualifications or public expenditures on training, lend themselves to additive measures and make it easy to produce indicators. Other dimensions, for example the role of training in promoting organisational change, are not susceptible to such measures and to comparison using indicators. They are no less important for that.

The quantitative aspect of comparison depends heavily on the availability of indicators in national data systems. Inevitably, the authors of the financing studies had to manage with what was available rather than start from where they would like to be. The most common of these indicators tend to be input:input or, if it is preferred, process indicators like cost per trainee; or impact indicators like training incidence or density. Technically feasible, but far less commonly available, are performance indicators like cost per qualification. To measure the internal and external efficiencies of training systems in a way which is consistent over space and time requires the same range of indicators as is needed for the quantitative aspect of a comparative analysis. Internal efficiency indicators, such as cost per qualification, measure system efficiency at converting resource into competence. There is a dearth of most kinds of indicator. But these indicators are perhaps slightly more available than external efficiency indicators, which relate to the effectiveness with which a training system meets the objectives of governments, Social Partners and individuals.

Examples of indicators:

Internal efficiency and impact indicators

- trainee unit costs
- course completion rates
- cost per qualification
- incidence of training
- density of training
- intensity of training

External efficiency indicators:

- rate of return
- trends in skill shortages/surpluses
- sectoral skills audits/competitiveness changes
- benchmark ratios of qualified personnel in workforce
- employment rates per occupation of graduates from occupational training

For comparative analysis such indicators need certain characteristics:

- they should be appropriate to the objectives of systems or sub-systems;
- they should be specific, quantified and standardised to facilitate comparison within one system over time and between systems at one time;
- they should be as simple as is compatible with increasing understanding of the training

system;

- they should be expected to provoke questions about these operations and activities rather than to provide answers.

Used in isolation, such indicators can be very misleading. For example, an indicator showing greatly increased output of technicians is of little value unless it is also known whether there was a pre-existing shortage and where the additional technicians were employed.

When used to raise questions, and to focus the analysis of both differences and similarities between countries, indicators have a uniquely valuable role in comparative studies. The financing studies, like other comparative studies but more so, reveal the paucity of existing indicators in terms of their coverage of the activity, inadequate identification to training objectives, and their standardisation. Once again, the financing studies underline the difficulty of interpreting those indicators which do exist when there is no adequate characterisation of the context of training, though the authors are notably well aware of this and were not asked to attempt such an immense task. Nevertheless, there is no way of avoiding the interpretative problem. As Claude Sauvegeot (1991, p 12) put it 'the training-employment interface is not a mechanical model'. What is required, as has been repeatedly pointed out by José Rose and other French researchers, is some way of combining oil and water, i.e. of blending statistical indicators ('statistics from skyscrapers') and qualitative studies ('monographic cabins').

CHAPTER 5 THE ENVIRONMENT OF TRAINING

In order to understand the data on the flows of people and of funds through national training systems it is essential to understand the inner and outer environment within which training takes place. The inner environment comprises the totality of competence formation, the way in which work is organised, and the way in which people are recruited, paid and promoted. The outer environment comprises all those less direct influences on training which originate in the economy, society and political system within which the workplace is located. It therefore includes the way in which primary and secondary, internal and external, occupational and regional labour markets operate; the industrial structure and technological mix within economy; the law on employment, taxation of companies and individuals; and the interaction of the education system, labour markets and firms.

In Chapter Four it was argued that it is necessary to characterise these idiosyncratic national contexts in order to understand what the data on continuing training mean, and to decide to what extent it is possible to compare the financing arrangements of each country which so heavily influence the formation of competences. This reflects a wide consensus among the leading researchers in Member States that it is not possible to "read across" data from different countries without a good understanding of the nature and significance of the profound differences from one country to another in the environment of training.

What have the financing studies to offer which will make possible a meaningful tabulation of continuing training data from Member States? Very little, although that very little supports the contentions of the Community's most experienced cross-national research teams.

One of the most important single issues is the role of money in inhibiting or motivating individuals or employers. Do subsidies to employers who train do more good than harm? Are individuals influenced to invest more heavily in self-development by tax concessions? In what circumstances is a market or even a pseudo-market (using tax money to boost demand) more effective than resourcing continuing training directly from tax revenues? The key question of what it is which compels or encourages individuals or employers to undertake or to sponsor continuing training is either not addressed in the financing studies, or it is not answered systematically and comprehensively. The United Kingdom report is unusually rich in this area. Where there is information which addresses these issues it is often scattered through a country report and arises only incidentally. It is, therefore, extremely difficult to make cross-national comparisons or even to draw any general conclusions on key issues.

Just three country reports - those for Germany, the Netherlands and Denmark - were selected for particular attention with respect to the influence of the environment of training on the flows of people and of funds. Though its report contains a wealth of highly relevant information on the environment of training, the United Kingdom was not included in this selection because its report does not, for the most part, distinguish continuing training from a great mass of post-16 initial education and training.

The explanatory power of contexts

Concerning the remaining country reports, three points are worth noting because they underline the value of contextual explanation, even when it is fragmentary:

Regions sometimes matter:

The Belgian study emphasises in trenchant fashion the great structural importance of the regional, in fact the linguistic communities in Belgium: 'The adjective "national" is hardly fitting since education in Belgium is organised independently by the French and Flemish-speaking communities ... Already social advancement courses are organised differently in the two communities and the national statistical system is no longer in a position to provide an overall picture' (B, p 6). The parallel with regionalism in Italy is striking, since responsibility for continuing education and training is largely devolved by that country's constitution to its twenty regions, so there are really no centralised data (I, p 75). Although government is able to pay for continuing training for the unemployed or for adults seeking a lower school certificate (I, p 77), it is otherwise a matter for employers or for individuals to pay for continuing training (I, p 112).

Legislation may distort data:

Where a minimum level of continuing training by employers is mandated by law, as it is in France, financing by firms - above mandated levels - may nevertheless increase strongly. The French study (F, pp 37-39) reports an increase in funding by firms 1972-86 by a factor of 2.3, which almost matches the 2.5 growth factor in public authority funding (State and Regions from 1983). According to the French study, the final financiers of continuing training in France in 1986 were the State (54.1%, local authorities, including the Regions (6.5%), firms (38%) and households (1.2%). Warning readers of the shortcomings of existing statistical sources, it is pointed out that the figures used in the report overweight State funding, for example by including initial training of trainee civil servants; underweight employer expenditures not entered into employers' tax declarations; and underweight the importance of training producers operating chiefly with private funding. Legislative interventions leave some types of training heavily documented while others remain in the shadows. In Germany, federal legislation is very prescriptive about certain forms of training, such as distance study, but permits a poorly documented and almost unregulated system to operate in parallel to a regulated one. In many countries, a thriving market in certain kinds of training provision, with vigorous commercial providers, is very poorly documented and therefore underweighted. The author of the Belgian report remarks (B, p 27) that 17 pages of the telephone directory for Brussels are occupied by these commercial providers.

Statutory rights are not always effective:

Once-fashionable forms of legislative intervention in the process of employer resource allocation - in favour of training - may still be part of the formal structure of a training system, but scarcely significant in operational terms. The right to training leave seems to be an example of this phenomenon. In six German *lander* there is a statutory right to training leave, as there is in France. But in Germany guaranteed duration is five (in Lower Saxony four) days a year. In France, if it is used, it applies to courses in the range of 500 to 1000 hours. But in both countries it is used by only 1 or 2 per cent of entitled employees.

In Belgium, training leave applies only in the private sector, with a right to a period of absence

from work without loss of remuneration, irrespective of age and not necessarily linked to the occupation practised. In practice, this statutory right is heavily compromised by the fact that 'the employer can only attain reimbursement of salary up to a given hourly or monthly level. He may, of course, continue to pay the full salary, but is not obliged to do so; in such cases the worker retains the right to training leave, but with some loss of income (in respect of the share exceeding the ceiling)... this ceiling on reimbursement may have substantially curbed the operation of the right to training leave. The exercise of this right is also conditioned by a second factor. Absences of this kind may cause disruption at work and despite legal provisions offering protection against dismissal, the fear of redundancy may effectively curb demand, especially in a period of high unemployment' (B, p 33).

Germany

At the outset (D, pp 9-10) the authors of the German report draw attention to a 'general lack of legal provisions governing continuing training ... evident ... from the fact that the range of courses available is dominated by measures which are not formally regulated and not designed to lead to the award of certificates.'

Nevertheless, there is a greater emphasis on legislation than can be found in reports from countries like Ireland, Italy or the United Kingdom, where the role of central government is far more circumscribed than it is in Germany. The contrast with France is a notable one. French legislation concentrates heavily on the training role of the employer. In Germany, the federal government 'derives its authority to regulate and organise vocational training (initial and continuing) from its responsibility for law relating to economic matters and for labour law' (D, p 10). Legislation is 'directed at individuals: it gives them legal or financial rights or protection as consumers. The regulations and Acts concerned are not as a rule aimed at continuing training institutions' (D, p 11).

The legislative framework of continuing training is set out in the German report in an unusually clear way. Because the consequences of the legislation are emphasised, the reader is helped to understand the role of this one dimension of the environment of training in determining who pays for continuing training and who receives it.

The Vocational Training Act of 1969, for example, empowers 'competent agencies' (such as chambers of commerce, industry crafts), 'to issue examination regulations on the basis of which examinations may be taken and certificates awarded. These certificates enable successful examinees to enforce claims for a given level of remuneration. The Act sets out only the requirements which the examinee must satisfy during the examination, not the way in which he must prepare for the examination. To ensure "uniform post-initial training" (at Federal level), if the chambers do not take action, the Federal Government may issue its own regulations on post-initial training' (D, p 11).

Concerning continuing training, the report says (D, p 9) 'The State plays only a subsidiary role in this section, i.e. it takes action only when the needs of society cannot be met by social groups, the private sector or individuals.' Again, 'in principle the law is based on the assumption that the two sides of industry are responsible for arranging the training of the labour force' (D, p 24).

The Employment Promotion Act (AFG) of 1969 governs financial assistance provided by the employment services for participation in continuing training. 'Participants are assisted either

by having all or part of the course fee refunded to them, or by being sent to courses which are entirely funded by the employment services. While attending a full-time course of post-initial training, they are also paid a maintenance allowance, in grant or loan form, equivalent to 68% (if married 73%) of their last net wage' (D, p 12). However, a succession of Acts in the seventies and eighties signalled a 'growing concentration of labour market policy on the unemployed and problem groups in the labour market.' This meant that whereas maintenance allowances were originally fixed at 90% of net remuneration, they have had to be reduced. In addition, whereas maintenance allowances made up just under 80% of total expenditure on training costs in 1985, the figure is 'not down to less than 60%' (D, p 78).

Lastly, under Federal legislation, the German report (D, p 12) lists The Distance Study (Protection of Participants) Act of 1986, which controls and regulates Distance Study courses. Though the Distance Study Institutions are not state assisted, the participants may be (under the Employment Protection Act).

The Länder are responsible for legislation governing the organisation and financing of institutes of education. 'Where continuing training is provided in schools (e.g. training leading to the award of state certificates in engineering, business management and domestic science), each Land specifies the content, duration and form of the course through its Education Ministry. As a rule, the successful completion of such courses of continuing training leads to a higher classification on the collectively agreed wage or salary scale.' (D, p 13). Some Länder will fund, in full, the courses run to enable people to resit final secondary school examinations. The Education, Continuing Education and Training, and Educational Leave Acts all control vocational training in the Länder.

In addition, there are the non-governmental arrangements made by associations and sectors. There are over 200 collective agreements and company agreements to release employees from their work for training purposes (D, p 15). 'The content and duration of upgrading training, retraining and retaken initial training courses are governed by Acts, regulations or agreements between the parties to collective agreements, since the successful completion of such training is usually followed by entitlements under collective agreements and social welfare legislation. Although the Vocational Training Act provides for updating training to be regulated in the same way, advantage is less frequently taken of this possibility. The providers of continuing training are thus free to organise their courses as they will' (D, p 17).

Most institutions in the areas of post-initial training and retraining are firms who are required to break even or make a profit. 'As there is neither a special form of licensing or recognition of these training organisers nor any central or regional planning that might restrict the number of institutions, they compete in many places. Given that the state is also reluctant to become involved in the development and expansion of the continuing training sector, it is thus possible to speak of "free enterprise" in this sector ... Roughly half of all continuing training courses, especially language courses, are run by institutions which are funded entirely from fees and cannot, therefore, be monitored by the state, employment services, chambers, trades unions, or firms' (D, p 21).

It is typical of the way in which the training environment is structured in Germany that courses which last for longer than 200 hours, or examinations which require the same amount of preparation, are subject to rules laid down by the Federal Government, or the chambers, and by the education authorities of the Länder because they result in entitlements under social welfare legislation or improved prospects in the labour market. Employees prefer such regulated

continuing training courses, employers prefer people who have completed such courses. Continuing training institutions offer them and so submit themselves indirectly to public monitoring.

Over time, the rights of individuals to financial assistance for continuing training have been reduced due to budgetary pressure. Under a January 1, 1989 amendment to the Employment Promotion Act only the unemployed or those in danger of becoming unemployed continue to enjoy 'a full legal claim to assistance while undergoing training', with a lower level of assistance for everyone else (D, pp 79-80). Much continuing training is almost untouched by this kind of legislation. The regulated market for continuing training is an important one. But beyond it lies an unregulated or open market responsive, in particular, to that half of all continuing training in Germany 'which takes place within firms or at their instigation.' The target group consists predominantly of employees above skilled worker level, i.e. technical and commercial managers. Most of the courses last less than a week. As employer-sponsored continuing training courses do not as a rule lead to an award of a generally recognised certificate, they are largely relevant only to the firm concerned, though even then the Labour-Management Relations Act provides for involvement of employees' representatives in decisionmaking about the firm's continuing training (D, p 20).

Netherlands

The dominance of the firm over much of the field, the internalisation of much of employer training, and the co-existence of open and regulated external markets for continuing training almost amount to several parallel training systems in Germany. This is even more the case in the Netherlands. 'The many parties involved and the highly divergent frameworks make the Dutch system obscure and difficult to describe in detail to outsiders ... The present situation is characterised by the complex, non-uniform and often incoherent nature of the government's legislation and rules' (NL p 11). When the Netherlands report was written, major legislative changes were taking place.

Of particular interest is the radical re-engineering of the framework of decisionmaking in the form of decentralisation to regions (for adult vocational education) and to tripartite partnerships at both national and regional levels. In large measure, the report shows central government proposing to withdraw from much of its exclusive administration of tax-financed continuing education and training, in favour of co-determination by the Social Partners and government. As the report (NL, p 21) explained, concerning the proposed Labour Management Act:

'The Central Labour Management Board (CBA) and the Regional Labour Management Boards (RBAs) are to be empowered to decide on the basis of labour market trends what vocational education for adults will be financed by the government ... For implementation they will use their own training facilities ... for the most part, however, the local employment offices will contract the training activities out to regional vocational education bodies.'

This new style corporatism relates chiefly to labour market training and other tax-financed programmes. A bewildering variety of existing and proposed legislation addresses important issues like the provision of second chance education and other forms of education. However, the authors of the Netherlands report are able to show that certain consistent themes run through all this complexity (NL, p 25). The main objectives of reform are 'improvement of cohesion, the involvement of the two sides of industry in policy-making and also the

government's withdrawal from administration and financing. The most important examples of this last objective are:

- privatisation, especially of the Directorate-General for Manpower;
- introduction of budget and ceiling financing to replace the present open-ended financing;
- enabling schools to provide education under contract, thus giving them their own source of revenue and making them less dependent on the government;
- restriction of government-financed part-time general secondary and pre-university education to subjects relevant to subsequent training;
- an increase in participants' contributions in line with the principle of consumer-paid services.'

