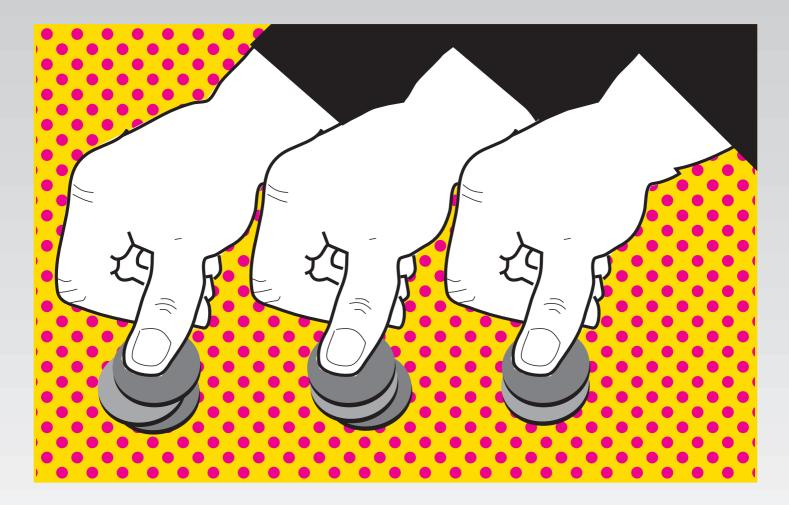


## Who pays for training? Some policy approaches to financing vocational training



**VOCATIONAL TRAINING NO. 13** 



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CEDEFOP assists the European Commission in encouraging, at Community level, the promotion and development of vocational education and training, through exchanges of information and the comparison of experience on issues of common interest to the Member States.

CEDEFOP is a link between research, policy and practice by helping policy-makers and practitioners, at all levels in the European Union, to have a clearer understanding of developments in vocational education and training and so help them draw conclusions for future action. It stimulates scientists and researchers to identify trends and future questions.

CEDEFOP's Management Board has agreed a set of medium-term priorities for the period 1997-2000. They outline three themes that provide the focus of CEDEFOP's activities:

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### Interested in writing an article ... see page 104



## The missing gene: the quality factor

The word "education" has a double meaning. It identifies a fact and the scientific discipline which studies it. The discipline (philosophical and pedagogical thought aside) dates from no more than forty years ago; the fact is as old as civilisation, but during these forty years it has experienced an extraordinary evolution throughout the world. A time during which the contradictions and the ambiguities of both the fact and its knowledge have expanded and *deepened*. This remark has only in part a negative connotation, since during this time dramatic changes have occurred in the fields of knowledge, technology, organisation, ideological values and institutional arrangements. Societies have thus become more complex and subject to further changes. Why should we therefore expect the problems of education to have remained as relatively simple as they were, and consequently easy to interpret?

The articles contained in this issue, concerning the financing of vocational education and training are no exception; their transversal reading offers a value-added beyond the merits of each specific contribution. Several papers point out – albeit with different nuances and for different purposes - that:

□ there is a substantial and increasing gap between demand and supply of labour force qualification;

□ the situation and forecasts are of increasing scarcity of resources that can be used for vocational education and training;

□ there is a widespread tendency of governments to introduce market principles in the field of vocational education and training. Many scholars appear to be sympathetic to this trend ;

□ the French model is frequently imitated, despite the fact that many drawbacks have been pointed out and that the German model is widely considered a better one;

□ everywhere smaller firms appear to be relatively unable to exploit the options for vocational education and training.

The connection established by the authors between these substantive issues and that of financing shouldn't come as a surprise. It is simply methodologically correct. On the one hand, people feel that those who benefit from vocational education and training should pay proportionately to the benefits they accrue. On the other hand, the issue of who is called to pay and how is not without consequences for the decisions affecting vocational education and training activities and their effects. While the latter proposition is meaningful, the former is highly ambiguous and questionable, since the use of the "who benefits" principle amounts to a persuasive way to ease the introduction of market principles in this domain. In other words, it is not chosen because of its ethical merits as a distribution mechanism (for example as opposed to the ability-to-pay), but simply because it is the built-in distribution mechanism of market interplay: it is the market itself, as an organisational system and an incentive device, and not the distribution mechanism associated with the market principle, that is considered desirable.

All this is quite odd, since it is well known – even in the most orthodox and promarket scientific environments – that investment in vocational education and training gives rise to pervasive externalities and is often the result of joint production; both reasons mark vocational education and training as a case of market failure, since neither the benefits nor (often) the costs are clearly identifiable and imputable, while externalities lead anyway to under-investment. The use of the "who benefits" principle as a Trojan horse is the worst possible choice: it is



naive, since it overlooks the complexity of market organisation, while failing to understand its institutional nature; it is dangerous, since it misguides collective action and institutional reforms; it even fails, to be truthfully blunt, to understand intimately the consistent implications of orthodox market theory, which, not only acknowledge market failure, but take into account cases in which redistribution, either because of extreme poverty and ignorance or because of the failure of credit systems, may induce an otherwise impossible situation or restricted development.

My impression, however, is that modern discussions on vocational education and training have little to do with the market principles embodied in orthodox economic theory; they are concerned instead, and fortunately so, with development and innovation, concepts which are alien to orthodox theory, the intimate nature of which is static. Even recent endogenousgrowth theories (which are benevolently absolved by the brilliant - if a little too ecumenical - article by Buechteman and Soloff) don't avoid this static nature, as they limit themselves to assuming that certain, actually non-investigated activities - including vocational education and training and R&D - have positive systemic effects on the aggregate output levels, despite the fact that, they are not easily measured at the individual level, and do not show any economy of scale or of scope.

The common perception of the market and of modern competition should be seriously revised. The market ideologues stress rivalry and overlook the fact that goods produced by the market are largely the result of complementarities, co-ordination and even co-operation, which take place along a chain of intermediate stages of production. The fact that modern competition is increasingly international is often overlooked. A developed country can compete in the same markets with an emerging one whose labour costs are several times lower, only in so far as it can produce goods and services that the emerging country possibly needs but cannot produce, at least for a certain time. The developed country must thus use this time span to prepare new fields of competition that will be out of the reach of emerging competitors (... at least for a certain time span, after which ....)

Not only development and innovation, but also modern competition based on innovation and continuous re-organisation of output and input composition, have to rely upon the ability to change, and change implies the creation and the diffusion of knowledge in an environment characterised by fundamental uncertainty and limited knowledge: an environment in which learning and invention take place. Optimisation is ruled out, if nothing else by the impossibility to list exhaustively the viable courses of action to achieve it . Only through the conceptual key of change can we tackle the problems posed by vocational education and training and its links with competition and growth. These, on the other hand, result from the complementary contribution of several *timely* factors, so that it is at a systemic - rather than at a sectional - level, and with a dynamic perspective, that the analysis of vocational education and training should be carried out. In other words, it is not so important to have a given setup for vocational education and training. but whether such a set-up is maintained, on average and through time, consistent with, and well adapted to other systemic features.

These reflections shed new light on the question of the gap between demand and supply of qualified labour. Employers have always complained that they couldn't find the qualified labour force they needed; since the 1960s many governments and international agencies, alarmed by the complaints of firms and caught by the shared anxiety about the pace of future technological evolution, have engaged in some effort and numerous exhortations to expand vocational education and training (remember the Mediterranean Regional Project, which opened in the 1960s the ephemeral experience of the Manpower Forecasting?). Despite their complaints, companies have always shown themselves able to adapt, through the design of organisation, production layout and new technology, and to make the best use of what they could get in terms of skills. At the same time they have shown themselves unable to express in an exact and timely fashion what they really needed, except in few obvious cases of severe constraints in the availability of well standardised, traditional, skills; and when one investigates what the firms



would like to obtain, one will find that they would like to have manpower endowed with the knowledge of the best managers, while performing shop-floor tasks at shop-floor wages.

One should thus be very careful in interpreting the asserted gap. In most industrialised countries there is clearly a sort of sequential pattern, according to which advances in knowledge at the top levels induce technological and organisational changes which call for more knowledge at the shop-floor level, while the cultural evolution at the lower levels discloses new options which are perceived and later on made operational by the top management. The ensuing process is thus always out of equilibrium, so that the perception of gaps is at the same time as easily explainable as unavoidable; and, it should be added, fundamentally desirable.

A similar sequential pattern is at work also in the society as a whole. Not only is human capital formation mainly made of externalities in the traditional sense, but it also gives rise to dynamic externalities. The individual reaching a certain level and quality of knowledge has a meaning and an impact dependent upon what happens to the knowledge of others in the same environment, on whether a given individual and others can actually use and develop their knowledge on the job; even what someone might be able to learn by themselves depends, not only on the knowledge they have accumulated in the past and on the use they may have made of it, but on the types of interaction with other people which are influenced by their environment. All this cannot be captured by mere quantitative achievements. There is a slippery qualitative (QL) factor - a true "societal" feature - which is as real as it is hard to capture, but helps in the understanding of national differences in performance that cannot be explained just in quantitative terms; among other things, such a "QL-factor" concerns the smoothness and effectiveness with which the potential (static and dynamic) complementarities between different systemic factors and agents (such as the private and the public sector, infra-structural and operational capital, human and physical capital, vocational education and training and R&D, etc.) are captured and institutionally co-ordinated, in such a way

as to allow for their exploitation and enhancement.

In such a perspective, the forecast of an environment in which there will be restrictions to the resources available for vocational education and training is hard to understand. While it is true that most of the countries concerned are affected by high and possibly growing levels of unemployment, almost none are growing on average, in terms of GNP, by less than 2% a year. The problem is not one of declining resources, but of choice concerning their allocation; alternatively one might think that there has to be some constraint; a constraint, however, which is never clearly spelled out. Is it a public budget constraint? This, in turn, would imply either that other expenditures are more important (and this would be, for better or worse, a *choice*) or, in the case where the whole of the public budget was being cut across the board, that the governments prefer to leave more purchasing power in the hands of the families and of the firms. Is this again a *choice*. or the result of an international constraint? In the latter case, what is the rationale? My feeling (my fear) is that an excess of emphasis on competition and on markets is inducing governments as well as firms to cut all expenditure having long-term returns.

A good case is provided by the survey of the British experience presented in this issue by West, Pennel and Edge. Thatcherite government has transferred many vocational education and training tasks from the national Training Agency to a number of new, local employer-led Training and Enterprise Councils (TECs). These are "private not-for-profit companies and their main function is to deliver public services". In practice the TECs appear to behave as general contractors in respect to their regional government offices, while sub-contracting the actual training operations to a variety of training providers. The evaluation studies point out - among other drawbacks - the following:

 $\Box$  since part of the payments due to the training providers are based (according to market principles) on the results reached by the trainees, the providers select only the best candidates. Those



more in need tend thus to be excluded, while no correction in terms of contractual constraints appears to have been sufficiently effective;

□ TECs are monopoly contractors. This is hardly consistent with the market principle;

□ TECs' articulation and operational strategies is are such that they are not able to fit the specific needs of the local industrial environments they serve, neither in terms of removing constraints nor for promoting proper evolution.

Has the market been poorly emulated or is the market principle unsuitable for education and training? Although such questions are actually suggested by the reform experience in England and Wales, the more extreme case of market guidelines is that of Latin America, as outlined in the article by Atchoarena, where vocational education and training tends increasingly to be considered as a plain marketable commodity to which the classical theories of exchange are fully applicable. Fortunately, upon a closer scrutiny things appear to be more mixed, and even in the more extreme "market" cases one would find a complex (though often contradictory) combination of market, public regulation and control, mixed financing arrangements. The market principle appears thus as a sort of ideological wind affecting institutions as well as scholars, a breeze, however, that might always turn into a damaging storm.

If the essential component of education (at large) is made by externalities, the individual incentive to invest in it is insufficient by definition. The same notion of an ex ante rate of return on education is dubious, since the return for a given effort in terms of delayed rewards will depend on societal patterns of behaviour. A collective response is then mandatory. The bulk of attention has until now focused mainly on the internalisation of externalities, and this has resulted in public intervention of the classical type (direct provision, public financing) and, in modern forms, of the French type (forcing firms to be concerned with vocational education and training through a zero-receipt tax). These strategies, however, miss the QL targets that have been considered earlier: co-operation and coordination for the enhancement of complementarities should become the only collective guideline in this domain.

The traditional arrangement of investing the public sector with the responsibility and the financial burden for vocational education and training tended to produce (aside from bureaucratic weights) a separation between the world of suppliers of vocational education and training and that of its users, with a generalised fall of concern and incentive (and thus of effectiveness) for all the parties involved. Even the control function was without support, since the state didn't find it convenient, until recently, to control its own behaviour.