Denmark

Denmark does things differently. Here is a highly distinctive environment for continuing training. The entire culture, indeed the mind set of the Danish people has a decisive influence on the way in which training is organised and financed, and therefore on the quality, quantity and distribution of training. The author spells out this environment in broad, clear strokes:

'Denmark has a very large public sector. Since the end of the 1960s, Denmark, together with Sweden and Norway, has represented the 'Scandinavian social model', in which many activities, which in other countries are under private control, are, in Denmark, regarded as public functions - and are financed through taxation. This applies particularly to activities ... within the training system' (DK, p 14).

'Another essential condition in Denmark has been a tradition for adult education and for training in the broad sense ... which can be traced back more than 100 years. This tradition has perhaps not appeared clearly in actual participation in adult education; but it has been of decisive importance for the debate on educational policy, as part of the cultural heritage, and has contributed towards a generally favourable attitude in the population towards education and training at an adult age' (DK, p 18).

'This tradition for adult education has also contributed towards training and adult training ... having been regarded as a social rather than an individual matter with regard to the financial aspects. For vocationally-oriented adult training, in particular, it is typical that by far the greater part takes place during working hours (during which the participant receives full pay from the employer or obtains a fund-financed (AUD fund) allowance in lieu of pay). Vocationally-oriented continuing training for workers in free time takes place only exceptionally, or else within schemes where the participant pays no more than a notional portion of the direct training costs' (DK, p 20).

Unsurprisingly, the Danish report gives a full account of its well-known AMU (labour market-training) system and the associated AUD fund. As with other financing studies, the Danish report does not offer a comprehensive overview of the environment of continuing training - which was not, indeed, expected. But, like other studies, it frequently contains sharp perceptions of the profound influence which this environment has on who gets what, and especially on the significance of changes in that environment.

One example is a straw in the wind, an analysis of trends by the most frequently used

supplier of courses for public employees (DK, p 47). One trend which is identified is towards a greater influence of demand on the supply of training, which is a specific objective of recent legislation. The supplier is shown reflecting on the experience of charging for previously zero-priced training services:

- ... the reason for the introduction of payment by users was a desire to reduce consumption of the service. In fact, what has happened is that the institution's activities have expanded. It cannot be decided whether this expansion of activity was due to increased market shares or a general expansion of the market;
- ... the reason for the introduction of payment by users was a desire to increase cost-awareness among both producers and users of the training. It is assumed that this strengthening of cost-awareness has taken place; at the same time, however, an increase of one quarter in the level of expenditure is recorded for individual services. This is explained [by the provider] as follows:
"When payment by users is introduced, expectations rise regarding quality, and since the recipient of the service (the course-participant) is not the same person as the payer (the employer), the competition parameter is quality, not price."

The Danish report (DK, p 48) concludes that this particular shift to user-charging had three consequences:

- the individual participants are more motivated than before;
- continuing training is now being used more selectively than before by public employers, as part of an overall training policy;
- holes are appearing in the supply of continuing training, due to lack of recognition of the need for continuing training particularly for groups who are short of money. This hits the groups who are weaker with regard to training, typically among office-workers.'

A second example concerns the operation of the oldest and biggest of Denmark's labour market training schemes, that for semi-skilled worker training. Its structure would appear to favour the employed, rather than the unemployed worker. For example, on courses for the semi-skilled, 'designed to provide unskilled workers with a basic industrial qualification, within an existing area of employment', employed applicants are accepted first,' then applicants with promised employment and lastly, the unemployed ... within trades and industries where the number of applicants is much higher than the number of course places it can be difficult for unemployed persons to be admitted to courses' (DK, p 61).

Conclusions

The financing studies tell us very little about the influence of the inner environment of training (at the workplace) on continuing training arrangements. On some aspects of the outer environment of training, especially the legislative framework and interactions with the education system, they are more forthcoming. This chapter has merely illustrated a few of the ways in which this influence is shown to operate in the financing studies:

- Those countries whose constitutions and laws accord great power to regions (e.g. Italy and Belgium) display major regional differences in their training provision and in training participation.

- Where the state intervenes comprehensively by law, such as the long-standing French legislation on formal continuing training sponsored by employers, continuing training activity tends to be heavily documented. But at the same time other important dimensions of continuing training, such as on-the-job training or the activities of private for-profit providers, remain in great obscurity. A balanced picture is extremely difficult to obtain.
- Training systems are in perpetual flux, but they also embody the remains of earlier experiments which may have little further potential. Perhaps training leave is a case in point.
- Regulated and unregulated training markets may co-exist and interact, as they do in Germany. The German study documents a statutory basis for regulation of aspects of continuing training which is a mixture of social welfare and employment legislation at the federal level with legislation on education and training at the level of the Land. The same study illustrates the way in which individual entitlements under federal law and under collective agreement can be the principal means through which regulation operates.
- Privatisation and marketisation of tax-financed programmes are becoming relatively common phenomena across Member States, the Netherlands being a case in point.
- The introduction of aspects of a full market regime into the structuring of continuing training is also an important issue in Denmark. Pressures to increase the sensitivity of supply to demand may be having a favourable effect on quality and on the participation of the more advantaged workers. But there are signs that restructuring of labour market programmes in countries like Denmark or Germany can favour the more advantaged at the expense of the least advantaged workers.

CHAPTER 6 FLOWS OF PEOPLE

The outcomes of training

The authors of the country studies were originally asked to use their national databases to help to uncover the influence of different financing arrangements on the acquisition of skills and knowledge through all forms of continuing training. They were asked to try to document and analyse the flows of funds and of people through their continuing training system.

Before exploring costs, and the financing of those costs (see Chapter 7), it is necessary to establish as clearly as possible what was being costed and financed. Authors were asked two easy-looking questions, both extremely difficult to answer (except in the abstract):

Outcomes

What is taught?	Skills, knowledge, attitudes, values
Who is trained?	A selection from the total workforce

The potential population to receive continuing training was defined as all those who were seeking work or at work and who had experienced a break of at least several months from the end of their uninterrupted initial full-time education and training, at whatever age that was completed. In an ideal information system it would be possible to distinguish

- those who had completed an initial training from those who had never had one, i.e. those who had left full-time education for unemployment, economic inactivity (not officially unemployed), military service, or employment without training;
- those who received no training from those who did, during a reference period such as a specified year;
- those who received training according to the type and level of that training, and qualification gained, using the five EC training levels plus a cell for training not classifiable by level;
- those receiving training according to the volume of training they received;
- those receiving training according to industrial sector, at least primary, secondary and tertiary sector, but better still using Standard Industrial Classification minimum list headings or the ISCO equivalent;
- those receiving training according to as many as possible of nine individual traits, viz, gender, ethnicity, age, religious affiliation, social class, income, education, location and employment status.

It is enough to list these optimum information requirements for the citizen of any Member State to recognise the chasm of ignorance which lies between the knowledge which is needed fully to inform policymaking and the knowledge which is currently available. The summaries of this chapter document this shortfall in its many dimensions. However, this ignorance is not uniform between countries or over all dimensions; so there are useful lessons to be learned

from a comparative analysis of the data which are available.

Definition

The normal lack of a harmonised definition of continuing training has to be noted repeatedly since it often affects comparisons between participation rates. In many cases it is unclear what definition is being used; and in other cases there is no way of adjusting one data set onto the same definitional basis as a comparator without going back to the original sources in the countries concerned.

In a programme set up as Focus 2 was, the country reports, once presented, are final. The only solution to the problem of definitional variety is an iterative programme process, where groups of authors can repeatedly rework their data in collaboration to improve the basis for comparison and so identify the irreducible differences. In the financing studies it is often difficult to break through to the substance because differences in the form and presentation of data constitute a screen which is, in this instance, impenetrable.

In so far as it is possible to generalise at all, there appear to be two main groups into which the data in the financing studies tend to fall. The first group broadly agrees with the definition to which authors were asked to conform if their data permitted. That is to say, continuing vocational training was defined as all training after the insertion of young people into working life, i.e. once they are in their first stable employment. The second group contains data which treat the process of insertion of young people into working life as a dimension of continuing education. So continuing training becomes all post-school training.

The definition of training itself is problematic. Traditionally, it has sometimes been difficult to distinguish on the one hand between certain forms of training and work, and on the other hand between certain forms of education and training.

On the work/training boundary wide variations in national practice are apparent. Some countries, such as Germany and the United Kingdom, rely heavily upon and have a fair amount of sporadic survey data on on-the-job training. Other countries, such as France, have powerful administrative data systems which pour out regular information on formal, off-the-job training. It is difficult to believe that on-the-job training is quite as unimportant in France as the data system leads some people to believe. A similar effect might be at work in Denmark, where a comprehensive, centralised administrative system for certain kinds of continuing training may bias the overall picture on the balance between off-the-job and on-the-job training. There is a grey area where on-the-job training shades gradually into experiential learning, i.e. competence formation integrated with production. On the whole, however, authors or the limitations of their data seem to have pushed the definition of training towards the formal rather than the informal end of the spectrum.

Authors were asked to presume that people undertake any education and training for work-related reasons unless there is good reason to think otherwise. The only continuing education to be systematically excluded, data-permitting, would be that in which the majority of students are judged to have purely recreational objectives, i.e. what is often called liberal adult education.

This very inclusive approach was necessary for pragmatic as well as conceptual reasons. Authors were bound to respect their data. In the Netherlands, for example, much of

the data came from the Central Bureau of Statistics. The CBS defines education as "organised communication of a non-occasional nature designed to impart knowledge, to increase understanding and/or teach skills" (N, p7). The definition would fit training just as well, so there is then no real distinction between education and training. In the Netherlands study, orientation towards work and the labour market is ensured by qualifying the word 'education' with 'vocational'. However, adults in full-time education are excluded by CBS from its count of adult vocational education because CBS defines adults as "persons who are not in full-time education but have a different principal occupation and for whom education is a subsidiary activity (employees, job-seekers, persons performing domestic work, pensioners)" (N, p7). As with other countries, authors could select data or adjust it slightly with an eye to the Focus 2 requirements, but the broad mass of data had to be presented more or less in the form in which it was collected and collated by administrative authorities, statistical offices and survey teams. Like the Netherlands, each national data set reveals idiosyncrasies of definition on the initial/continuing, the work/education and the education/training boundaries. Such idiosyncrasies make many data non-comparable; but they do not prevent carefully qualified comparisons.

Measurement

In the financing studies, that which is measured is quite variable because of inconsistent definitions of continuing training. How it is measured is a separate source of variation.

The most common types of measure are those of participation, such as incidence, and volume measures such as density and intensity of training. These measures commonly take a simple form, which can be illustrated in relation to the employed population. In relation to the provision of training

incidence = the proportion of employees receiving training

density = the number of training days per employee

intensity = the days of training received by each trainee.

These basic form activity measures then appear in a number of variations. For example, twelve main variations in the form of incidence data were picked out from the country reports. Each variation used a different identifier against which to express the proportion of those receiving training:

- 1 Employment status
- 2 Principal activity
- 3 Occupational grade
- 4 Outcome
- 5 Educational level
- 6 Age
- 7 Gender
- 8 Region
- 9 Industrial sector
- 10 Ownership sector
- 11 Enterprise size
- 12 Establishment size

Taking the first identifier as an illustration, it was not uncommon to find only absolute numbers of the unemployed or, less frequently, of the employed who had received training.

Where this occurred, the absolute numbers in the target population of the unemployed or of the employed, or indeed of the total workforce were often not given. So an incidence measure could not be constructed where it was not already on offer. The most useful overall measures per country would have been:

- the proportion of the total workforce receiving training
- the proportion of employees receiving training
- the proportion of the self-employed receiving training
- the proportion of the unemployed receiving training

Given the use among Member States of standard measures for all these categories of employment status, it would not be very difficult technically to produce a set of data for the Member States in a common form. However, to do this it would be necessary also to standardise the definition and measurement of training.

The same story is repeated again and again with the other identifiers, as it is with measures of density and intensity. In order to make progress in comparing the frequency and extent to which people participate in continuing training across the Community, it is essential to agree and use common definitions and measures. Over time, national data sets can be adjusted onto the agreed basis. During the interim, where policy priority dictates, and technical feasibility and cost permit, it is quite possible to rework a good deal of existing data into a more or less common form which facilitates comparison. If the common form data achieve what François Avenir has called a 'substantiated approximation' to the quantitative situation in several countries, then it is possible to consider real differences and similarities between the substance of training in those countries. It will be seen that, in the case of the financing studies, it is difficult to penetrate the non-comparable forms in which participation data appear in order to reach the substance of continuing training. This is to say nothing of the frequent absence of data in any form.

Incidence of training

In the light of the preceding discussion of definitional and measurement inconsistencies across the eight countries which provided a significant range of relevant data (D, F, I, UK, NL, B, IRL and DK), any attempt to cross-tabulate a particular incidence measure is more likely to mislead than to inform. But it is possible to review what was made available country by country and to compare these data selectively and by identifier. In this way what is missing can be highlighted, and what would be needed to fill gaps and adjust data into a common form becomes clearer. For reasons of space, a reasonably full review is given only to participation data using employment as the identifier, the remaining data being treated in more summary fashion and selecting only those features which are not treated in the section on the employment identifier.

Employment status

The eight country studies do not provide data on a common basis which identifies the proportion of employed, unemployed and self-employed who undergo continuing training. Often, such data are only available for one or two rather than for all the main categories of the workforce, and then based only on certain institutions, schemes or exploratory surveys. For instance, there are good Belgian data on ONEM training and on training leave. But 'no regular statistics are available on vocational training provided in firms. This lack of information is

especially serious in respect of continuing training, which also includes the areas of advanced training and retraining' (B, p 40). The best that can be done is a preliminary exploration based on surveys in three industrial and three services sectors (B, pp 40-60).

In theory, the Labour Force Survey might appear to be an ideal instrument for producing data which are at least comparable in form across all Member States. In practice, the results of the training questions in LFS have disappointed even that limited expectation. Hence the reluctance within the Community to make use of these data, and of the data on training from the Community's Labour Costs Survey. The Irish report is a case in point. It carefully reports a range of results from the 1985-87 Irish Labour Force Surveys on the extent of training undergone by the employed workforce (IRL, pp 8-19). But those surveyed were only the 15-49 year olds - 'it was presumably taken for granted that few persons of 50 + years would be receiving training' (IRL, p 8). The way in which Member States tailor the LFS to their national circumstances and priorities is completely understandable. But it does not make for a common form database.

Irish samples covered employees receiving training during the four weeks prior to the April/May survey data. The employed workforce increased from 854,000 in 1985 to 866,000 in 1987, but the proportion of 15-49 year olds receiving training dropped from 8.2 per cent to 7.6 per cent. The inter-year comparison raises an immediate question as to the reason for this. In 1986 76 per cent of respondents described their training as 'further training for the present job', 7.6 per cent as retraining for other jobs and 3.8 per cent 'other' training, probably more general education.

Continuing training participants were at least seven times as numerous as the 12.6 per cent who reported that they had been on first vocational training. As usual with continuing training, percentage shares substantially above the average characterised the 15 -19 and 20 - 24 age groups, after which training declined sharply with age. Between 1985 and 1987, with the exception of those in the youngest age group, the proportion of those receiving education or training scarcely changed. For the youngest age group, however, the proportion fell from 31 to 28 per cent, which explains the drop in share of those reporting first vocational training from 17 per cent in 1985 to 12 per cent in 1987. The reasons behind these shifts lie out of sight. But shifts in Community-wide participation would have to be broken down like this at national level in order to focus investigation of the reasons for them, and especially to decide whether the reasons were local or wider in origin.

The LFS is a survey of individuals. On participation, such an instrument often produces considerably different results from administrative data or surveys of employers in the same country. It would be even more difficult to compare individual-based data with institutional or employer-based data in other countries. The UK database provides some interesting insights into the comparison of individual-based with employer-based data. The Netherlands report includes an unusually full account of that country's institutional data relative to individual-based data.

Table 6.1: Participation in adult education by persons aged 16 and above, excluding those in full-time education by type of training, Netherlands

Type of training	1985 (n = 2687) 1	
	Participation	Estimated % of total

	%	Absolute (in 000s)	
Day time training	3.9	450	19
Company training	3.8	430	18
Correspondence courses	2.7	310	13
Other courses 2	10.4	1,200	50
Total participants	7.4	2,000	-
Total participation	20.8	2,400	100

- 1 In view of the size of the random sample and the low participation percentages, the confidence margins are likely to be wide.
- 2 This heading covers vocational courses, courses of general education and courses attended for personal reasons.