The French strategy offers in principle a good alternative, not only from the point of view of the internalisation of externalities, but also from that of social involvement in vocational education and training: every firm is obliged to pay, but it can avoid taxes if it spends on acceptable vocational education and training activities. The state can in principle exert its governance role by selecting what is "acceptable" for tax deductions, while firms should have the convenience to be active in choosing how to spend their money, since spending cannot be avoided, and to exert control over what they get for it. Labour representatives might variously choose how to be involved: pushing, monitoring, controlling, proposing, etc. The experience, however, has shown that this was not enough to elicit (at least at the desired speed of evolution) the necessary "culture of VET", as Gasskov puts it in his article, despite the attempt of the French government to "force" firms in such a direction by raising the tax rates. The point seems that economic motivation appears to be (perhaps) a necessary, but certainly not a sufficient tool for *creating a culture*. This helps to explain the tendency of smaller firms to under-exploit the vocational education and training options available to them, but only in principle and on the basis of economic terms, with no effective cultural commitment.

The model which is closest to the co-ordination and co-operation guidelines illustrated above is the German one. The internalisation of externalities is collec-



tive, rather than public. Most German firms feel it is their obligation to train the labour force; such a goal has been internalised in their culture so well and for such a long period of time that it has become a *commitment*, and as such is so well shared among firms that they are not worried by the risk of free-riding. Such a social arrangement belongs only to Germany and to the few contiguous countries which have succeeded in absorbing this piece of German culture. This "institutional" arrangement is so well embodied in the culture of people that it produces a shared positive attitude towards the quality and the evolution of vocational education and training and its complementary activities. It is not by chance that the German model, born in Bismarkian times, is so often mentioned, but so seldom proposed for inspiring reforms.

The "QL factor", actually, is the least known gene, and the technology for its laboratory replication has not yet been found.

Sergio Bruno

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## Who pays for training? Some policy approaches to financing vocational training

## Financing vocational training: policy issues

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## Some policy approaches to financing vocational training

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### 

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Training provision in England and Wales has clearly been influenced by "market principles", but concerns have been raised as to the extent that the changes introduced have provided for a training system that is effective and equitable.

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Education, training and the economy<sup>1</sup>

## Introduction

Throughout most industrialised countries we encounter growing concerns about skills mismatches and imminent skills shortages in the labour market and the adequacy of existing education and training systems in supplying the skills needed by firms and workers to meet the competitive challenges facing highly industrialised, high wage countries in the decades ahead. These concerns at first sight seem to be at odds with the fact that during the past three decades most industrialised countries have experienced an unprecedented expansion in educational attainment among their populations which has raised formal skill levels of the workforce far above those of the early 1960s.

Concerns about the adequacy of existing education and training institutions have been raised in both Europe and the US by the pervading decline in productivity growth since the mid 1970s, the continuing loss of important markets to Asian low-wage competitors, demographic shifts in the working-age population, widening education-specific wage differentials, and persistent high unemployment particularly among low-skilled workers. Moreover, recent international comparative research has revealed significant differences in the educational attainment and workforce skills between major industrialised countries, such as the United Kingdom, the US, and France on the one hand and Japan, Germany, and Sweden on the other. Improving education programmes and promoting skills enhancement, consequently, have become top priority items in most national policy agendas.

A common assumption underlying wide parts of the current policy debate has been that human capital investment and a high level of workforce skills have a more or less direct beneficial impact on economic performance and competitiveness. This

view is by no means new and in fact was a guiding notion underlying major reforms in mass education in the late 19th and early 20<sup>th</sup> centuries. Since then cross-country differences in education and training provision have been seen as an important source accounting for national differences in economic growth and competitive performance. Thus, in Britain, the origins of relative economic decline, observed as early as the 1870s, were partly explained by shortcomings in technical education visa-vis the strong emphasis placed on vocational education and industrial training in imperial Germany. In the 1950s and 1960s the massive US expenditures on education and research and the US comprehensive secondary and post-secondary school system acted as a stimulus and model for the subsequent educational expansion in most western European countries and Japan. More recently, after Japan had become a major competitive force in the global economy, the Japanese system of highquality mass education and systematic firmbased workforce training has attracted the interest of US and European policy-makers, although in institutional terms Germany's comprehensive system of modern apprenticeship training has remained the primary focus of interest by education reformers in both Europe and the US.

Yet although a large amount of both micro-based and macro-economic research during the past decades has firmly established that education and workforce skills have a positive effect on individual welfare and overall economic growth, our knowledge about the actual links and intermediary variables between human capital investment on the one hand and economic outcomes on the other is still largely anecdotal and hardly refined enough to yield solid policy recommendations.

The aims of this article are:

□ to provide a systematic overview of both the expected *overall trends* in

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1) This article is based on a "Human Capital Investment and Economic Performance", conference held in Santa Barbara, California, November 1993

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workforce skills and skill requirements in different countries, and of the theoretical models explaining the *links* and *interrelationships* between human capital investment and economic performance;

□ to discuss the *methodological implications* as well as measurement problems involved in analysing both human capital investment and their economic outcomes from different disciplinary angles and with particular emphasis on international comparisons;

□ to show the range of *different institutional approaches* taken towards generating and allocating workforce skills in five different national settings, namely France, Germany, Japan, the United Kingdom and the United States, and to provide for each country a review of the empirical evidence about investment in education and training and their economic outcomes at the level of individuals, organisations (firms), and the nation as a whole; and finally

□ to discuss alternative public policy options for supporting individuals, firms and public agencies in making the human capital investment required to meet the competitive challenges facing highly industrialised countries in the 1990s and beyond.

## Common trends and challenges in industrialised countries

One of the striking issues is that despite the diversity of national trajectories and institutional set-ups, most highly industrialised economies are currently facing very similar challenges. Generally, education systems have to serve a diverse "clientele". The economy, for which it has to supply the right amount and mix of skills to sustain future competitiveness, is only one "customer", in addition their are students and their parents, who expect access to high quality education and work preparation as a basis of future earnings and employment security, the political system, which has to rely on the socialisation and internalisation of democratic values and behaviours, and for society at large, for which education fulfils the important functions of shaping individual ability profiles, assigning social status and identity, and creating social cohesion.

From the input-side, education and training systems are facing challenges from demographic shifts in the size and composition of succeeding student cohorts, as well as from changing social values and educational preferences towards higher educational attainments and more "customised" diversity in the provision of education tailored to the needs of different population groups. In most countries, the unparalleled educational expansion of the past three decades has focused largely on quantity and mass education and thereby neglected structural adjustments in education institutions that are needed to accommodate a growing diversity of student talents, interests, and social aspirations without an erosion of the quality of education.

Throughout the industrialised world, governments during the past three decades have significantly increased the amount of public spending on education and contributed to a remarkable increase in formal educational attainments of the population; however, rising expenditure on education and rising formal education levels frequently were not matched by a corresponding improvement in student abilities and performance. Thus, although the United States has one of the largest shares of education expenditure in GDP (see table 1) and one of the highest enrolment rates in secondary and post-secondary education, US students' academic performance in core subjects such as science and mathematics has been ranking at the very bottom of the scale of industrialised countries; likewise, literacy levels in the US have sunk far below those of competitor countries. Given the continuing trend towards increasing demand for education on the one hand and growing fiscal constraints on governments on the other, the issue of the internal efficiency of education systems, including the strengthening of quasi-market elements in education and training provision, will demand more attention by policy-makers in the future.

On the *output side* education and training systems, the prominent features of which - with few exceptions - still resem-



ble the patterns of standardised mass production of the 1950s and 1960s, face the challenge of the world-wide decline of Fordist production principles and the trend towards a new post-Fordist regime involving the gradual elimination of typical mass production jobs and an increase in job complexity and skill requirements at all corporate levels and in particular among front-line workers; a growing number of the latter find themselves in services (rather than mere operative) functions requiring a broad basis of general and social skills combined with high-level technical competence and a high degree of functional flexibility to cope with varying situations and customer demands. Especially the social and cognitive skills required by new forms of production organisation and cutting-edge work practices appear to be increasingly at odds with the learning modes, kind of abilities, and behavioural orientations taught in conventional school settings.

The rapidly rising demand for higher-level skills is manifested in continuing high or even increasing skill-specific wage differentials, despite the strong growth in the supply of highly educated workers with post-secondary education credentials and university degrees. Moreover, the gradual shift of standardised mass production to lower-wage countries within an increasingly global market environment has already come to be felt in highly industrialised countries in the form of rising unemployment rates of unskilled workers. This is particularly true for unskilled youngsters who - without special integration measures - face permanent exclusion from the labour market. Last, but not least, the rapid pace of technological change, structural shifts from immediate production to tertiary functions, shorter product cycles, and an increasingly volatile, global economic environment have resulted in accelerated skills obsolescence and enhanced requirements for workers to be mobile, and have the ability to acquire new and update regularly their skills in the course of their working lives.

All these developments seem to require a new institutional "rapport" between the production of individual skills and competences on the one hand and the production of goods and services in the economy on the other. In particular, the

## Table 1: Educational expenditure from public and private sources on educational institutions as a proportion of GDP by level of education (1994). Selected OECD countries

total percent of GDP

primary and secondary private tertiary

France	6.2%	4.3%	1.1%
Germany	5.8%	3.8%	1.1%
Japan	4.9%	3.1%	1.1%
UŔ	4.7%	3.4%	0.8%
<b>United States</b>	6.6%	3.9%	2.4%
Source : OECD			

growing importance of post-secondary schooling and higher education in supplying the skills necessary, not only for traditional professionals, higher-level managerial staff and government officials. but increasingly for mid-level production and service functions implies that new institutional links and co-ordination mechanisms between schools and business have to be developed in order to avoid skills mismatches and the devaluation of public education investment. Given the fact that most workers who received their education 30 years ago will spend another 10 to 15 years in the labour force, and that the annual replacement rate of retiring workers by newly educated labour market entrants is below 2% in the United States and even lower in Japan and most European countries, particular challenges to public policy will lie in the area of providing institutional support structures for life-long learning and to organisations and firms in the creation of learning-intensive work environments.

How successful different nations will be in coping with these common challenges and in adjusting to the new competitive environment strongly depends on, among other factors, their existing stock of human capital and their institutional requisites for providing and adequately employing the skills and competences needed to make the transition from traditional Fordist production patterns towards a new post-Fordist growth regime. This involves not a merely quantitative increase "(...) the growing importance of post-secondary schooling and higher education in supplying the skills necessary, (...) implies that new institutional links and co-ordination mechanisms between schools and business have to be developed in order to avoid skills mismatches and the devaluation of public education investment." VOCATIONAL TRAINING NR. 13

"Human capital theory is still the most influential strand of theory linking education and training of individuals and firms to economic performance and outcomes."

"Human capital theory also provides the hitherto most convincing rationale for public intervention in the process of human capital generation (...)" EUROPEAN JOURNAL

in education and training investment but, first of all, the development of appropriate co-ordination mechanisms between education systems on the one hand and work settings on the other. The latter would also seem to require a shift from prevailing internal labour market structures with their inherent limitations in an era of increasing economic volatility towards a model of "professional" labour markets involving a stronger emphasis on general, transferable skills and thereby allowing a higher degree of functional flexibility and worker mobility. The alternative to making the transition consists in a low-wage strategy based on increasing price-competition with industrialising countries and the relinquishing of high living standards, an option which has its obvious limits and would only postpone, but certainly not eliminate the need for institutional and economic modernisation.

## **Theoretical underpinnings**

Human capital theory is still the most influential strand of theory linking education and training of individuals and firms to economic performance and outcomes. According to the basic model, acquired skills and competences (the "human capital stock" of a society) are seen as the result of rational investment decisions by individuals and firms with the objective of maximising the returns to such investment. Human capital theory also provides the hitherto most convincing rationale for public intervention in the process of human capital generation: individuals, particularly at the beginning of their working lives, when their expected future earnings are still highest, usually lack the resources to pay for their own education and skills so that the state has to finance the investment; moreover, skills and knowledge acquired through education produce positive external effects or social returns (i.e., benefits accruing to society at large) which cannot be captured by the individual investor and, therefore, in the absence of public intervention, would result in an under investment in education and workforce skills.

The risk of under investment in human capital is particularly acute in the case of *workforce training* : unlike transactions in spot markets, modern employment rela-

tionships involve mutual sunk investment by both workers (who acquire firm-specific knowledge and skills) and firms (who invest in the training of their workers), thereby creating a dual monopoly between the parties regarding the returns to this investment, which would be lost if the relationship was terminated by either side ("asset specificity"). Given incomplete information, the willingness of both parties to engage in human capital investment in the first place thus depends on the existence of a governance structure between them that protects each party's investment from opportunistic behaviour by the other side. Employment security regulations, legal training standards, and/or public skills certification may provide such a governance structure at a lower cost than mere contractual arrangements between the labour market parties themselves and therefore prevent under investment in human skills. Modern labour market analysis thus gives valuable insights into the economic rationale and incentive patterns underlying human capital investment and the delicate equilibrium of interests needed to create and sustain functioning training markets. Britain has been frequently cited as a typical case in which institutional factors have reinforced instead of compensated for market failures in providing a sufficient amount of workforce training ("low-skill equilibrium"); Germany's "dual system" of apprenticeship training, by contrast, is widely regarded as an example of an institutional arrangement that encourages massive investment in human capital by successfully correcting the market's inherent tendency to lead to under investment in workforce skills.