Source: Table 5.2 (NL, p 54) and Time Studies, 1985 from Bronnemann-Helmers, R (1988) Samenhang rond vol wasseneneducatie (1) (Cohesion in adult education), Rijswijk, Social and Cultural Planning Bureau.

The findings reported in Table 6.1 reveal important broad features of those who participate in adult education in the Netherlands. The survey respondents kept a diary for one week in October, in which they noted what they were doing every quarter of an hour. Since the reference period is only a quarter of the length of that used for the Labour Force Survey, the narrowness of the base for extrapolation onto an annual basis precludes any comparison across countries. The authors of the Netherlands report commented that the 1985 figures are reasonably close to other estimates and censuses. But they note that some of the participants recorded by CBS under private training schemes (using institutional data) will be included under other courses in the time study (Table 6.1). Their more important qualification concerns the number of participants in company training schemes, which seems to be well on the low side. Other research suggests 700,000 to 800,000 in 1985, compared with Table 6.1's 430,000. However, that research concerned participation over a year, not a week. 'Consequently, comparisons of surveys of institutes (including the statistics on company training schemes) and surveys of individuals (like the time studies and the manpower census) are not valid' (NL, p 54).

The Dutch report graphically illustrates the formidable task which many countries face. This is the task of piecing together an extraordinarily fragmented set of data produced by quite different collection methods and trying to assess its validity and reliability.

The comments of the authors of the Netherlands reports are most revealing. They point out that 'the time studies put the number of participants in other courses far higher than the 1983 estimate and the 1984 census. However, the latter figures reveal only part of the picture because they do not include the wide range of courses attended for personal reasons' (NL, p 54). CBS census data and time study data for 1975, 1980 and 1985 broadly agree on trends in the numbers of participants but there are large cautions. The authors point out (NL, p 55) that private training as reported in Table 6.1 (company training schemes, correspondence courses and the majority of other courses) account for some 75 per cent of participation. But the data on private training are very difficult to evaluate. CBS surveys of institutes are only a partial check on other data. 'No records at all are kept of non-recognised private education' (NL, p 53).

The Dutch authors have to make very difficult judgements (NL pp 69-73). No hard and fast picture emerges from a plethora of data - just within one country. 'Reliable conclusions on developments in the content of adult education can hardly be drawn from the material presented in this report. There are, however, indications that:

- from 1980 to 1985 participation in adult education increasingly became an activity for young people (aged 16 to 24), men, employees and the better educated;
- the significance of company training schemes in particular is growing;
- it is primarily large firms that are able or willing to ensure that their employees obtain further training. Small and medium-sized firms largely opt out and are in any case dependent on external training institutes;
- participation in company training schemes focuses on 20 to 30 year olds, men, and the better educated;
- training agreements at sectoral levels are primarily geared to the employed.'

Their caveats concerning Netherlands data often apply in other Member States and are one of the main reasons for our own extreme caution about the reliability and validity of cross-national data:

'Additional information (to the records kept by institutes) can sometimes be obtained from surveys of individuals and comparative studies, but it is usually impossible to link data obtained from such studies in a reliable manner. This type of research thus provides what is largely supplementary evidence concerning specific areas...

Finally, (we wish) to refer to two other major problems connected with records. In most surveys there is little or no linking of age-related data to activities. This results in age rather than the activity being seen as the criterion for adult education. Another problem is that the recording instruments are inadequately attuned to education as part of other activities. A not insignificant proportion of adult vocational education is thus in danger of being overlooked.

More specific methodological problems, such as the occurrence of double counts and the emergence of bias as a result of records being kept by interested parties, do not yet appear to be in most urgent need of solution, given the present global level of knowledge of adult vocational education.'

The data in the financing studies do not often provide a breakdown of continuing training participation into the categories suggested in Chapter 4, i.e. deferred initial training, updating, upgrading and retraining. If such distinctions existed at lower levels they had been lost in aggregation. One exception is the German report. Its authors begin their quantitative overview with a blunt warning: 'there are no official statistics on continuing training in the Federal Republic' (D, p 27). However, they manage to scrape together thirty seven pages of data before they get as far as costs and finance. The important Employment Promotion Act (AFG) of 1969 gives individuals the right to financial assistance while attending full-time post-initial training, about which the Federal Institute of Labour provides excellent data.

Those who need to retrain with federal assistance are, however, a minority, 361,505 in 1988 (D, Figure 5a, p.28). Interviewees in a 1985/86 survey conducted by the Federal Institute for Vocational Training and the Federal Institute of Labour stated 'that the continuing training courses they had attended from 1980 to 1985 had consisted primarily (90%) of updating training (brushing up and increasing knowledge). Only 7% saw advancement and 3% retraining as the main aim of their continuing training' (D, pp 44-45).

As Table 6.2 shows, even private sector organisations provide data on continuing training of the employed and the unemployed using categories fairly similar to the updating, upgrading, retraining and on-the-job training often employed by the Federal Institute of Labour.

With participation data classified along these lines the special characteristics of a country's training system stand out. Deferred initial training and training for the unemployed do not figure as large in Germany as in some other Member States. Although nearly 56% of all new enrolments in 1988 were (technical) unemployed, continuing training assisted under the Employment Promotion Act is provided to a declining proportion of people without initial training (1987: 24.9%, 1988: 22.8% of all enrolments), and of the long-term unemployed (1987: 13.1%; 1988: 10.4% of all enrolments).

Table 6.2 **Inter-company continuing training in the private sector, Germany, 1987**

	Participants, 1987
Updating training	
- technical	338,023
- commercial	451,942
Upgrading training	
- technical	121,741
- commercial	83,302
General continuing training	127,160
Social continuing training	25,627
Special conferences arranged by training centres and organisation	85,837
Courses for trainers	
Leading to trainers' qualification	20,533
Continuing training of trainers	20,619
Retraining	
- technical	10,429
- commercial	2,338
Schemes to improve employment prospects of the unemployed	6,619

Total 1,294,170

Source: Figure 14 (D, p 49), Germany Industrial and Trade Association 44/44, Deutscher Instituts-Verlag

Such data reveal that the training system as presently financed, and in the circumstances faced by Germany in the eighties, produces a growing polarisation between non-beneficiaries and beneficiaries. On the one hand, the appropriate continuing training (that promoted by the AFG) fails by wider and wider margins to reach the most disadvantaged among the unemployed - those without initial training and the long-term unemployed. On the other hand, the most advantaged among the employed - the managers and professionals - take a larger and larger proportion of in-company training.

In France, whereas one worker in eight attended a training scheme in 1974, almost one in four took part in a continuing training scheme by 1986. But it is typical of the participation data in the financing studies that the French data include unemployed workers (thirty per cent of whom attended training schemes funded by the public authorities) and many hundreds of thousands of young people on insertion programmes who had never yet had a job, including those on work placement programmes which, 'although not strictly speaking vocational training, are generally included in continuing training statistics' (F, p 33). In total, only about 80 per cent of the people counted in the French data on people in training were workers in jobs. The German study reports three surveys which also document a steady and undeniable increase in participation, but using non-comparable surveys, i.e. ones with different definitions of continuing training and different survey methods.

The British study offers participation data from both public and private providers of continuing training, but not on a basis consistent with its Labour Force Survey data, though the latter are broadly consistent with, say, the Irish LFS and that from Germany, the Microcensus. Moreover, the provider-based participation data are on different bases. Public and non-profit institutions identify over two million enrolments among those aged 25 and over. The age criterion is, in general, a good statistical proxy for continuing education and training, but the data include large numbers enrolled on recreational courses. They are therefore not in a condition to be combined with data on the provision by private providers, which count people completing a course instead of enrolments, may include unidentified double counting, and are drawn from a one-off survey (Training in Britain: Private Providers, 1987/88) whereas the alternative figures derive from annual administrative data. These provider-based data do not identify participants as employed, unemployed and self-employed. The private provision for 2.4 million people taking an estimated 65 million days of training is greater than was previously thought, but it is difficult to relate to other provider-based data which mixes vocational with recreational provision.

Table 6.3 Training by Private Providers by Category, GB, 1986/87 (000s)

Category	Numbers of people completing course
Transport	69
Information Technology	135
Languages	61
Management	1030
Secretarial/Commercial	135

(1)

Other (2)	957
Total (3)	2,387

Source: Table 2.3, UK, p 8

Notes

- (1) Includes both those who achieved a qualification after a long period of study and those who received only a few days of training
- (2) 'other' includes a wide variety of providers most of whom provide more than one type of training. The Survey does not, unfortunately, allow a detailed breakdown of the overall volume of training by category
- (3) Some individuals may take more than one course of training in a year, so that this figure may slightly over-estimate the number of individual trainees receiving training from private providers.

In the financing studies there is no clearer example of the problems of reconciling data from different sources than the comparison of the LFS data for the United Kingdom with the participation data provided by the 1987/88 Employers' Activities Survey in Great Britain. Like the Irish LFS data referred to above, the British LFS shows a fall in the percentage of total training going to the youngest age groups, but a striking rise in the percentage of the whole age group undergoing job-related training. The LFS shows 13 per cent of all employees undergoing training in the four weeks prior to interview in the Spring of 1988 (Table 6.4). The employers' activities survey reported 34.8 per cent of employees undergoing off the job training in 1987/88, 32.9 per cent receiving on the job training and a total of 48.3 per cent receiving one or the other or both. The UK report points out that, taking the 1984 and 1987 figures from Table 6.4, the increase in the proportion of job-related training is a remarkable 29 per cent. But it then goes on to point out that evidence from the 1987/88 and previous employers' training surveys suggests that these participation figures could not safely be regarded as a guide to trends in the overall volume of training provided by employers because it is very likely that a fall in the average length of training spells means that the participation data overstate in volume increase (UK, p 12).

Table 6.4 **Job-related training* - Great Britain, Spring estimates**

Year	Employees of Working Age ** No. receiving training (000s)	% of all employees
1984	1,086	9.1
1985	2,088	10.4
1986	2,176	10.8
1987	2,380	11.7
1988+	2,776	13.3

- * persons who said that in the 4 week period prior to interview they had taken part in any education or training connected with either their current job or a job they might be able to do in the future.

** men aged 16-64, women aged 16-59

+ preliminary estimate

Source: Table 2.6, UK, p 13; Labour Force Survey

Other participation identifiers

Personal identifiers

The eleven other identifiers, additional to employment status, fall naturally into two groups. One group - the trainee's principal activity, occupational grade, educational level, age, gender and newly acquired knowledge and skills (outcome) - might be described as personal identifiers. Participation is measured against the characteristics of individuals. The second group - region, industrial sector, all contextual identifiers which locate the continuing training. Consideration of the use of these two groups of incidence measures in the financing studies yields some additional pointers on the explanatory value of identifiers, on what is missing and what data would be needed to fill gaps and produce data in a common form.

Participation is often measured in relation to personal characteristics. In the financing studies, non-standardised participation data using these personal identifiers come from a selection of the eight countries whose composition varies from identifier to identifier (see Table 6.5):

Table 6.5 Availability in country reports of some participation data using personal characteristic identifiers

Identifiers	D	F	I	UK	NL	B	IRL	DK
Gender		0	0	0	0	0		0
Age				0	0	0		0
Prior education				0	0			
Occupational grade	0			0			0	0
Principal activity						0		0
Outcome		0			0			

Participation is not as easily classified as Table 6.5 suggests. Sometimes, data are available in a form which combines several identifiers. Arbitrary allocation to just one of these identifiers therefore oversimplifies the actual availability of information by implying (misleadingly) an absence of data from particular country reports. On the other side, where availability is accurately indicated, the quality and quantity of data vary dramatically from one country report to another, but the table may (misleadingly) suggest equivalence. Three things can be said with complete safety:

* There is great unevenness in both the availability and the quality of the reported data which used personal characteristics as identifiers;

- * It is unlikely that this feature of the financing studies precisely reflects what is nevertheless another uneven pattern of availability and quality in the Member States;
- * A different investigative procedure is needed, one which permits country reporters the time to compare results and try again by reworking or bringing in additional data, until they achieve a far closer approximation of reported data to available data and a closer approximation of the form of one country's data presentation to that of another. To attempt this kind of comparative exercise again using the once-and-for-all Focus 2 procedure rather than the interactive procedure here proposed would be prohibitively and avoidably unproductive.

The extreme unevenness in quality and quantity of the participation-by-personal-identifier data rules out reading across even three or four country reports, identifier by identifier. However, where reports do address a given form of incidence data they generally do so in a way which is highly revealing of the methods by which the national training system selects or rejects people for training and distributes the benefits of training. The evaluation of training benefits remains grossly underdeveloped relative to the evaluation of the financial costs of training. These participation data offer at least some of the raw material for understanding this much neglected benefit dimension of the financing of continuing training. The Netherlands report made explicit what is no doubt implicit in several other country reports, namely the long-term shift which is under way towards increasing the extent to which the beneficiary pays for continuing training. This requires a much more accurate and comprehensive appreciation of the nature and distribution of benefits than has been evident in the past.

The issue is so critical for the future financing of continuing training that it is worth selecting from the country reports some pieces of evidence which provide important pointers for all future development of data and of understanding across all Member States.

In its penetrating résumé of methodological problems the Netherlands report (p 72-73) comments that 'information on inflows and outflows and the degree of success is sparse' though a few evaluative studies are available or are being carried out. What information there is tends to be from centralised data systems and does not capture more decentralised forms of continuing training. With some modifications, this situation seems to apply to many Member States. Until outcome data can be improved, the study of the financing of training is bound to be almost entirely the study of the financing of inputs or, at best, of an activity. It cannot address the central issue, which is the financing of value-added.

Quite exceptionally, the German report offers a range of outcome data (e.g. Tables 6.6, 6.7). Its authors note that

'There is currently no systematic, comprehensive evaluation of continuing training measures. Possible evaluation criteria range from success in terms of satisfaction, learning, examinations and employment among participants to success in terms of the firm's organization and investment' (D, p 60).

Tables 6.6 Continuing training certificates, 1985, Germany

Basis: Information obtained from Germans aged 19-65 on the continuing training course last attended in the previous five years

	%
Certificate obtained	39
Can still obtain certificate	9
No certificate	52
No information	1
	101
Type of certificate	1
Confirmation of attendance	37
Entry in vocational training "logbook"	7
General certificate issued by training provider	22
Officially recognised certificate	29
Other	6
No information	0
	101

1 Basis: all participants who have obtained, or may still obtain a certificate (= 100%)

Source: Figure 21, D, p 61

Table 6.7 Reintegration of unemployed participants in continuing training, 1987, Germany

Participants in a full-time course assisted by the Federal Institute of Labour who had found jobs six months after completing their training, in % of enrolments

Updating training	74
Upgrading training	79
Retraining	80
On-the-job training	92
Improvement of employment prospects (section 41a of the Employment Promotion Act)	63
Total	73

Source: Figure 23, D, p 62

Most continuing training is employer-sponsored training of their own employees. But the outcomes from this training are the least evaluated. Non-learning outcomes - the effects on selection for promotion, on job competence, organisational change, profitability and competitiveness - are the real test of the relevance of the learning objectives of training. They are almost entirely unevaluated. The German authors remark on the bias of certification towards the attestation of attendance and learning, the only major exception among all other

objectives being the reintegration of the unemployed.

Of course, other countries collect follow-up data on long-term training of the unemployed which is fairly similar, even if it does not appear in their particular country reports. The point to be made concerns the extreme narrowness of the outcome data which are available, relative to the variety of training objectives and outcomes. This absence of key data provokes a number of observations:

- (i) Attendance certificates used in employer-sponsored training are not negligible as documentation of outcomes. Where training is being used as a screening device, a filter, attendance certificates bear witness to a minimum level of diligence, determination and conformity to corporate objectives. But they say nothing of attainment, and if training has objectives for the firm beyond screening these may remain un-measured.
- (ii) In those circumstances where improvement in competence results from concurrent, self-directed, experiential learning, how reliable is competence-based assessment as a measure of training-led learning?
- (iii) It can be difficult to attribute improved competence changed values, greater flexibility or enhanced creativity to training rather than to other contingencies. It is nearly as difficult to measure such outcomes against the objectives of sponsoring employers. Most of the financing studies are profoundly silent on the outcomes from continuing training and therefore on the incidence of training by outcome. The remaining studies show a frank and clear-eyed appreciation of the magnitude of an evaluative task which has scarcely been addressed over most of the field of training.

Nevertheless, making progress on the evaluation of outcomes is an absolute necessity if the financing of training is to get beyond the scatter gun approach. The quality of training is the relevance of its outcomes to the objectives of those who pay for it. At constant volumes, it is highly unlikely that this quality is proportional to its cost because it is so rare to find training well targeted. Lack of precise targeting is in turn due to lack of feedback on outcomes. Cost-effectiveness is bound to remain highly variable until the measurement of outcomes against objectives (effectiveness) becomes routinely adequate instead of a great surprise.

One other country report provided some data and commentary which could have a significance for future work which is comparable to that in the German report. The authors of the UK report remarked at one point (p 77) that '... individuals' decision-making on training is influenced not by mathematical calculations of rates of return, but by their own perceptions of the benefits that are likely to result.' The authors of the UK report recognised that people's attitudes are important because they condition their decisions about whether to invest in their own development and because they influence the effectiveness of employers' efforts to update their workforce. Indeed, their analysis encompassed the role of perceptions of benefits as well as attitudes more generally.

One example of this approach is incorporated in commentary on a Table (6.8) drawn from a 1986/87 survey of individuals' perspectives:

Table 6.8 Long term benefits expected by recent training recipients, Great Britain 1987/87

% of respondents expecting benefits in:	Those receiving employer-funded training: %	Those receiving training funded from other sources: %
Earnings	61	61
Promotion	71	56
Job Satisfaction	75	59
Value to Employers	86	64

Source: Table 6.6, UK p 77

'People with recent experience of training were found to perceive a range of positive effects likely to benefit them in the long-term. Overall, employer-funded training was seen as more likely than training funded in other ways to lead to significant benefits. Nevertheless, the majority of recipients of training funded from other sources felt they could expect to benefit in a number of ways, including increased earnings, promotion prospects and job satisfaction. Amongst those who had arranged training themselves, full-time courses were regarded as more likely than part-time courses to have a strong effect on earnings. Indeed, in general, longer courses were perceived to have a greater effect on earnings and promotion prospects than short courses.

When people currently undertaking training were asked why they had started the course, four out of five gave job-related answers. The others referred to notions of challenge, learning something new, because the opportunity arose and boredom. Nearly 3 people in 10 referred to getting a job, getting a more interesting job or opening up a wider choice of jobs. A further one in four mentioned getting better qualified, learning new skills or updating or improving existing skills. Most people cited both economic goals (such as higher earnings and better job prospects) and non-economic goals (such as increased job satisfaction and self-improvement).'

Against these expectations of a range of positive benefits, the UK report (pp 78-80) also presented much more depressing survey evidence reflecting the fact that expectation of future training, and of benefits therefore, are positively associated with level of previous qualification. A country which historically has a low training (low skill, low productivity, low wage) economy, like the United Kingdom, locks itself into this prison through a substantial minority of its workforce who are unqualified or minimally so and do not see training as a continuing process. Some 42 per cent of a large sample of economically active men and women - one third of 19-34 year olds, and almost one half of those aged 35 and over - 'could not foresee any eventuality which would lead them to undertake education or training' (UK, p 80).

Objective measures of the full range of benefits attributable to training are certainly essential for understanding and for evaluation. But the outcomes of every national system of training are also influenced in a profound way by individuals' perceptions about the benefits to them from training, and the likelihood of them receiving training. Policy instruments have to act

on these perceptions, just as they must influence the choice sets of employers and their decisions.

Data on the principal activity of those who train - and of those who do not train - together with data on the occupational grades and prior education and training of individuals also provide invaluable material for incidence measures indicating the nature and degree of polarisation produced by training systems as they are currently financed. It is very rare for such data on the distribution of training between people to be related to data on outcomes. Yet for evaluation and understanding, that linkage is second only in importance to the need for value-added measures of training outcomes.

Table 6.9 Proportion of various worker categories having participated in continuing training (per cent), Denmark, 1981-86

	Survey 1981 Private Sector	Survey 1981 Public Sector	Survey 1986 All gainfully employed
Self-employed	-	-	23
Unskilled	9	11	20
Skilled technical assistants	20	16	24
Office workers and subordinates	30	31	
Salaried employees in sales, product development, management etc	44	43	54
Unemployed	-	-	22
Average	33	28	39

Source: Table 7.2, DK, p 103

Table 6.9 shows clearly a phenomenon which is apparent in many Member States, the great diversity of levels of participation between categories of workers. The picture is usually confused by variations in reporting methods - which need to be standardised within and between countries - but the Danish report (p 104) picked out clear tendencies:

- '25-40% of the gainfully employed participated in one or other form of continuing training within one year (whereas 60-75% did not take part in continuing training at all within one year).
- The category 'salaried employees' takes part far more frequently in continuing training than do skilled and unskilled workers.
- Subordinate office workers take part much less in continuing training than do the other categories of salaried employees.

- The unemployed and self-employed take part in continuing training on a scale equal to that of skilled and unskilled workers.'

Some country studies were able to provide information relating to the incidence of training to occupational grades, to prior education, to gender and to age. While such measures do have value in isolation, they have even greater value when used together as a multi-faceted monitoring instrument. As usual, these measures do not explain very much by themselves; they are chiefly valuable in showing what has to be explained. For example data in the German report can be rank ordered to show the incidence of training by occupational grade (Table 6.10); and this would be feasible with similar data from the Danish and Irish reports (DK, Table 7.3 and IRL, Table 2.3).

Table 6.10 Participation in continuing training from 1974 to 1979 and from 1980 to 1985, Germany

				% of interviewees having completed at least one course of post-initial training or retraining			
				1974-79		1980-85	
				rank		rank	
				order	10	order	
Wage earners		10					
- semi-skilled and unskilled	4	9		5	9		
- skilled		16	(7=)		15	(7=)	
2							
Meister		33	(4)		35	(4=)	
Salary earners		26			31		
- low-grade salary earners	16	(7=)		15	(7=)		
- specialists		28	(5)		35	(4=)	
- higher grade salary earners, 40 executives	(2)		48	(2)			
Civil Servants		41			46		
- lower and middle-grade	37	(3)		42	(3)		
- executive and senior levels	44	(1)		51	(1)		
Self employed		17	(6)		24	(6)	
Total		20			23		

Source: Figure 18, D, p 56

- 1 Gainfully employed Germans, excluding assisting family members
- 2 Wage-earners and salary earners

Typically, these data are therefore non-comparable. For instance, the Danish and German data relate to participation during different stated years, while the Irish data refer only to training during four weeks of a stated year. Also typically, there are some clear and familiar messages in the data. The Danish report (p 107) points out 'that one-half of all white collar workers in the public sector with previous long or medium-length theoretical training took part in continuing training within one year. This category is exceeded only by white-collar workers within the private financial sector. Not unexpectedly, the smallest numerical participation in continuing training was within the unskilled workers' organisations.' Another aspect of what the Danish author calls the St Matthew effect ("unto everyone that hath shall be given") is underlined by the authors of the German report (p 55), pointing to the 'widening gap in participation in continuing training between wage-earners on the one hand and salary earners and civil servants on the other'. The Irish authors (p 15) examine a very similar polarisation between the well-above average training available to managerial, professional and white collar workers and the far lower levels of participation among those with the least initial education and training.

There are no surprises in this area in other country reports. The Dutch data (NL, p 115) indicate that those with higher education are roughly thirty times more likely to participate in company training schemes than those who received only a basic education. The British data (UK, p 74) reveal that those with qualifications higher than Advanced Level were more than three times as likely as people with no educational qualifications to report having received training in the three years previous to 1986/87.

The personal identifiers most commonly found in the financing studies are those based on age and gender. There are thought-provoking differences between countries. The Irish study (p 10) points to the fact that British data reveal proportionately twice as much job-related training of persons over the age of 25 as the Irish data. The Irish authors regard this as 'clear evidence of a serious lack of continuing training and retraining of the Irish employed population aged 25 years or more.' The Dutch report points to the fact that both age and gender discrimination tend to be greater in company training schemes than in other forms of continuing education and training, the proportion of male employees participating in such schemes being about one and a half times higher than female employees (NL, pp 57-58). The UK report documents the higher propensity among women to stay in full-time education after the age of sixteen, but their lower propensity to continue into higher education and the likelihood that they will receive less training of significant duration from an employer than men. Since gender differences are widely perceived as a reflection of certain aspects of women's general labour market position, only a thorough documentation of the whole environment of training, including labour market conditions and practices and industrial structure, could make sense of inter-country differences and similarities. In general, this environment of training is not in evidence in the financing studies.

Contextual identifiers

These are the identifiers which locate continuing training industrially and spatially (Table 6.11). Since the benefits of training accrue not only to individuals but to employers, to the

economy as a whole and to local communities within each country, such measures of incidence are potentially important instruments for evaluating the operation of a training system.

Table 6.11 Availability in country reports of some participation data using contextual identifiers

Identifier	D	F	I	UK	NL	B	IRL	DK
Enterprise size	0			0	0			
Establishment size				0				
Ownership size					0			
Industrial sector	0			0	0		0	
Region			0			0		

As is the case with personal identifiers, these data are very sparse and uneven in their availability in the financing studies; this certainly under-reports both the quantity and quality of data which already exist; and a more persistent, iterative process would be needed to bring in the data which are produced but are missing.

Just sufficient data exist in the financing studies to indicate the value of such measures in posing key questions, for example as to the reasons for variations in participation rates according to enterprise size. Empirical studies reported by the Germany authors (D, p 42) suggest that continuing training activities increase with the size of firms and that there are also significant sectoral variations (see Table 6.12). 'A study made by the Federal Institute for Vocational Training in 1983 of 119 firms providing continuing training showed that over four fifths of all participants came from large firms (with over 2000 employees). The findings of the BIBB/IAB surveys similarly reveal that large firms are more actively engaged in continuing training. From 1980 to 1985 employees of small firms (up to 49 employees) attended continuing training courses less frequently than employees of firms with 500 or more employees (21% as against 29%). By comparison with the period from 1984 to 1979 the gap between employees of small and larger firms participating in continuing training in fact increased to 8%'.

Table 6.12 Participants in employer-sponsored continuing training as a proportion of the workforce, by sectors, Germany, 1983 (?)

Industrial sector	%
Electrical engineering	35.0
Metalworking	21.7
Chemicals	14.9
Engineering	6.3
Textiles	5.9
All sectors	18.4

Source, Figure 10, D, p 43

The fragments of data in other country reports suggest that the situation could be fairly similar in a number of Member States. The British report uses a different definition of continuing training from the German report - all post-16 education and training outside the school system rather than post-initial training - as well as different data collection methods. So the reported figures are of a different magnitude. But even so, there are really large inter-sectoral variations. The percentage of employees training in different industry groups in Great Britain 1986-87 ranged from a top rate of 78 per cent in Health down to a bottom rate of 24 per cent in Construction. Participation does increase almost invariably with enterprise size (see Table 6.13). In turn, the British data are not entirely out of line with what the authors of the Netherlands study have to say (NL, pp 57-58):

'Training activities were most common [in 1986] in the commercial service sector (banking and insurance, business services and other commercial activities). Of the total workforce in this sector, 45% participated in training activities, the respective percentages in large, medium sized and small firms being 64, 49 and 25%. Training activities were thus relatively common in each of the size categories in this sector. Other sectors in which a high percentage of the total workforce participated in training were the minerals extraction and manufacturing industries (31%), the public utilities (31%) and transport, storage and communications (32%). These relatively high percentages were primarily due to the large firms in these sectors. A quarter of the three million employees work for firms which do not undertake any training activities, 90% of them for firms with fewer than 100 employees.'

Table 6.13 Proportion of employees receiving training by enterprise size, Great Britain, 1986/87

Number of employees	%
10-49	30
50-499	37
500-999	41
1000-4999	58
5000-9999	48
10000+	61

Source: Chart 5.5, UK, p 65

Surprisingly, the spatial dimension in training participation is largely absent from the financing studies. One passage in the Belgian report (pp 14 - 15) shows the potential importance of a spatial analysis of the incidence of continuing training, even though it is limited to the tax-financed operations of one major continuing vocational training agency, the National Employment Office (ONEM). The report illustrates the difficulty of viewing Belgium as a single entity with respect to vocational training.

Table 6.14 ONEM training activities: breakdown by linguistic community, 1986, Belgium

	1	
Flemish speaking Community	French speaking Community	Belgium

	number	%	number	%	number	%
Trainees						
basic	5,362	16.9	4,327	33.2	9,761	21.8
supplement- ary	18,750	59.2	2,052	15.7	20,807	46.5
other	7,539	23.9	6,654	51.1	14,200	31.7
Total	31,651	100.0	13,033	100.0	44,768	100.0
Budget resources (BF million)	1.810,9		1.879,5		3.726,9	
Expenditure per person training (BF thousand)		57.2		144.2		83.3

1 Including the German-speaking community (84 persons in training, budget BF 36.4 million)

Source: Table 8.3, B, p 14

Commenting on Table 6.14, the report says:

'Firstly, it will be seen that the predominance of supplementary training related only to the Flemish community and not at all to the French. In the French community "other" types of training predominate, while the share of basic training is also larger than in the Flemish community.

Secondly, the absolute figures are surprising when it is recalled that the Flemish-speaking regions account for only 51% of the unemployed; by contract, the Flemish community accounts for 70% of all persons trained by the ONEM. On the other hand, a look at the budget figures shows that the Flemish community accounts for less than 49% of the total; this implies that expenditure per trainee differs.

In fact, the contrast is striking: expenditure per person in Wallonia is 2.5 times that in the Flemish-speaking community.

It must be concluded that two very different policies exist regarding the role to be played by the employment office. However, the efforts devoted to continuing training in Belgium appear in a different light according to whether reference is made to the number of trainees or the budget. From the financial viewpoint, progress has been more modest. During the second crisis period - beginning in 1981 - the financial resources devoted to this sector not only ceased to grow but actually fell off; in real terms, this decline amounted to 23% over five years (from 1981 to 1986), while the number of trainees rose by 49%.'

Density and intensity

The proportion of employees who are receiving training (incidence) is bound to be one of the chief guides to the distributional effects of any system of financing training. The number of training days received per employee (density) and of training days received per trainee (intensity) can be valuable supplementary measures. However, density is an employer effort measure, whereas intensity is an essential complement to incidence measures, making it possible to distinguish between employees attending very minor training events and substantial investments in their skills and knowledge.

In general, measures of density and intensity of training repeat the pattern exhibited in the case of incidence measures. All countries lack comprehensive, annual data. Even France, with its unusually strong and wide-ranging legislative framework for continuing training, has very little data on-the-job training. Even the United Kingdom, after a very comprehensive survey-based study of its entire system of post-16 vocational training, knows a great deal about one year (1986/87) and very much less about subsequent years. Most countries have data which are more fragmentary and difficult to interpret than the data from France or the United Kingdom.

In the United Kingdom, which has abundant density and intensity data for 1986/87, two kinds of economically active adults aged 19-59 claimed not to have received any job-related training or education in the previous three years, although on further questioning about half were found to have had some kinds of learning experiences related to work. However, employers reported giving training to 48% of their problems in 1986/87. Leave on one side the problem of reconciling density data from an individuals' survey (2,500 individuals 19-59 years old) and an employers' survey (1,500 establishments and 140 large organisations). The British data relate to all forms of post-sixteen training. In France, which also has abundant density data, continuing vocational training is defined as formal training which takes place mainly outside the workplace and therefore excludes on-the-job training. The most comprehensive German data go beyond even the British definition to include not only formal off-the-job and on-the-job training, but also informational and other events (conference participation, reading professional journals) which would be excluded under the definition used for the United Kingdom's 1986/87 study.