Whereas a large amount of theoretical research has been devoted to exploring the micro-motives and conditions influencing human capital investment decisions, a less developed area of research relates to the nexus between individual skills, organisational capabilities, and economic performance. Here "evolutionary" theories of economic change and organisational (or enterprise) learning provide some highly interesting theoretical guidelines.

These theories rest on the assumptions that :

 $\hfill\square$  innovation is central to competitiveness;



□ innovation rests on dynamic capabilities residing in organisations;

□ individual skills embodied in workers may be a necessary prerequisite, but are not a sufficient condition for the development of organisational capabilities; and

□ that the latter rather depends on, and essentially *consist in*, the particular modes in which individual skills are employed and combined in an organisation. In other words, education and training reforms alone are unlikely to be effective unless organisational structures are redesigned in a way so as to allow for an innovative combination of skills and capabilities, and for their integration into the routines that define the strategic repertoire of the organisations of firms.

At the macro-level human capital considerations were for a long time neglected and only indirectly taken into account by theoretical growth models in the form of exogenous technological change. This marks a strong contrast to empirical growth accounting exercises which have explicitly incorporated labour quality (commonly defined as years of formal schooling) into their models and found that increases in human inputs have a sizeable impact on overall economic growth which in fact exceeds the growth returns from tangible capital investment. Only recently, human capital has received more attention in the context of the "new growth theory" (Romer and Lucas).

According to the basic underlying model, productivity increases and innovation are the outcomes of the division of labour which allows a permanent upgrading of the skills, competences, and dexterity of workers and firms in producing goods and services and thereby acts as the principal source of cumulative economic growth. Unlike older models, new growth theory assumes that new knowledge and skills are created endogenously, for example, in the form of private R&D investment or mere "learning by doing", and that the marginal product of human capital grows in proportion to the existing knowledge.

However, since the production of knowledge always produces positive externalities (i.e. knowledge can be used by everyone) and only part of the returns to in-

vestment in new knowledge can be appropriated by the investor (e.g., in the form of patents), the amount of private investment in knowledge and skills is generally inferior to the amount that would be optimal for the economy as a whole. Hence public policy, by subsidising private R&D activities or providing scientific and engineering skills that in turn trigger internal innovation, may be vital in supporting cumulative economic growth. New growth theory thus joins human capital theory in providing a powerful rationale for the growth generating potential of public investment in human capital.

## Methodological and measurement issues

Whereas theory provides nice propositions, measurement and empirical operationalisation of the relationships between human capital investment and their economic outcomes still provide serious methodological problems.

On the input side, the most commonly used indicators of human capital investment are years of schooling, school enrolment rates, formal secondary and postsecondary education and training credentials or degrees earned, incidence and hours of formal or informal training onor off-the-job, and finally public and private expenditures for education and training. While most of these indicators may be adequate for measuring changes in human capital stocks and investment over time within a given national context, their limitations become immediately apparent when it comes to cross-country comparisons. Generally, such indicators fail to provide information about the actual amount and economic relevance of the skills and competences acquired and embodied in individuals. For instance, the same amount in years of schooling or the same formal education credential in successive cohorts can denote a quite different quality of human capital investment when access rules, curricula and passing standards have changed. Similarly, the actual skills acquired during a given number of years of formal schooling may differ substantially across countries with different education and training systems.

"However, since the production of knowledge always produces positive externalities (...) and only part of the returns to investment in new knowledge can be appropriated by the investor (...), the amount of private investment in knowledge and skills is generally inferior to the amount that would be optimal for the economy (...). New growth theory thus joins human capital theory in providing a powerful rationale for the growth generating potential of public investment in human capital."



"Measurement problems (...) may in fact explain why macro-economic crosscountry comparisons of the relevance of human capital investment (as measured by years of schooling, schoolenrolment, and educational attainment) in relation to differences in economic growth arrive at ambiguous results that are at odds with the results of growthaccounting models for individual countries." This is illustrated by the fact that French eighth graders tend to significantly outperform US eighth graders in mathematics and science. Moreover, comparisons based on years of schooling and school enrolment rates which, by their very nature, do not capture firm-based training activities, tend to produce "favourable" results for those countries where skills are primarily acquired through formal schooling. In the extreme case, years of schooling and formal skill credentials in one country may function as mere entry tickets (or screening devices) irrespective of the substantive content and quality of the skills acquired (particularly where internal labour market structures tend to dominate), whereas in other countries acquired skills may closely correspond to the actual job tasks for which workers are hired (as, for example, in occupational labour market settings). Likewise, countries where workforce training is more formalised (as, for instance, in the case of Germany's apprenticeship system) tend to fare more positively in comparisons of the incidence of workforce training than countries where training primarily takes place informally on the job (as, for example, in the United States).

Similar problems and incompatibilities have to be taken into account when using expenditure data as "input proxies". Whereas statistical data on public education expenditures are available for most countries, information on private (i.e., households' or firms') expenditures, the proportion of which in total education outlays varies considerably across countries, tends to be more scarce, selective (i.e., not accounting for important cost components), and unreliable (e.g., based on estimates rather than evidence). The latter is especially true with regard to workforce training, reflecting the fact that much training occurs informally on-thejob involving various actors (trainers, peers, and supervisors), and that, consequently, most firms do not have (and frequently do not consider it worthwhile having) an exact cost-accounting of their training activities. But even in the case of public expenditure data, cross-country comparisons are rendered problematic by the fact that public expenditure data contain heterogeneous components depending on how school costs are budgeted and on the various functions that education systems perform in different national settings. US schools, for example, often perform functions such as after-school sports, medical check-ups, psychological counselling, after school day-care, hot meals, driver education, and transportation to and from school, and the share of nonteaching staff in total school staff in the US (51 %), consequently, by far exceeds the corresponding shares in most European countries (France: 26 %; the Netherlands: 16 %).

Measurement problems of the kind described above may in fact explain why macro-economic cross-country comparisons of the relevance of human capital investment (as measured by years of schooling, school-enrolment, and educational attainment) in relation to differences in economic growth arrive at ambiguous results that are at odds with the results of growth-accounting models for individual countries. Some of these measurement problems are avoided by in-depth company case studies that permit the collection of detailed information about the skills actually used in the production process. Such studies have found that firms in different countries tend to differ in the particular mix of skills that they employ for producing the same product. The coordination between different worker competences within the organisation rather than the mere amount of skills (in terms of average years of schooling embodied in the workforce) which has a strong impact on worker productivity and organisational efficiency is also one of the lessons taught by the Japanese model.