Sometimes it is possible to adjust data towards a particular definition. For example, British employees who received training got an average of 14.5 days. But the intensity varies dramatically according to the employee's labour market history. Initial training which is end-on to full-time schooling might well be excluded from continuing training - the British 1986/87 survey suggested that 650,000 apprentices and other long-term trainees were being included. The same survey showed that this group received 53 days of training per trainee, whereas other new recruits received 14 days each and established employees 11 days. But what is a training day? In Britain the measured training was carried out both in working hours and in the trainee's own time, including work time spent off-the-job but en route to or from a training event. In France, only the actual time under training and during working hours is counted. So even if British and French data were converted into a common measures, like hours, duration per employee or per trainee cannot be made remotely comparable.

Those density and intensity measures which are available reflect a wide diversity of concepts and coverage sometimes within one country, certainly between countries. Employer-sponsored continuing training, and especially the large volume of on-the-job training, are

particularly under-measured apart from occasional and usually one-off surveys in some Member States. Until common concepts and measuring instruments are agreed, the scope for adjusting existing data onto a more comparable basis is distinctly limited. The scope for misinterpretation of existing data is great.

Conclusions

Seven general conclusions can be drawn from surveying what the financing studies are able to report on the flows of people:

- (1) Data which are collected by surveys of individuals, by surveys of employers and from administrative/provider records are all necessary in order to cross-check broad trends. But these data are at present very difficult to reconcile cross-nationally with any degree of precision and any confidence in their interpretation.
- (2) Those country reports which contain abundant participation data, i.e. the Netherlands, Germany and the United Kingdom, illustrate both the necessity and the potential for an improved understanding of each country's system, including the whole environment of training, as the basis for relating data in a meaningful way across countries.
- (3) The paucity of participation data in the other five reports understates the availability of information on participation in one or two cases (notably France). But in other cases, for instance Belgium, there are clear statements that the necessary data simply do not exist.
- (4) At the start of this chapter the training consequences of existing financing arrangements were classified, conceptually, into the competences which are acquired and the people who benefit from this acquisition. The financing studies document some of the characteristics of those who receive training. But the data are very uneven in quality and coverage; and, in particular, they are biased towards input and process measures of the flow of people through training and away from outcome measures. It is not always easy or indeed possible to find an adequate account of the activity which is being financed. However, it is much easier to identify the activity than it is to identify the product which is being financed. This product is the competences which a country needs. If these competences cannot be defined and measured there is no way of knowing their cost and deciding how best to finance their formation.
- (5) Country reports reveal a number of Member States in which there are outcome-related measures for tax-financed programmes of continuing training. These make it possible to see whether at least some programme objectives are being achieved. On the other hand, country reports also give the impression that many such programmes still lack the outcome data necessary to ensure real accountability. In a training programme for unemployed adults no data are more important than rates of qualification, employment and job retention.
- (6) Unless legislation and regulation is introduced which makes comprehensive monitoring possible, price-financed continuing training (mostly employer-sponsored) will remain badly documented - even as a process. It is an open question whether the link between customer satisfaction and the financial success of providers which is so essential for the

efficient allocation of resources can operate effectively without a reliably certified product.

- (7) The inadequacies of existing data on the training consequences of national financing arrangements are compounded when the issue is cross-national comparison. National idiosyncrasies of definition, coverage and measurement leave no options. The scope for adjusting existing national data onto a comparable basis, which is considerable in a few areas, is generally very limited. There is no alternative. The only way to achieve meaningful cross-national comparison is by means of a sustained and systematic effort to understand existing differences between the national environments of training and national practices as an aid towards greater and greater use of common definitions, measures and data collection methods.

CHAPTER 7 FLOWS OF FUNDS

With the aid of the financing studies it is possible to get a view of the ways in which continuing training was being financed in Member States during the second half of the 1980s. Their data can be supplemented from earlier CEDEFOP studies of the financing of training (see the Focus 1 country studies; Drake and Rasmussen, 1984; Drake, 1991). The view is disappointing because clouds obscure much of the landscape. Nevertheless, these clouds leave glimpses of the countryside which are sometimes sufficient to guess the general lie of the land.

A limited purpose

Data selected by availability

At both Community and national levels CEDEFOP seeks to establish what is the minimum information required not to make policy but to give a description of reality which is as true as possible. Neither CEDEFOP nor comparative researchers in Member States see comparative data feeding directly into policy formation, providing lessons or models for policymakers. This is one progress report in an analysis of training systems, part of an investigatory agenda which is big, long and difficult. It is not so much a synthesis as a summative assessment of the work at one stage in this agenda.

What Chapters Six and Seven reflect is country studies which were deliberately non-theoretical, rooted in the concreteness of actual training systems. To make full use of comparative data requires not only the conditions laid out in Chapter Four but the use of theory in order to select data and draw comparisons.

Unless there is an explanatory model to relate one thing to another as cause and effect, correlate or autonomous activity, simple measurement of training volumes and expenditure is of little immediate use to policymakers. In order to formulate a policy it is necessary to use a model, a picture of how the system works, to interpret the theory-less data of the financing studies. The data in the studies are those which were available. They are not necessarily those which are relevant for policymaking. Only an explanatory model can indicate what are the relevant data, i.e. the data needed to interpret training activity, patterns and trends and to predict what has to be influenced in order to change activity, patterns and trends. The limited understanding which is offered to those who examine the financing studies is an understanding of what data are available in the somewhat accidental and rather haphazard databases of Member States.

Questioning data through comparisons: some examples

This limited understanding goes beyond a knowledge of what is available. Comparison

provokes questioning (see Box Q) which may then direct the course of further investigations. On the basis of the structures of initial education and training shown

Box Q Stream analysis of young people

In the four countries the different routes for young people aged 16-25 in 1980 are characterised as four blocks:

Block I:	General education, academic streams
Block II	: Full-time vocational training schools
Block III	: Alternance
Block IV	: Without vocational qualification - in work or unemployed

The diagrams derive mostly from data in a series of CEDEFOP studies and are intended to show the outlines of initial training for an age group.

This stream analysis shows the movement and attrition of young people along the four main routes (vertically) but also the size of transfers across and between routes (horizontally) as a basis for coherent cost analysis and forward financial planning. It also shows 'how misleading it is to base financial planning only on the budgets of training institutions (public or private).' These comparisons highlight the structural differences between training systems which are, in turn, the basis of inter-country differences in the flows of funds used to finance the education and training available along the main routes. For example,

- * In D there are major transfers across from general education (8%) and full-time vocational schools (17%) into the dual system which finally caters for 61% of the age group, leaving only 12% without vocational qualification.**
- * In F, considerable numbers leave general education without a certificate for other main blocks (II = 4%, III = 8%, IV = 5%) and the stream lacking any vocational qualification swells finally, at 25, to 23%.**
- * In NL there is a substantial migration from general education to full-time vocational schools (21%) and the unqualified stream swells only to 11%.**
- * In UK, relatively, there is a dramatic absence of transfers between main routes, the largest being 3%; and the vocationally unqualified stream which increases over time in the other three countries actually decreases slightly in size but still ends as 26% of the age group.**

Source: CEDEFOP, 1990, p 4

in Box Q it might be expected that countries would be financing a compensative form of continuing training in proportion to the relative size of the unqualified stream by the age of 25. That size is greatest in the UK, followed, in descending order, by France, Germany and the Netherlands.

The data in the financing studies suggest that the stream analysis which is just feasible in initial education and training is at present quite impractical for continuing education and training. But there are indications from the participation of labour force groups that continuing training is not much more compensative in the UK and France than it is in the Netherlands and Germany (Box R). Where the financing studies address the issue (e.g. the German and Danish reports), there are some indications that even publicly-financed continuing training, which is generally compensative in intention, is being distributed in favour of the more qualified and less in favour of the completely unqualified and unskilled.

Box R Participation rates in continuing training, 1986/87

Source: CEDEFOP, 1990, p 8

The data in Boxes Q and R are now fairly historic. But they could be updated. The financing studies reveal a paucity of financial data on continuing training which is frequently greater than the paucity of data on the distribution of training - participation rates - and its volume measured by the number of people being trained (Chapter Six). In a country like France, with an unusually strong database on continuing training, it is possible to show in broad magnitudes the apportionment of training expenditures between the major categories of the workforce:

Leaving aside the technical problems of the underlying data - its overweighting of state funding and underweighting of company spending - the issue here concerns the understanding which is available on the basis of the data in the financing studies. Here is a system with a relatively high level of public financing and strong public intervention in the form of what is effectively a mandatory obligation to train laid upon firms.

Practicality and subsidiarity

What do the French data suggest about the way in which that system works when they are considered in isolation or by comparison with data from other Member States? What is the range of combinations of procedures which can be used to finance training? What are the characteristics of individual financing instruments as they operate in France and in other Member States?

An understanding of such issues - of the workings of national training systems - constitutes a more modest but more practicable objective than the collection, collation and comparison of data to inform the operation of policy on continuing training at Community level. The CEDEFOP studies show how far the Community is from anything like the Community-wide training system

which is the precondition for Community-wide comparability of training data and therefore of the operation of a common training policy at Community level.

A common policy may be feasible as well as desired; but a single community-wide mode of operating such a policy is not practicable without convergence. A lengthy, agreed restructuring of labour and training markets, work organisation and education systems would be needed to create sufficient convergence to operate a common policy at Community level. Without that, the direction and size of the policy's effects would be extremely haphazard. On the other hand, considerations of practicality and of subsidiarity suggest that a Community training policy, operated at a national rather than a Community level, is already a feasible objective.

The leverage of financial costs on all learning costs

Financial and total resource costs

In general, the financing studies report only those training costs which are identifiable as such in public or company accounts. There are a few striking exceptions to this rule, based on surveys of employers' training activities, of household expenditures and of the time budgets of individuals. But the great mass of data refers to accounted flows of funds derived from transactions which record income flowing into funds dedicated to training, allocations to agencies responsible for training or spending on training. For the most part, these accounted flows of funds relate to formal training, i.e. to instruction which is off-the-job and clearly distinguished from production. The resulting picture shows how some of the costs of formal instruction were being financed in the second half of the 1980s.

These financial costs are very much less than the total resource costs of training, which, in turn, are less than the total resource costs of learning. Financial costs (the accounted costs) have considerable leverage on total training costs. They have some, though less, leverage on total learning costs. So the relationship of financial costs to total training costs and to total learning costs needs to be appreciated if the significance of the reported financial costs is to be clarified.

The choice between experience-only and training

Costs of learning by experience-only - the work-led competence formation of Chapters One and Four - are not addressed in the financing studies. It has long been recognized (see Oatey, 1970, p 5) that the costs of learning by experience are one of the ordinary costs of production. In large part they are borne by employers, though they may be shared with employees in certain circumstances. These costs are heavy. They are best measured by the value of production lost as a result of mistakes, spoilage, output levels and quality below a criterion level i.e. the lowest level acceptable in a given job.

Below that criterion level the worker is best described as a learner, even if there is some valuable output mixed in with the learning process. To get a worker to a criterion level of

performance involves cost whether the route to competence is experience-only or uses a combination of instruction and practice (i.e. training) in order to accelerate learning and so reduce the production lost. Employers have to compare the additional costs of providing instruction and of structuring practice, i.e. the costs above those incurred using experience-only, with the reductions in production lost due to the acceleration to a criterion level of competence.

It is precisely at this decision point that financial cost levers on the heavy costs of learning by experience-only. Leave aside the employer who uses recruitment as the path to a competent work force. The employer who trains his way to a competent workforce incurs considerable financial costs (mostly in providing or purchasing instruction) compared with the employer who relies on experience-only, virtually all of whose costs are non-accounted resource costs such as lost production. The German study (D, pp 63-64) spells out the wide range of such financial costs. Employers frequently treat financial costs identified as training costs rather differently from resource costs which do not involve flows of funds through the employer's accounts, whether or not these resource costs are identified to training. In other words, the financial visibility of a resource cost can be as important as its size in influencing choices between the experience-only and the training routes to competence formation.

Non-reporting of training costs

The structure of costs, this balance between resource costs which are both accounted and identified to training and those which are not, has long been recognised as a vital feature of company choices about competence building. Unless this is remembered, much of the significance of information on the financial and non-financial costs of enterprise training is bound to be unclear. The peculiarities of corporate decision-making about the training as opposed to the experience-only route to competence (e.g. Box S) are well known to those stakeholders familiar with the workplace. But they are often forgotten in policy debate beyond the workplace.

Box S Obscuring the full costs of enterprise training

'The evolution of cost accounting, with it emphasis on allocating all costs, both direct and indirect, to cost and profit centers, has been matched by a growing reluctance on the part of senior staff officers to have their activities so well defined that a cost algorithm can associate those activities with a direct set of beneficiaries. Those responsible for support and service functions believe that a significant proportion of their direct expenses properly belongs to the firm's fixed cost base. From this perspective, identifying direct cost, such as salaries of the trainees during training, only muddies the water, since the firm is unlikely to save the trainees' salaries if the training is not offered. The interests of the firm, as well as its training functions, are thus best served by focusing on the minimal additional cost of training materials, vendor contracts and, where appropriate, the trainee's necessary per diem expenses.'

Source: A report on training in a range of large and medium-to-large firms in manufacturing and services in a modern industrial economy, 1984

The proportion of the total resource costs of enterprise training which are accounted (i.e. financial) costs may rise (i) because accounting coverage increases within a firm or (ii) because the rise in the market prices of the goods and services being bought outstrips any rise in those resource costs of training not recognised by the accounting system. Others things being equal, a change in proportion may tip the decision at the margin between training-led and work-led competence formation. This leverage of financial cost over total learning costs is invisible in the very public world of the financing studies. But it can be important in the private decision-making of firms.

The costs of entirely on-the-job training are almost as difficult to separate completely from costs of production as the costs of learning by experience only. They may not be measurable without large margins of error and uncertainty. Costs of instruction off the job are generally easier to measure than those of instruction on the job. So it is not surprising that they are far more comprehensively accounted and better reported in the financing studies. The practice component in training which is off-the-job is often no better costed and reported than the practice component in on-the-job training.

Mode of competence formation	Reporting of financial costs
Experience-only	none
Training on-the-job	
instruction	occasional
practice	very rare
off-the-job	
instruction	common
practice	very rare

Whatever the proportion of financial to non-financial costs, if the costs which have to be financed - an instructor's salary or a course fee - are not financed, then a complementary tranche of non-financial costs is also not incurred and the training, on or off-the-job, does not

happen. The knock-on effects may be resort to experience-only learning (no costs to the financed, but resource costs incurred and production lost), recruitment of appropriately skilled workers, job redesign or product redesign to reduce skill requirements. Since financing or not financing can trigger such a range of substitutions in the production process, it can be seen that financial costs have a leverage on the whole spectrum of workplace learning activities and beyond.

The measurement of financial costs

Financial costs and economic costs

Authors of the country studies are very well aware of the partial nature of the financial cost data with which they are dealing. For the most part, they report only those costs captured by the forms of financial accounting used in public or corporate budgets. It is the exceptions which highlight the difference between financial costs and total resource costs, sometimes called economic costs. The UK study (p 19) describes the distinction thus:

'One way of looking at the costs of training... is in terms of the actual money payments involved. The other way is in terms of the real resources, i.e. buildings, materials, labour and so on, devoted to training. In many cases, these resources could be put to alternative uses. Their value in the best alternative use can be seen as the real cost of training to the economy; it is what has been foregone in order to undertake training. The emphasis on actual money payments is characteristic of the accounting approach to costs, while the emphasis on the value of opportunities foregone is characteristic of the economic approach.

There are two main reasons why the two approaches can result in a different assessment of costs. The first is that the accounting approach often excludes certain types of implicit cost, in other words, costs which do not manifest themselves in any explicit transaction. The second is that the market prices at which transactions (implicit or explicit) in the inputs to training take place may not, in certain circumstances, measure very well the value of those inputs in alternative uses.'

The UK study covers all post-sixteen education and training undertaken outside the school system in 1986-87, and it is often impossible to isolate continuing from initial vocational education and training. However, it does report a major government study which produced an order of magnitude estimate of total training costs for that year (Table 7.1). At this point, the particularly interesting feature of that estimate is its mixture of financial and economic costs. For instance, the £8 billion of costs borne by the individual trainees are not financial costs, culled from accounts, but estimates of earnings foregone by individuals while they undertook training (UK, Table 3.3); and there are substantial staffing costs included in employers expenditures which are estimated from time analysis and do not appear as training costs in company accounts. On the other hand, government expenditure is derived almost entirely from identifiable education and training data in government accounts.

Table 7.1 Overall costs of training in Great Britain, 1986-87

	£ billion
Employers	18

Government	7
Individuals	8
	33

Source: UK, Table 3.6

Where financial and economic costs are mixed in this way it is not meaningful to compare the resultant aggregates with aggregates from other countries which reflect different mixes of financial and economic costing, or only financial costings. The £8 billion of training costs borne by individuals in Great Britain (24 per cent of the total costs in Table 7.1) cannot be compared with the 1.2 per cent of training expenditures identified to French households in Figure 7.2, nor is it meaningful to compare the resultant aggregate with Britain's gross domestic product or physical capital formation estimates as long as those comparators are calculated using a quite different set of costing conventions.

Undercounting and bias

Since the financing studies generally rely on financial costings this produces both undercounting of the true or economic cost of training and a notable bias towards administrative and away from market data.

Had relevance to policymaking been the dominant criteria for data collection, rather than availability, more data might have been collected on the operation in each country of external and internal labour markets. Many of the financial levers which influence training, such as the ratio of trainee to fully skilled wages, are placed in those markets. A few studies - that for the United Kingdom is an example - do pay considerable attention to this. But most of the financial data in most of the studies are administrative in origin and reflect bureaucratic or government activity rather than market activity. Frequently, the data reflect government use of policy instruments which regulate, supplement or displace markets. The authors of the financing studies repeatedly remark on the complete absence or paucity of data on the size and operation of the training market. The relevant characteristics of external and internal labour markets receive only a passing mention.

It is also necessary to treat with caution the skewed perspective on training caused by the origins of the data. France has some of the most thorough documentation of training expenditures in the entire Community. Although much of the reported spending is controlled, or at least mandated, by central government, very substantial spending is devolved to regions, départements and even communes. However, France has 22 regions, 96 départements and more than 36,000 communes. The French study explains the wide range of allocation and spending powers delegated to the regions following the decentralisation of 1983. But as it reaches the lower levels of implementation of subsidiarity it gives up, admitting that 'funds, for which there are few statistics, also come Départements, Communes and households' (F, p 6). The authors of the French report go on to note that 'there are major shortcomings in existing measurement systems as regards the evaluation of the information generated by the French continuing training system' (F, p 8). The plethora of data on financing emanating from agencies like the Vocational Training and Social Advancement Fund, from the Regional Councils and through the training reported by firms to the tax authorities too easily distracts attention from major areas of ignorance concerning administrative data or household data. When central government provides only one third of local government revenue, as in France, there is scope for considerable independent local government influence on vocational training, using its

powers to raise taxes and loans.

The big picture

Financial regimes

A painting is a structure, a set of images related to each other. To say that these images are structured is to say that they are not listed in some meaningless order, for instance randomly or alphabetically. Most of the meaning in a painting is in its arrangement of the elements of light, colour, shape, perspective, balance. Similarly, with training, each country has a prevailing system or form of organisation which is the set of arrangements of the elements of people, funds, and social, political and economic organisations.

An integral part of the big picture which is a country's training system is its financial regime, the total arrangement of all its procedures for financing training, hereafter referred to simply as its regime. While it is important to try to understand the experience of Member States with particular financing procedures, it is also necessary to consider the big picture, the complete set of arrangements as one element within an idiosyncratic training system. Individual financial instruments do not operate in isolation but interactively, as part of a set of financing arrangements within a training system.

These financing regimes might be classified into three types:

The market regime

Resource allocation is steered largely by financial instruments which are forms of price such as fees and subscriptions. These channel most of the funds used to finance training from beneficiary to supplier. Typical instruments relate the amount which is paid to the use of instructional services. Power lies exclusively with those who can both benefit from and pay for training.

The bureaucratic regime

Resource allocation is steered largely by financial instruments which are forms of tax levied on individuals as citizens or employees or on employers. The basis of financial support for training is neither use nor benefit but residence in a tax area, size of taxable income, pattern of personal expenditures, employment in a particular industry sector or being a producer of goods and services of a certain size or profitability. Power over the distribution and volume of training lies with those who control the allocation and expenditure of taxes, whether this power is exercised directly or delegated under certain conditions and regulations.

The mixed regime

Funds are raised by means of both prices and taxes. Sometimes it is those who can pay who are trained; sometimes training is given

according to need and irrespective of the ability to pay. Supplementation or displacement of some markets produces an incidence of training costs and benefits which is very different from that produced by a purely market or a purely bureaucratic regime.

The financing studies reveal something of the anatomy of each country's regime. It is to these data and then to the evidence of changes in regime that attention must now be given.

Modifications and trends

The way in which training is financed is a major determinant of who is trained (who benefits) and at whose expense. The sharing of costs between co-beneficiaries such as individuals and employers, or between users and taxpayers, is largely a function of financial arrangements. In each system the stakeholders, and particularly government, have had to choose between prices and taxes as instruments for raising funds; between putting obligations on employers and employees; between general and hypothecated taxation; and between improving the operation of the human capital market with tax reliefs, loan schemes and high differentials for skills.

In making these choices they are choosing how to share out the costs and benefits of training. But these shares do not follow predictably, in direct proportion to the choices. To understand the consequences of such choices a knowledge of the terrain is essential.

Box T Firms do finance training for transferable skills

'We're training for the whole region' - manager of a company welding school.

Source: Ryan, 1980 p 344

In his classic study of company welding training, Ryan (Box T) explained how and why a shipbuilder was prepared to carry the greatest burden of financing a training programme in arc welding, a core skill in great demand among other employers in the region. Whereas the company bore substantial costs in training a welder, 'the average trainee incurred no net sacrifice of present economic well-being in order to learn to weld' (Ryan, 1980, p 344). Many other, usually less detailed studies have reported the same phenomenon. The substantial costs of training for skills which are valuable in more than one firm or more than one industrial sector are often not financed in the way suggested by economic theory alone. Such theory stresses the experience-wage relationship, skill specificity and worker mobility. To explain why the distribution of costs of training is financed in the way it actually is, it is necessary to introduce a range of contextual factors. These include institutional features such as the structuring of internal and external labour markets, customary wage differentials, local training provision and customary expectations of employers and employees. Custom modifies economics. Together they explain a great deal about finance.

In the Member States there is a perpetual interaction between the forces of custom and the forces of the market, overlaid by public interventions - the visible hand of government. The financing studies reveal and this report illustrates an encrusted pattern of arrangements for financing training, the residual of decades of these interactions and interventions. At the outset of the German report (D, p 2), its authors note one of the premises upon which the German regime is founded:

'Of importance for the "philosophy" of the financing of continuing training is the assumption that the participants in continuing training can as a rule pay their own way either from their own income or because they have acquired rights (e.g. unemployment insurance).'

This is a cultural characteristic. A country's financial regime is not a carefully engineered machine, built to one design, whose fitness for its purpose can be scientifically assessed against specification. In order to understand these arrangements the systematic, scientific approach of measurement and testing has to be combined with the skills of the historian, the anthropologist, the sociologist and the political scientist, as well as with the experience of employers, trade unionists and providers of training.

The first round of financing studies in the early eighties (Focus 1, see Drake and Rasmussen, 1984 pp 10-14) occurred at a time when some Member States, for example Denmark, Ireland and Belgium, were modifying their regimes as part of a response to public budgetary crises caused by extremely heavy public borrowing. Both Denmark and Ireland partially replaced general taxation with what were in effect dedicated taxes. These were compulsory levies from employees and private employers to finance certain types of training in Denmark, and the Youth Employment Levy on all private incomes in Ireland. There also began a movement which was to become more widespread and more pronounced in many countries as the decade matured, namely an increased funding of training from the market. What makes comparison so difficult is that regime modifications do not occur all in the same direction, e.g. from bureaucratic and towards market financing, over all countries at one moment in time, or even simultaneously across all sectors and occupations within one country.

Apprenticeship financing in Germany:

In a number of countries the apprenticeship system had been in serious decline for some time by the early eighties. The response to this major threat to youth training was revealingly varied. Some countries stayed with their existing arrangements. France already had a dedicated tax for this precise purpose, the *taxe d'apprentissage*. Between 1979 and 1983 a downturn in the business cycle combined with a demographic bulge in Germany. This seriously threatened the capacity of the dual system to provide training places for those eligible young Germans who sought training (see Drake, 1991, pp 216-218). Some increased Federal and Länder subsidies to the dual system and queuing in the tax-financed vocational schools gave the largely market-financed in-firm training system time to cope. By 1987 the number of training places available again exceeded the number of registered applicants.

Apprenticeship financing in Britain:

In the Netherlands, Denmark and the United Kingdom financing arrangements were considerably changed. In Britain, the Manpower Services Commission's publicly-expressed fears that subsidies to shore up a failing apprenticeship system might encourage employers to shirk their traditional financial responsibilities in training young people proved to be well founded

(see Drake and Rasmussen, 1984, pp 11-12). What emerged was a mere remnant of the country's apprenticeship system, in part shored up from a tax-financed youth training scheme for the substantial fraction of young school leavers who became unemployed.

Apprenticeship financing in Denmark:

The partial substitution of taxes for prices (employer revenues and trainee earnings foregone) in the United Kingdom contrasts with the responses of Denmark and the Netherlands. The Danes invented a central fund solution in the form of the Employers' Trainee Reimbursement Scheme or AER. Under apprenticeship, which continued at a slightly reduced level, the employer paid the apprentice a wage and financed apprentice training out of his own cash flow and at his own discretion. Under the new regime, signalled by the establishment of the AER in 1977, a new form of basic vocational training or EFG was set up alongside apprenticeship. This stream begins a year earlier than apprentice training with a year of tax-financed technical or business school. The second stage of the EFG is largely on the job and very similar to apprenticeship but almost a year shorter. After the first year, the EFG trainee is treated financially just as an apprentice is treated.

The employer of either an EFG trainee or an apprentice has since 1977 been reimbursed fully or in part for wages paid to EFG trainees or apprentices. This has been done from the statutory central fund financed by a levy on all private employers and without any public funds. As Koefoed (1984) explained, the private employers contribute on the basis of the number of their employees. The AER is governed by a board comprising a chairman appointed by the board and four representatives each from employers and from trade unions.

The collectivization of employer training costs through the AER helped to rebuild youth training opportunities when they were threatened. Between 1975 and 1984, while the age cohort increased in size by 16.5 per cent, the proportion of 17 year olds embarking on alternance training increased from 23 to 40 per cent. Since levy income is collected from all private employers irrespective of their training effort and is redistributed to those who give training contracts to apprentices and EFG trainees, the AER redistributes employer revenues from non-training firms to training firms.

Apprenticeship financing in the Netherlands:

As with the United Kingdom, in the Netherlands the apprenticeship system had been in serious decline despite injections of public funds. The preferred solution of the early eighties was a different kind of collective fund scheme. By 1984 thirty eight sectoral collective agreements had been made, twenty nine of them including training and development funds under bipartite control financed by a payroll levy ranging from a few hundredths of one per cent to about 1.5 per cent (NL, pp 30-31). A 1987 survey of sectoral training programmes showed that, of sectoral training organizations' revenue, 40 per cent came from course fees, 30 per cent from firms' contributions, almost 25 per cent from government subsidies, and 5 per cent from other sources. It was not known what proportion of course fees were paid by firms and what by participants. Typically, these agreements cover both youth and adult training, and often rights to paid educational leave. In 1985 there were around 35,000 on apprenticeships averaging two and a half years in duration. By the end of the decade this was approximately 80,000.

It is not necessary to pile on more examples. Member States reach for modifications which suit their predispositions and structures. The British were disillusioned with fund solutions, and

only the Construction Industry Training Board now survives from an era of sectoral funds. The Dutch have been in a decentralising mood, with increased reliance on the Social Partners for management, on sectors and regions, on employer revenues and market-sensitive provision. The Danes have steadily pursued their single, Social Partner-managed collective fund approach. In 1983 they bolted on to the administrative system used by the AER a specialised Labour Market Training Fund for continuing training known as the AUD.

Evolution of regimes:

Financing regimes are best conceived as a spectrum from pure bureaucracy to pure market. One modification shifts a country's regime a little towards the market pole, another pushes it a shade further or a shade back, and so on. Very few Member States are really close to either pole. For instance, in a pure form of bureaucratic regime purchaser and provider are indistinguishable. It is the command economy of training. The state raises the funds through general taxation, allocates them between uses, and spends those allocated to training, in provision which it owns and operates on planned programmes which allow of no competition.

Governments may still train their own work forces on these lines, but in recent years one of the few clear trends, evident in a considerable number of Member States, is to modify essentially bureaucratic forms of financing by introducing some market forces into an otherwise bureaucratic system. One stage in such a shift is to change the means of raising funds from general taxation, by definition unrelated to training or to structural shifts within the economy, towards dedicated taxation like payroll taxes. On a sectoral basis, as in the Netherlands, or in the construction sectors in Germany or the UK, the raising of funds then becomes more sensitive to sectoral employment changes and Social Partner definition of sectoral needs. Even where general tax funds are still used, the separation of purchasers (using tax funds) from providers (whether publicly- owned, non-profit or for-profit) introduces competition between providers. This is precisely what has been happening in Denmark:

'For many of the continuing training activities at the central continuing training institutions, the financial basis has been changed as part of the government's efforts to introduce greater cost-awareness through the introduction of payment by users. Permanent, annually adjusted grants to continuing training institutions are being gradually replaced by grants to users, i.e. the training institutions, managing boards, departments and local authorities whose employees will participate in continuing training. At the same time, the central continuing training institutions are to compete with others for continuing training participants, as part of the efforts towards more market control of continuing training' (DK, p 44).

The growth of the parafiscal (or intermediate) sector reflects a movement away from thoroughly bureaucratic resource allocation, combined with an unwillingness to push deregulation and dependence on market financing to the extent which it has reached in, for instance, the United Kingdom. Parafiscs are a heterogeneous but distinctive collection of organisations (see Drake and Rasmussen, 1981; Drake, 1983, pp 65-77). Typically, parafiscs involve group financing of training by voluntary or statutory levy or subscription, although they also employ funds raised through the characteristic instruments of bureaucracies, i.e. tax subsidies, and of markets, i.e. by selling priced services. Variety of revenue sources and a marked degree of financial autonomy are common characteristics. Professional associations, sectoral training bodies and funds, the Training Insurance Funds in France or co-operatives like the Escuela Profesional Politecnica at Mondragon are all examples of these hybrids.

Organisationally, parafiscs shade off on the bureaucratic side into Social Partner-managed statutory bodies like the Federal Institute for Labour in Germany or the AUD and AER in Denmark; on the market side into self-financing training companies owned by non-statutory trade associations. The characteristically mixed revenue sources of a parafisc are used to finance an output profile which reflects the traits of both the markets and the bureaucracies between which these independent non-profits find their niches. A typical output profile includes private training services available only to those who pay the fees or subscribe, but also collective-type services to an extent greater than would be provided by purely price-financed for-profit providers.