Things get even more difficult when it comes to relating education and training to economic outcomes or performance. Problems are least at the level of individuals where returns to training can be measured in terms of employment and career opportunities, earnings and wage growth, and the matching between skills acquired and the skills needed (and rewarded) on the job. That higher investment in education result in higher earnings has been proven to be true for most industrialised countries on the basis of Mincer's earnings equation, though with different intensities and involving different skill-specific wage differentials, which overall tend to be less pronounced in countries with more centralised wage setting systems. At



the same time, wage premia paid on prior skills investment also play an important role in setting incentives for individuals to invest in education and skills acquisition in the first place. Thus US high school students' deteriorating academic performance has been explained by the fact that, due to the absence of national examination and certification standards (as they play a prominent role in most European countries), school performance in terms of grades achieved in core subjects is not adequately rewarded by US employers in the form of higher entry wages for better performing students.

Greater difficulties arise in the assessment of the outcomes and economic effects of human capital investment and workforce skills at the level of organisations or firms. The mere fact that firms pay higher wages to skilled than to unskilled workers does not necessarily imply that skilled workers are more productive and that increasing the skill level of the workforce automatically has a favourable impact on the firms' economic performance. Indeed, most firms themselves do not directly measure the productivity impact of workforce skills, nor do they have a clear idea about how to quantify the returns to investment in human capital, which has led commentators to conclude that workforce training by firms in many cases is an "act of faith". This may in part be accounted for by the fact that the benefits from workforce skills diffuse widely and accrue cumulatively over long time periods and in many different places within an organisation. Moreover the measurement of firm performance itself poses serious difficulties, and commonly used indicators (such as profitability, growth of sales or turnover, physical productivity, value-added, market share) can be misleading for several reasons (for instance, larger investment in training may actually lower current profits, but have beneficial impacts on innovation, product quality, and firm competitiveness in the longer-term).

It is revealing of the difficulties involved in operationalising the core variables at hand that so far the empirical evidence of the impact of human capital investment (in the form of skills hired from outside or generated in-house) on corporate performance has been very scarce and limited to anecdotal evidence from company case-studies involving matched comparisons of firms across a range of different countries and industries. Although this approach permits the collection of immediate information on production organisation, division of labour within the firm, production efficiency, and product quality, none of these studies, aside from problems of sample selection and generalisation, have so far come up with a convincing model explaining firm performance and linking the latter to the skills embodied in the workforce.

Macro-economic studies, in turn, have traditionally focused on economic growth, per capita output, labour productivity (output or value-added per worker hour), and export performance across different industries as dependent variables. Each of these indicators have their own shortcomings : for example, the pervasive and lasting slowdown of productivity growth among OECD countries since the early 1970s can hardly be explained in terms of changes in the educational endowments of the labour force; neither are changes in education and training, which affect the composition of the workforce only very gradually, safe candidates for explaining recent short-term increases in US and British manufacturing productivity relative to (West) Germany; nor can human capital variables account for the fact that the United States, despite a significant catching-up by other countries, continues to be the world leader in absolute manufacturing productivity. This has led analysts to conclude that it is organisational capabilities rather than workforce skills per se that account for cross-country differences in economic performance. Other studies have emphasised the complementarity of human capital and other assets (fixed-capital investment; R&D activities; market size; public infrastructure; etc.) that is vital for generating productivity increases and economic growth. Likewise, the export performance of a country and its industries, frequently taken to indicate "national competitiveness" primarily reflects exchange rates (that are the outcome of fiscal policies) and unit labour costs (that in turn are the result of national income policies), and only in second place differences in labour productivity that can be influenced by education and training policies.

"(...) most firms (...) do not directly measure the productivity impact of workforce skills, nor do they have a clear idea about how to quantify the returns to investment in human capital (...)"

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"Without clear notions of where modern highly industrialised societies should be heading, it is difficult to decide the kind and amount of human capital investment that would be optimal and how we should assess whether current practices represent an over- or under investment in human capital." EUROPEAN JOURNAL

Even if some of the above measurement and methodological difficulties could be overcome, one would still be left with the benchmarking problem: that is the formation of concrete ideas about which economic activities, organisational patterns, and human resource practices promise the largest returns to society in the future, which labour market structures should prevail, what levels of unemployment are socially acceptable, etc. Without clear notions of where modern highly industrialised societies should be heading, it is difficult to decide the kind and amount of human capital investment that would be optimal and how we should assess whether current practices represent an over- or under investment in human capital.

## National case studies

National case studies of France, Germany, Japan, the United Kingdom, and the United States looking at the institutional structure and recent policy reforms, and present empirical evidence about the scope, distribution, and economic outcomes of education and training investment, provide some interesting insights.

Both the United States and France, as two countries where Fordist production patterns involving internal career labour markets have prevailed, have seen recent policy moves towards a vocationalisation of upper-secondary and post-secondary education in response to perceived shortages in intermediate workforce skills. In France, policy reforms to that end were implemented during the 1980s through the creation of technical "baccalaureates" and new vocational routes within higher education. Although many youngsters have meanwhile entered these new routes, which, in fact account for a significant part of the overall increase in school enrolment in France, the persistence of internal labour market structures has led employers to continue to give preference to traditional academic school degrees over vocational credentials in their hiring and promotion policies, thus resulting in a devaluation of the vocational skills and qualifications acquired in these new programmes. The latter is reinforced by the fact that many graduates from the new vocational programmes, in view of their inferior labour market and career opportunities, prefer to continue on in education towards a general higher education degree. These response patterns on the part of employers and students are in line with the high social esteem traditionally attached to academic knowledge as opposed to applied skills that has characterised French society for centuries. At the same time they illustrate the limits of educational reforms in transforming existing labour market structures and social value systems.

In the US, although the Clinton administration has announced programmes to strengthen vocational education in high schools and community colleges and to this end has embarked upon developing a system of nationwide vocational education and training standards, no systematic reforms - with the exception of local experiments - towards a vocationalisation of secondary and higher education have occurred so far. Consequently a large majority of those who do not go on to a four-year college or university still enter work-life without any formal vocational preparation. Here the absence of vocational education routes reflects not only the prevalence of internal labour market structures, but also the traditional American adversity to any form of "tracking" or "routing" in the education system. Unlike in France, where the old elitist preference for academic merits has been working against vocationalism, the American opposition to routing reflects the strong egalitarian tradition in the United States that has maintained that a four year-college education is always the superior alternative.