However, it has to be remembered that most financing innovations are regime modifications. They represent an evolutionary rather than a revolutionary approach to change. A new financing mechanism has always to be evaluated in context. For example, the five labour market training schemes financed since 1983 through the AUD are by no means the only way in which continuing training is financed in Denmark. Calculations based on the data in the Danish study (DK, Table 1, and Table 7.2 here) show that these schemes - mostly for semi-skilled and skilled workers and workers on retraining and vocational preparation courses - accounted for only one third of total direct costs of training in 1986. From 1960 to 1983 labour market schemes were 90 per cent funded from general taxation (DK, p 57).

Table 7.2 **Funding sources for continuing training, Denmark 1976-86 (per cent of total funding)**

Training Supplier	Funding source	Funding Shares		
		1976	1981	1986
Public authorities	General taxation	26.5	20.3	22.2
Ministry of Labour	General taxation AUD	37.6	30.9	34.7
Trade unions, employer organisations, separately & through collective agreements	Multiple, chiefly members' contributions and course fees paid by employers	18.9	14.4	12.6
External training suppliers	Fees	8.5	10.8	9.6
In-house company training	Employer revenues	8.5	23.7	20.9
All		100	100	100

Source: Drake, 1991, Table 9.2

The introduction of the AUD changed the source of funds to a dedicated tax on all workers and employers, sufficient to meet all expenditure. But the share of all funds for continuing training raised from both general and dedicated taxation fell from 64 to 57 per cent between 1976 and 1986 (see Table 7.2). The share of the last three categories in Table 7.2 - non-statutory and far more market-sensitive funds - rose from 36 to 43 per cent. It has already been noted (in Chapter Five) that a clear trend is evident in Denmark towards the replacement of zero pricing by user charging. The Danish innovations which are best known outside Denmark may be the central funds of the AER and the AUD, financed by dedicated taxes. But the big picture of continuing training in Denmark tells a different story: there has been a gradual, piecemeal trend towards increased reliance on the market-sensitive funds and towards full cost pricing of training services.

Modifications to the big picture, the overall financing regime in each Member State, will remain difficult to evaluate while the data are so poor. For instance, the authors of the German study are able to state categorically who bears the costs

Table 7.3: Expenditure on continuing training in Germany in 1980, 1983 and 1986, in billions of DM

	1980	1983	1986
Private Sector	8.0 (4.0*)	9.2	10.0 (5.0*)
Federal Institute of Labour	2.5	3.1	4.5
Public authorities (Federal, Land and local government)	2.3	2.4	3.2
Participants	not known **		

Source: D, Figure 25

* corrected extrapolation proposed by Bergner (1987).

** in a sample survey three quarters of participants said they were financed individually.

(the private sector, the Federal Institute of Labour, the public authorities and participants) and the various sources of finance for these costs. But comprehensive measurement of the share of each stakeholder in total costs is quite another matter:

'... there are countless gaps in the information on the financing of continuing training. A description of sources and flows of funds must be based on various sources of data and information, which differ widely in topicality and/or accuracy' (D, p 67).

Concerning their best estimate of the overall picture (Table 7.3), the German authors give a clear warning that it 'gives a general insight into expenditure on continuing education in 1980,

1983 and 1986 at current prices, as estimated by official agencies. The figures for the Federal Institute of Labour and the public authorities reflect their actual expenditure (flows of funds). The data on the private sector are estimated costs' (D, p 67). There is not even an estimate of total expenditure by participants.

Flows of funds

Reason for the complexity of inter-relationships

Tracking the funds used to finance training from their source, through the budgets of those who allocated them to training and into the budgets of those who provided the training was an immensely difficult task in each Member State. The German experience of this process, and

reports:

'Costs are measured in money and defined as the consumption of goods and services for the at which they are valued (value structure). Costs are not the same as expenditure (real payment flows). They differ in value recording and allocating quantities consumed (quantity structure), valuation margins in particular Comparisons can be correctly made only if the respective value structures are open.

Continuing training costs can be identified to training institutions and participants, and the institutions and participants can be regarded as cost centres. They do not, however, reveal

They are then both cost centres and cost units. They may also finance the costs of the training institution wholly or partly by paying for the training provided costs. On the other hand, participants may have part of their costs and of the course fees refunded by the Federal Institute of Labour, as is the case with continuing training financed

when participation in a training course is "necessary" within the meaning of the Act. While participants usually meet at least some of the costs they incur, the costs incurred by training : the body behind the continuing training institution, the public authorities or the Federal Institute of Labour in the form of

exception is employer-sponsored continuing training, where the continuing training institution (a department of the firm) and the

As the costs associated with training may be financed from a wide variety of sources, a course may be the subject of mixed financing in the same way as the whole system of recognized as eligible for assistance under the Employment Promotion Act may or may not be receiving assistance under

the cost of learning and work aids, etc refunded by the Federal Institute of Labour, while those who receive no assistance must meet these expenses themselves.

Besides the different methods of financing individual courses, there are various ways in which the providers of funds recoup or pass on costs. The Federal Institute of Labour finances its operations with contributions from employees for whom its insurance is compulsory and from their employers. Government financing through taxes eventually affects the budgets of employees and employers through the income and consumption taxes they pay. Firms pass on their costs in the prices they charge for their goods' (D, pp 64-65).

As the German report notes, this gives rise to an extremely complex pattern of links among the various financial flows. At its simplest, this pattern is depicted in Figure 7.3.

The data on flows of funds from the financing studies will be sampled by examining examples from several countries of flows allocated to training by firms, by households and by public authorities before comparing the pattern of flows in a large country with that in one or two smaller countries.

Allocation by firms

In some of the larger Member States, such as the United Kingdom and Germany, private sector firms have a dominant role in the financing of continuing training. Market forces are very powerful influences on employer behaviour. This is the case even where an enterprise is able to operate a strong internal labour market, which tends to protect the corporate return on long-term investments in the continuing training of the workforce.

Even where firms do operate such an internal labour market, the requirement for training and the capacity to finance it are closely linked to sales of the firm's products. Company training is no less sensitive to the availability of skills on the external labour market and to the availability of training on the training market. The firm's internal training, on or of the job, is as sensitive as its external training to changes in product markets, on the external and internal labour markets and on the training market. In a sense, market financing of company training is a three level affair. Working through the levels from the most to the least remote from the process of competence formation, the three levels are the product market, the labour market and the training market. Prices at each level influence the training decisions of the firm. Less or more directly, these prices control the size and distribution of the relevant flows of company funds, i.e. sales revenue, payroll and training expenditures.

The most that the financing studies can do - by estimation - is to track flows of funds at two levels, i.e. payroll and training expenditures. For instance, the UK study (pp 24-26) reported a large scale survey of employers' training expenditures which made heavy use of payroll data on wages and salaries of those being trained and those doing the training, as well as accounted expenditures on non-labour inputs to internal training and on external training (see Table 7.4).

The estimated net cost of training to employers represented in the survey (covering 18.7 million employees) was £14.4 billion at 1986/87 prices. This was equivalent to an average of £809 per employee but £1,685 for each employee receiving training. The dominant funding flows going out from employers were those in connection with payments to staff:

Table 7.4 Expenditure on Training by Employers, Great Britain, 1986-87

STAFF COSTS	£M	
Trainees'		
Internal Part-time Trainers		
On the job:		
Trainees		
Trainers	4,158	
management	1,378	
Admin		
		12,243
NON-LABOUR INPUTS		
Cost of Training Facility		
Materials	172	
	137	
Other Costs		
		1,940
EXTERNALLY PROVIDED TRAINING		
Trainers on	117	
Training off	606	
		723
LEVIES AND SUBSCRIPTIONS TO ITOS		157
INCOME		
Revenue from providing training	177	
Grants		451
EXPENDITURE		14,435
Excludes employment in firms with under 10 employees, in agriculture and in the Armed		

Source: UK, Table 3.1

to 81% of total gross costs - or 85% of net costs. Within this overall figure £7,009m was accounted for by the labour costs of trainers and senior

management input, and £5,234m by costs associated with payments to trainees. The next most important funding outflow was mainly made up of payment for non-labour inputs and amounted to £1,940m or 13% of gross costs. Payments for externally provided training, both on and off the employer's site, total £723m and at 5% are a relatively small fraction of total gross costs' (UK, p 24).

Of course, many of the cautions about costing and financing expressed (in the previous section) by the German authors apply also to the United Kingdom data, not least to the estimate of off-the-job training costs at £5,847m relative to on-the-job training costs at £6,838m (UK, p 26).

It is interesting to compare these estimates with the German approach, whose data seem not to be exactly comparable:

'Where firms incur continuing training costs, a distinction is made between direct and indirect costs. Direct costs comprise:

- labour costs and the cost of materials associated with internal continuing training and
- the cost of external continuing training for employees.

Indirect continuing training costs, on the other hand, are labour costs incurred during the absence of the participants i.e. the cost of the continued payment of wages, and salaries to employees while they are undergoing continuing training. These costs are entered in the firm's books as wages and salaries, along with all non-wage labour costs, and do not appear again as a separate item under training costs.

The commission of experts calculated that the cost of the continued payment of wages (indirect costs) in 1971 accounted for an average of 49.9% of the total continuing training cost of all firms. At 57% the figure was highest for large firms affiliated to chambers of industry and commerce, followed by craft firms with 50% and small and medium-sized firms affiliated to chambers of industry and commerce with 47.9% (Sachverständigenkommission 1974). In its study of the situation in 1980, the Institute of the German Economy states that indirect costs accounted for 59.3 per cent of total continuing training costs in large firms, 43.6% in small and medium-sized firms and 32.3% in craft firms (FALK 1982, 144ff). The study carried out by the Federal Institute of Vocational Training in 1983-84 found indirect continuing training costs to be even more onerous ... in this case indirect cost accounted for over 71% of the total ' (D, pp 71-72).

The German study considered available data on private sector training expenditures to be rather problematic:

'Firms in the private sector use cost categories in their cost accounting system. Given the overriding objective of determining the firm's success each year, the main aim in cost accounting is to allocate costs as accurately as possible to the period in which they are incurred.

In contrast, the accounting methods used by the public authorities are geared to actual movements of funds (revenue and expenditure). As costs and expenditure are not always identical, the comparability of data on spending by the various sources of funds is very limited from the outset' (D, pp 67-68).

The uncertainties surrounding aggregate expenditures are vividly illustrated in the German report (D, pp 69-71). On the basis of a study carried out by the Institute of the German

the annual expenditure of the private sector on continuing training as rising from DM 8.0 billion in 1980 to DM 9.6 billion in 1985. But concern over the led to the subsequent omission of such data from annual publications. By 1987, representatives of employers' interests were estimating these costs at over DM 15 billion a year.

The most recent survey of private sector continuing training costs quoted in the German report (D, p 71) is one from the Federal Institute for Vocational Training in 1983-84. 'It covered

training (von et al, 1986). Total costs per employee and year averaged DM 347. They varied very significantly among industries and especially groups of employees. Broken

DM 1344	per manager
	per technical salary earner
	per commercial salary earner
DM 104	
DM 26	per

These British and German data can be juxtaposed with data from another country, such as the Netherlands, which has recently begun large scale and comprehensive research on training schemes. Depending on the methodology employed, industry spending on Hfl 2.3 billion or Hfl disparity between these estimates becomes greater when the studies which generated them

The second and higher of the two estimates derives from a study which, according to the Ministry commissioning the first study, seems to have overestimated the number of employees

add to an overestimation of expenditure per employee in smaller firms. On the other hand, the authors of the Netherlands study (NL, p 38) point out that the Central Bureau of Statistics study religious institutions. They go on to remark:

'If it is assumed that training costs in the health private sector (Hfl 1,000), the total spent on training would be about is assumed that the growth discernible since the early 1980s has continued, a total of Hfl 3.5 billion is conceivable, perhaps not in 1980, but in 1988' (NL, p 38).

sufficiently sound condition to engage in sensible cross-national comparisons of magnitudes. However, if that temptation is resisted and due notice is taken of survey limitations, such data

schemes, i.e. to training completely or partly financed by the company itself for its own employees, or those of subsidiaries or of the parent company. The study (NL, pp 34-35) does

'... any training which forms part of the apprenticeship scheme, educational activities for young people, work done by trainees from outside the firm, teaching during work, on-the-job training including internal and external practical training and courses for the firm's client. The data obtained from the CBS research can be considered representative of the total population of 71,000 firms with five or more employees....

The costs associated with the company training schemes in the Netherlands, as calculated by the CBS, are shown [Table 5.5] by sector and size category. It should be noted that the questionnaire asked for 'all costs incurred by' the firm, excluding labour costs and social security charges associated ... with apprentice agreements. Firms were asked to break down the total costs, where possible. If unable to do so, they were asked to indicate precisely what categories of expenditure the total figure comprised, the following categories being used:

1. expenditure on staff and equipment, including social security charges associated with any staff employed by the firm in a separate department responsible for internal and/or external company training;
2. expenditure, including social security charges, on staff (including instructors), apart from the staff of departments referred to in 1, concerned with (the administration of) internal and/or external company training;
3. cost of external assistance with company training schemes (instructors, help with the development of courses), cost of courses bought in;
4. reimbursement of education expenses and associated travel expenses.
5. costs associated with education leave/lost working hours;
6. other costs.'

Table 7.5 **Cost of (internal and external) company training, by sectors and size categories, 1986, Netherlands**

Costs, including the cost of lost working hours Size category, number of employees

	5-<100	100-<500	=500	Total
	Hfl			
Agriculture and fisheries	3	1	-	4

Minerals extraction and	59	116		779
Public	3		36	48
installation firms	15		14	45
restaur-				
ants, repair firms		52	97	
Transport, storage and				
communications firms		14	456	
Banking insurance and				
commercial services	106	136		573
Other services 1		52	61	
Total		396		2292

Comprises in particular social services, sport and recreational institutions/firms, (socio-) include: government, religious institutions, education and health care.

The principal findings (NL, p 36) reported from the CBS study with respect to firm size were:

'The cost of training schemes borne by employers, extrapolated to include all firms, amounts to or 1.5% of labour costs. As a proportion of labour costs, training costs are equivalent 500 employees) and 2.9% for large firms. Costs average Hfl 1,000 per employee (of firms providing training). There are major differences between large is Hfl 3,400 in large firms, Hfl 2,200 in small firms, the cost per employee being

Much more common in Member States is the situation reported in the Danish study (DK, p 85) with respect to in-house continuing training in the private sector. Such training is nearly : but data are very poor with respect to both the time and number of participants and direct and indirect costs:

the total activities of the enterprise; but the methods and what is calculated as training expenditure varies from enterprise to enterprise. Some operate with budgets, whereas others set aside funds for training as consequential expenditure in connection with investment in machines or equipment. Data concerning scope and therefore, be used as the basis for assessing total scope and expenditure.'

There is heavy competition for the title of most poorly documented sector of the training economy. But training financed entirely or largely out of household budgets, where individuals pay fees, is arguably the winner across all Member States.

A flavour of the difficulties encountered in all countries in evaluating the role of this source of training finance is given in the German report (D, p 86):

'A survey of the cost of continuing training to the individual (Bergner 1985), which examined only a small proportion of long-term and thus cost-intensive courses, shows that participants' gross and net costs differs widely even when they are attending the same course. The public assistance provided for continuing training (under the Employment Promotion Act) does not reduce the difference in participants' gross cost to such an extent that the net cost of a course to them becomes largely the same: participants living in large urban areas have a significant cost advantage over those living in rural areas or small towns, which cannot offer a wide range of continuing training opportunities.

The absence of data makes it impossible to indicate how much individuals spend on continuing training. This aspect is not adequately covered by statistics or even by occasional sample surveys. However, expenditure by individuals is probably high: three quarters of participants in continuing training stated in a sample survey that they had not received any direct financial assistance for courses they had attended in the previous five years.'

Allocation by government

Data coverage and quality tend to be higher in the public sector than in the private sector. Indeed, given the different importance of the public sector from country to country, this by itself is one of the reasons for great caution in making cross-national comparisons.

In some reports there is quite comprehensive coverage. For Great Britain, for example, there are data comparing the respective roles of central and local government and data showing the importance of government and therefore tax funding relative to other sources of funds (Table 7.6).

Table 7.6 Income to providers of training by source , GB, £m

	Universities	Public	Skill Sector	Private Centres	Sector
Recurrent Income	86/7	85/6		86/7	87/8
Source:					
Central/local government funds	1,716	2,132	-	165	
Tuition Fees	331	353	74	1,016	

Other		387	4	
Total	2,484		78	1,203

Where public or semi-public sector agencies are concerned data coverage and quality can be very good. For example, the German report (D, pp 76-78) includes data on the financing of continuing training of the unemployed through the Federal Institute of Labour. The Institute's funds are raised from unemployment contributions split equally between

federal tax revenues. In this case data quality is good enough to identify trends. The great importance of maintenance allowances to participants on full-time courses is plain to see, but

However, the German report also notes that, despite rising unemployment, 'expenditure on full-time training schemes, which ease the pressure on the labour market, fell ... while under 80% of total expenditure in 1975, the figure is now down to less than 60%. Two factors have been largely responsible for this trend. They

problem groups in the labour market. Firstly, the maintenance allowance rates have been reduced

Secondly, with the focus on the unemployed, more people entitled to less than full maintenance allowance have undergone continuing training in recent years '(D, p 78).

authority spending can be far less satisfactory. Staying with Germany, the official education budget data includes expenditure by public authorities on and 7.8), but it makes no distinction between continuing training and continuing education.

Table 7.7
current prices), 1970-1987, Germany

Year		% of public education budget	% of total public budget	
	581	2.1		0.06
1975		1.9	0.3	
1980	2291		0.5	0.16
	2951	3.5		0.16
1986*		3.5	0.5	
1987*	3300		0.5	0.16

Source: D, Figure 29

Table 7.8

Year		Federal absolute	%	Lander absolute	%	Local absolute	%	Total
1970		34		5.9		154	26.5	394
1975		149	14.1	465	44.1	440	41.7	1,054
1980	534	23.3	913	39.9	845	36.9	2,291	
1985	742	25.2	1,177	39.8	1,023	35.0	2,951	
1986	737	23.5	1,271	40.5	1,129	36.0	3,137	
1987*	769	23.9	1,306	40.6	1,141	35.5	3,216	

* Estimate

Source: D, Figure 30

More important, the figures used for Tables 5.9 and 5.10 'do not include all state expenditure on continuing training. As a result of its narrow definition of continuing training, the education budget largely consists of subsidies to training institutions. In 1977 the Working Group for Empirical Research on Education in Heidelberg examined public budget estimates for concealed expenditure on continuing training and found funds in other budget items amounting to half as much again as those shown by the Federal and Land Governments (MULLER/SCHÖLER 1980).

Apart from estimates for the in-service training of teachers shown in the budget of the Ministry of Education and Science, the cost of continuing training for public servants (the employer-sponsored continuing training of the public service, as it were) is not included in the education budget. However, according to a survey conducted by BSW, public servants are particularly active participants in continuing training. An accurate statement on the costs borne by the state, and particularly the indirect cost of the continued payment of salaries, which would have to be considered to permit a comparison with the costs borne by the private sector, cannot therefore be made' (D, pp 81-82).

The pattern of flows of funds

Figures 7.1 and 7.2 show the relative size of training activities and the relative proportions of funds coming from different services in a large country. The French report, from which these figures come, includes a large section (F, section four) devoted to a sophisticated analysis of the overall pattern of flows which finance training. French data admit of detailed breakdowns of funding, flows between central and local government and firms - household expenditures are recognised as problematic.

At the other end of the size range among Member States, for example Ireland, there may not be the same sheer abundance of annual data that is to be found in France. But the Irish report nevertheless lays out what is known in a way which greatly assists the reader's understanding of what it is that is on view (Figure 7.4 and Table 7.9, from Figure 1.1 and Table 1.1 in IRL, pp 3 and 6). The routes along which pass the funds used by the main agencies are laid out (Figure 7.4), and the reliability of cost data compared (Table 7.11).

Summarising the conclusions of a path-breaking investigation, the authors of the Irish report choose their words with care:

'Continuing training appears to have entailed a cost of at least £102.5 million in

1987. The cost was borne in roughly equal shares by the public and the private Anco, grant-aided new industry training and the activities of the National Rehabilitation

Regarding the training availed of by the private sector, the largest component ... seems to have been mainly self-provided (£24m), the second most important training institutions (c.£16.5m), with third place being occupied by the levy/grant Anco (£9m).

Finally, in the case of roughly estimated cost of £102.5m, we were able to attributable to direct cost elements. This subtotal of £67m consisted of approximately £37m direct costs and £30m indirect costs. dominant features of the two principal schemes for which a breakdown was not readily available, i.e. the levy/grant scheme and the continuing training of the training costs in 1987 were distributed fairly evenly between direct and indirect costs' (IRL, p 7).

and measure the overall pattern of activity are of great value as an exploratory device. The results are best regarded in the way the authors regard them, as working diagrams which will be changed. That they cannot provide a basis for cross-national comparison will be clear from a typical comment country:

institutes, budgets or ex post settlements, the gaps in the data ... the difficulty of isolating the vocational component in some instances ... often pose problems which are not easy to solve ...

ultimately paid. In publications such amounts are mixed up ... The choice of the right indicator and consistent presentation are therefore important, but not always feasible' (NL, p 46).

The flows of funds which finance training are generated, allocated and spent using a defined in terms of

(the kind of financing regime of which they are a component, and

(ii)

The role of these instruments is critical to any understanding of the flows of funds within the

turn.

Instruments and their regimes

The modes of financing training can be conceived as a spectrum between those characteristics of the market and those characteristic of the state or governmental bureaucracy. Price, for example, is the archetypal market instrument just as tax-and-subsidy is the archetypal instrument of the state. This spectrum can be subdivided into four segments, labelled the market-reliant, the market-regulating, the market-supplementing and the market-displacing. In any Member State all four modes co-exist, although the net position of a particular country may be towards the market or the state pole and that net position may shift one way or the other as a result of reforms such as the substitution of user charging for tax-and-subsidy or of dedicated for general taxation.

	Market reliant	Market regulat- ing	Market supple- menting	Regime Market displacing
Financing Modes				
Funds raised from:				
User revenues				
Tax revenues				
Funds allocated by:				
Price payers				
Grant givers				
Funds spent by:				
Providers selling training				
Providers not selling training				

A purely **market reliant** mode of financing would limit the supply of training entirely to what was paid for out of non-tax funds and to those who were both able and willing to pay. The **market-regulatory** mode differs from this in only one respect: legislative interventions provide the basis for regulating labour and training markets beyond enforcing contracts and maintaining the efficiency of the markets. The effect of this legislative and regulatory framework may be to enhance the demand for, supply and quality of training relative to the levels which would obtain without the framework.

The **market supplementing** mode adds a source of revenue not available in a market, i.e. taxation, and a mode of allocation completely different from price, i.e. the grant or subsidy financed out of tax funds. Moreover, it may also add in a fresh type of provision, where the provider receives a tax-financed grant and makes no charge for training services, i.e. zero-

priced services. In some cases parallel to priced services for other kinds of training. In the **market displacing** are substituted for funds volunteered by employers and households. They are then allocated and spent as directed by the government instead of buyers providing funds only to those sellers

Figure 7.5: Funding Flow Chart, UK

Source: UK, Chart 3.1

funds which finances training. As Figure 7.5 illustrates, the four modes and their defining instruments are all to be labour inputs (resources other than labour used in training) and wages paid both to trainers and to trainees (including earnings and employer revenue foregone). Even the United Kingdom in a from those which would obtain without intervention (market-regulating mode). Market-financing of British training is modified by supplementary financing of other stakeholders by government in training providers, and grants to employers. What Figure 7.5 does not show so clearly is that government can also operate a command economy, in which it uses funds raised through taxes

Instruments and their consequences

The principal financing instruments are either (or (iii) instruments for allocating and spending money. Legal instruments are highly visible, incorporated in statutes. For instance, they require training contracts for certain categories of

Instruments for raising money range from user charges, tax reliefs public borrowing, to the use of general or hypothecated taxes to finance public subsidies for or spending on training, and the granting of statutory powers to bodies to raise a training levy and make grants for training. Indirectly, changing the ratio of young trainee to adult pay is a

Box U). Allocative parafiscal agencies, mostly labour market institutions, such as the National Employment Office (ONEM) in

Fund in France, FAS (formerly the Industrial Training Authority) in Ireland, the Construction Industry Training Board in the United Kingdom, or the Federal Institute of Labour in Germany.

Box U:

opportunities

In the United Kingdom the Low Pay Unit (1992) reported that, from 1979 to to 33 per cent and of 18-20 year olds from 61 to 53 per cent.

Ms Marshall, Head of Education and Training at the Engineering

Employers Federation, was reported to have said 'This is an encouraging sign, which could lead to more, and better quality, training places' ... 'She said there was a widely accepted correlation between young people's pay and the training opportunities employers offered. Youth pay in Germany used to be almost half the UK rate, which was one reason for some German employers overtraining, to the benefit of the economy as a whole, she added' (Financial Times, 1992).

To understand such instruments it is necessary to identify and measure their training and financial consequences. It has always been stressed (e.g. Drake and Rasmussen, 1984, p 31) that to improve cost data without an equal effort to improve data on training outcomes (how people's competence is increased by training) is a dangerous course. If data on financial flows are improved in coverage and accuracy, as they need to be, one consequence will be an upward revaluation of the cost of training. 'Unless there is a parallel revaluation of training outcomes, and unless these outcomes are related to costs, the economic viability of much vocational training will be called into question in an erroneous but compelling fashion' (ibid. pp 31-32).

A few examples serve to show that there is often an attribution problem in identifying and measuring the financial and training consequences of a particular financing instrument. What would have happened if the instrument which is being evaluated had not been operating?

One instrument for raising funds for training is a statutory obligation laid upon employers to spend a minimum percentage of payroll on training or face financial penalties which may well produce fewer corporate benefits. Financial data on the French version of this instrument (Figure 7.6) show that the average actual contribution level grew from about 1.3 per cent in 1972 up to 2.34 per cent of the wage bill by 1986. The data might seem to show that increases in the statutory contribution rate have, as it were, pushed the actual spending rate upwards. Certainly, the reported spending rate has responded. The familiar evaluation problem faces everyone: after this, therefore because of this? However, the French report (F, pp 46-47) reveals a more complicated story when it turns to the pattern of enterprise and employee training which might be held to result from this particular mix of compulsory and voluntary training expenditures. Starting from the growth in the average contribution level, it notes that

'Although it seems to be tailing off in firms with less than 50 employees, it is continuing to grow in medium-sized and large firms. The gap is therefore growing, since the training outlay increases with the size of firm, from slightly over 1.1% for firms with 10-19 employees to close on 4% for firms with at least 2000 employees. This is true up to a threshold which seems to be around 300 employees. Expenditure on training in most firms is below or equivalent to the statutory requirement.

The contribution level also varies greatly depending the sector in which the firm operates, which to some extent overlaps the criterion of size. The outlay on training is considerable in certain sectors (levels of 3.2 to 7%). In these sectors, over 40% of employees attend a training course whose average duration is fairly long every year...

... The proportion of labourers and semi-skilled manual workers among the number

trained has dropped considerably over the last ten or so years, while numbers in skilled manual worker and employee categories have increased. This trend is in line

managers are the categories most affected by training ... SMEs place greater emphasis on training.'

A similar type of analysis on the flows of people (who receive training) is accorded as much consideration as their effect on the flows of funds. 'Gainfully employed people who pay unemployment insurance claim to assistance under the Employment Promotion Act when participating in continuing training measures' (D, p 79). This demand-side financing enables an otherwise crippled by income tax legislation in favour of the employed which 'provides for indirect co-financing of continuing training by the state. Expenditure on continuing training can be deducted

Financial contributions of firms to continuing vocational training, France, 1972-86

"professional expenses" or as "special allowances". The state thus reimburses the individual participant for his expenses up to the level of the tax rate applicable to him. This could be sums involved are again unknown' (D, p 84).

Of course, the sums involved need not be unknown. It would be possible to measure add this to the substantial supply-side financing of institutions by Federal, Land and local government. These tax subsidies produce continuing training courses at zero or sub-market all costs.

This combination of demand
The authors of the German report give much attention to the training consequences of the way in which costs are financed. Their judgements are unambiguous:

Continuing training in the Federal Republic of Germany have exacerbated the unequal distribution of training opportunities in the last few shortcomings in initial training. Most of those taking advantage of continuing training opportunities have had an above-average education and initial training and now have above-

'The continuing training arranged and financed by firms has not yet succeeded in

Most of those delegated by firms to undergo continuing training are managers (about 65% of all managers attend a course of employer-sponsored continuing training at least once a

year), commercial salary earners (40%) and technical salary earners (40%), little interest being taken in - and little money spent on - the training of workers who did not complete their initial training (2%).

Although unemployed skilled workers, at one third, and people without training, at one fifth, were relatively well represented in publicly assisted, predominantly off-the-job continuing training in 1985, they will still underrepresented when their share of the total labour force is considered.

This polarisation is further exacerbated by the highly disparate quality of the courses attended by the various groups of employees. While continuing training for managers usually takes several days, it is reduced to a few hours a year for the lower categories of employees.

While employer-sponsored continuing training is almost entirely devoted to employees, publicly assisted continuing training has increasingly become a form of training for the unemployed: while only about 6% of all people assisted under the Employment Promotion Act were unemployed before attending a course in 1973, the proportion had risen to over two thirds and, in some cities, to over four fifths in 1987.

The danger posed by this split is that the transition from long-term unemployment to employment will become increasingly difficult, even after training' (D, p 91).

After a fairly lengthy and subtle consideration of the possibilities of determining the internal and the external efficiency of continuing training measures and of cost-sharing (D, p 92-94), the German authors review the way in which some financing instruments currently obstruct the achievement of policy objectives and how these weaknesses might be overcome. The nature of this evaluation can be illustrated from the report's consideration of the device of relating rates of assistance to earned income to act as an incentive to undergo continuing training and improve the endurance of problem groups (D, pp 98-99). The report quotes the findings of research of the Federal Institute of Vocational Training:

'Particularly for those unaccustomed to learning whose income was low even before they began continuing training a maintenance allowance that is only slightly higher than unemployment benefit is a major disincentive to starting a course of continuing training or successfully completing a long course of demanding training. It seems likely that the comparatively small numbers of poorly qualified long-term unemployed people undergoing training with assistance under the Employment Promotion Act can also be attributed to these financial barriers.

The German report notes that 'rates of assistance that are related to earned income make it clear that what is achieved in training must be regarded as equivalent to what is achieved at the workplace and must be appropriately rewarded. An added factor is that people unaccustomed to training usually find continuing training more strenuous than routine work' (D, p 99).

It is in the light of the unsatisfactory distributive consequences of the existing financing measure, specifically the level of maintenance allowances, that the authors suggest two measures. The first is to raise the maintenance allowances for those undergoing continuing training under the Employment Promotion Act to a level 'significantly higher than unemployment benefit.' The second is to introduce a minimum maintenance allowance to benefit particularly

those whose income was low before they became unemployed (especially women) and who therefore would not receive appropriate assistance when attending a course of continuing

Conclusion

The institutional context within which financing instruments operate is a critical often decisively, the distribution of the total cost burden between stakeholders - and therefore influence their behaviour. Over and over again, the financing studies illustrate the fact that sectors, between economies and, especially, between enterprise-sponsored training and training in public programmes.

unit of analysis for many managers is time, not the firm's money. The business cycle is another key determinant of the pressure to train and of the rate of utilisation of training capacity. On the influencing the use of financing instruments to ration training opportunities. For individuals, the level of prior qualification may be decisive in determining both the demand for and availability of assistance and confidence become dominant factors.

There is a profound lack of comparability in the existing data on flows of funds in experiences of Member States with the operation of instruments which are generically similar.

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financing of continuing training in Member States, to whose authors an immense debt is owed.

B	Belgium
	Denmark
F	
D	Germany (West)
	Ireland
I	
NL	Netherlands
	United Kingdom