Whereas the educational reforms and the continuing trend towards higher education in France have caused a shift in the definition and acquisition of skills from the corporate sector towards the state, with all attendant co-ordination problems, in the United Kingdom, the Conservative deregulation policies of the 1980s have tended to transfer responsibility for vocational skills creation and assessment towards employers, weakening and partially abolishing the traditional co-operative arrangements between unions and employers' associations governing workforce training until 1979. These poli-



"(...) Japan and Germany are also known for their high level of general academic skills provided by the general education system which in turn provide the basis for intensive post-secondary training offering a wide variety of options for all ability profiles."

cies, which were aimed at introducing more market elements into training provision, have actually contributed to the erosion of occupational labour market structures in favour of firm-specific skills provision through internal labour markets, while funding of workforce training has shifted more and more to the central government in the form of public training subsidies for firms hiring shoolleavers. The shift towards internal labour market structures has had the consequence that firms increasingly use general education credentials as screening devices when hiring youth into publicly subsidised training, which is often of poor quality and highly job specific. The latter may be one factor explaining why, just like in other countries, more and more British youngsters are enrolling in higher education instead of seeking vocational training.

Japan and Germany, each in their own right are considered as models, not only for their successful economic performance in past decades, but also for the high level of their labour force. Both Japan and Germany are also known for their high level of general academic skills provided by the general education system which in turn provide the basis for intensive post-secondary training offering a wide variety of options for all ability profiles. In the case of Japan this occurs through lifelong learning and systematic job rotation in the context of lifelong employment careers within a specific company. In Germany, by contrast, this occurs through broad and systematic initial vocational training in the context of its co-operatively managed apprenticeship system. Japan and Germany represent respectively, so to speak, the successful variants of internal and occupational labour markets.

Both models, however, are endangered. As in the other countries, both countries see increasing trends toward higher education among recent cohorts of school leavers. In Japan, the past successes of large corporations were partly due to the fact that they were able to hire the best from secondary school leaver cohorts and train them in the internal labour market. Once in the internal labour market, promotions tend to occur in a more or less autocratic fashion. Workers are allocated to jobs less according to their individual preferences, than to the needs of the cor-

poration. The increasing quest for higher education among Japanese youth may indicate a secular change in their career and social aspirations and calls into question the future viability of the Japanese model. Access to university is restricted through entrance examinations; roughly 50% of a school leaver cohort now applies for higher education and 31% are actually admitted (as compared to 15% in the 1960s), decreasing the pool of talent available for production work in large corporations. Even more serious pressures on the Japanese model may result from recent changes in overall economic conditions. The viability of the model of internal career training clearly rested upon the condition of sustained economic growth and a high degree of employment stability, as it has been institutionalised in the system of lifelong employment. With the advent of the current severe recession of Japan's economy, the decline in economic growth rates, and the increasing incidence of major layoffs and corporate downsizing, Japanese corporations can no longer promise lifelong employment and, therefore, cannot continue to expect the most able among school leavers to entrust their future into the hands of one firm. With this, one the cornerstones of the Japanese training and production system may indeed be seriously threatened.

Similar challenges are confronting Germany's "dual-system" of apprenticeship training, which in the past has provided more than 70% of its employed workforce with broad, certificated, vocational skills. Although university enrolment rates in Germany have been much lower than in the United States and Japan, more and more youngsters and their parents are opting for upper-secondary education and subsequent higher education instead of vocational training. Those youngsters who do not attain the school credentials required for university enrolment increasingly flock to white collar apprenticeships that offer higher pay and better advancement prospects. These trends reflect an increasing reluctance among German youth to put up with the limited career opportunities and earnings potential associated with traditional post-apprenticeship employment paths in production-related occupations. The lack of career opportunities for apprenticeship graduates

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have been exacerbated by the growing number of higher education graduates crowding into mid-level management positions which used to offer upward mobility options for the more able and ambitious among former apprentices. By engaging in adult technical education following their apprenticeship, these more able and ambitious apprentices have always been German industry's primary source of broad technicians' skills.

The continuing trend towards higher education among successive cohorts of school leavers at the same time forces German firms in the industrial sector, who traditionally have invested large amounts in apprenticeship training, to hire new apprentices for production occupations from the lower 50 percent of the ability spectrum, thereby raising training costs, reducing the expected returns to human capital investment, jeopardising the future supply of technicians for mid-level management positions, and inducing firms to search for less costly forms of workforce training. As in Japan, the latter is reinforced by growing difficulties of German firms to provide long-term employment security in the face of enhanced economic uncertainties and thereby reap the harvest from their own training investment. Recent reform efforts in Germany, therefore, have been directed towards a stronger vocationalisation of higher education and a strengthening of the links between employers and higher education institutions through the creation and expansion of more industry-oriented, applied higher education routes.

## **Public policy challenges**

In the face of growing competitive pressures from developing and newly industrialised countries, a defensive low-wage strategy is not a viable option for highly industrialised, high-wage countries. Rather, the extent to which highly industrialised countries will succeed in producing the wealth required to sustain high living standards and distributional equity goals will depend on whether they manage to create and enter into a new cycle of cumulative economic growth based on intensive innovation, the rapid implementation of cutting-edge technologies, and steady productivity gains. Major investment in human capital, both in the form of education and workforce training and in the form of research and development activities, appear to be an increasingly indispensable condition for enabling firms to move towards new markets and upmarket segments that yield higher economic returns than standardised masscommodity markets, the expansion of which was the driving force behind the Fordist era of unprecedented mass prosperity. However, as the newly industrialising nations, particularly in the Pacific region, rapidly catch up in terms of the educational levels and skill endowments of their working populations, human capital investment alone will be less and less of a *sufficient* condition for maintaining competitiveness in the future. Education and training policies, therefore, are but one necessary component within an overarching policy framework designed to assist individuals, firms, and public policy agencies in managing the transition towards an emerging post-Fordist economic growth regime.

Within this overall setting the following challenges and priorities for national education and training policies in the years ahead should be emphasised.

First of all, the experiences with ongoing reform efforts make it clear that education reforms are likely to fail if they are not synchronised with the prevailing cultural, institutional, and labour market structures in which they are intended to operate. This has been particularly evident in the case of France, where major reform efforts in the area of secondary and post-secondary education have not achieved their intended results. It also casts doubt on the transferability of national "models" of education and workforce training or of their components to other national settings. Such doubts seem to be warranted as to whether the creation of a national vocational training system incorporating basic elements of the German "dual-system" of apprenticeship in the United States, as it has been suggested by many commentators, presents a viable policy option for solving current US deficits in front-line workers' skills. If it is the case that many US employers underinvest in workforce skills and have preferred to adhere to outmoded Taylorist



work patterns, then this is not only due to the absence of an institutional framework supporting firm-based human capital investment, but also to the frequently poor quality of US secondary education, which forces American firms to invest substantial amounts in remedial education and, therefore, to incur significantly higher training costs than their competitors in countries with a better functioning general education system. In this situation, not investing in workforce skills and continuing a de-skilling strategy based on narrowly defined job tasks may be the more efficient strategy, from the microeconomic perspective of firms at least, though not necessarily from the perspective of society at large. Improving the quality of general education and the internal efficiency of schools, therefore, seems to be a first and essential step towards increasing the scope of firm-based workforce training and thereby enabling firms to move towards new post-Fordist production techniques.

Particularly with the pervasive trend towards growing school and especially higher education enrolment rates among recent cohorts of labour market entrants and a concomitant shift in *initial* skills provision from employers towards school settings, the redesign of the links between education and employment and between schools and business has become a paramount issue in policy debates. This includes the issues of aligning school curricula and higher education programmes with employers' expected medium-term skill demands, of improving the "communication" between education systems and labour markets through skills testing and certification, of facilitating the school-towork transition of youth through direct co-operation between schools and local employers, and more generally of the creation, or extension, of "dual-systems" involving alternating school-based learning and learning on the job. Improving the links between education and employment appears to be all the more important since the enhanced volatility in the economic environment of highly industrialised countries increasingly calls into question the future viability of internal career labour markets and, instead, tends to favour vocational, or rather professional labour market structures, which allow a greater degree of technical specialisation

and worker mobility and are known to provide workers with a stronger sense of self-identification with and commitment to their work. The latter seems to be one of the lessons emanating from the "German model", which has been successful in supplying the economy with a broadly skilled and highly motivated workforce and - unlike the British model - has permitted German firms to move up-market and become the world's largest exporter of high-quality products. The German example, at the same time, makes clear that functioning professional labour markets rest on a careful balancing of decentralised market co-ordination with more centralised public policy co-ordination, especially in the form of education and training standards, curricula design, as well as skills assessment and certifications.

But the continuing trend towards higher education poses serious challenges for higher education systems themselves. They have to maintain quality standards for their programmes whilst not only accommodating growing student numbers. but also suffering from public budget cuts. The latter has already led to a serious deterioration of teacher/student ratios and per-student expenditures in many countries. In the face of these constraints, recent higher education reforms in several European countries have aimed at strengthening the autonomy of higher education institutions in internal budget allocation and student selection and at replacing bureaucratic control by the creation of quasi-markets for education. Rising student drop-out rates, however, seem to indicate that, in order to accommodate a growing and, in terms of abilities, profiles and aspirations, increasingly heterogeneous student population, further structural adjustments of higher education institutions will be required if both access to and quality of higher education are to be sustained in the future.

Finally, the pervasive trend towards school-based *initial* skills acquisition is balanced by the demographically and technologically induced rise in the importance of lifelong learning and skills adaptation which hitherto have largely resided in the hands and at the discretion of employers and, consequently, been guided primarily by micro-economic considerations rather than social equity cri"Improving the quality of general education and the internal efficiency of schools, therefore, seems to be a first and essential step towards increasing the scope of firm-based workforce training and thereby enabling firms to move towards new post-Fordist production techniques."

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teria. This has resulted in an unequal distribution of further training opportunities which tends to deepen existing segmentation lines between highly educated and less-skilled workers, who frequently do not profit from further training and, as a consequence, have been suffering enhanced unemployment risks in most highly industrialised countries. The latter is true even in the US, where wages are considerably more flexible than in Europe or Japan and where wage levels for unskilled labour frequently have slipped below the poverty line. With the continuing trend towards higher skill requirements, even for operative tasks, the trend towards an increasing exclusion of unskilled workers from employment opportunities and the participation in overall welfare increases is likely to continue and thus seems to create serious challenges for active labour market policies.

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Gregory Wurzburg

Economic Co-Operation and

The increasing demand for

VET raises questions as to

how it can be made afford-

able. The answer depends

on meeting two general

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## Issues in financing vocational education and training in the EU<sup>1</sup>

### Introduction

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The importance of vocational education and training is well established. They play a central role in the development of skills, competences, know-how, and knowledge that individuals bring to the workplace. Because of the impact these have, in turn, on the employability and productivity of individuals, and the competitiveness of enterprises and national economies, vocational education and training exert a powerful influence on the social and wellbeing of societies. Moreover, this importance appears to be increasing as the pace of technological change and increasing demand for flexibility in the workplace contribute to faster obsolescence of jobspecific skills, competences, know-how and knowledge. In short, the knowledge economy places the emphasis on continuous learning, and vocational education and training are vital learning resources.

The increasing demand for vocational education and training has been accompanied by some increases in supply. The marked rises in participation in formal education and training attest to this. Although time series data for continuing vocational training is available for few countries, they and more anecdotal evidence would suggest that the volume of continuing vocational training is growing. But, judging by patterns of participation, the growth in supply appears to fall far short of the volume needed to make vocational education and training widely accessible in sufficient quantity both to compensate for the poor levels of literacy and qualifications among some adults, and to ensure adequate opportunity for the updating and upgrading of experienced workers. Thus, the rising demand for all forms of learning, including that which occurs through vocational education and training, seems likely to outpace the increase in supply. This mismatch seems particularly acute for very poorly-qualified adults, who employers are less willing to train, or who otherwise lack access to vocational education and training because of unemployment, a lack of financial means, or both. This poses a challenge to ensure that vocational education and training is accessible and affordable. Meeting this challenge requires that a number of diverse problems be addressed, ranging from the pedagogical, to motivational, to institutional, to financial. It is the last that this article intends to discuss.

# Affordability and the finance of vocational education and training

The rising demand for vocational education and training risks exceeding the capacity of the usual approaches to its financing that are found many EU Member States. Constraints on public spending make it difficult for governments to finance indefinitely the additional training that is being sought. The fact that much of vocational education and training leads to private returns in the form of higher productivity and profitability, for enterprises, and higher wages and employability for individuals, raises questions about the appropriateness of direct public finance. The pressures on enterprises to reduce costs makes it difficult for them to shoulder a larger share of costs (and in some cases, to sustain their present share).

Thus, the increasing demand for VET seems likely to outpace the capacity of present financing arrangements to pay for it. Resolving the financing dilemma depends on "enhancing the affordability" of

### conditions: raising the rate of return to VET, in order to strengthen the economic incentives to invest in it; making it easier to finance current VET out of its future benefits, in order to ensure adequate financial resources to pay for VET.

1) The views expressed are those of the author and do not commit either the OECD or its Member Countries.



VET from society's point of view. But what does this mean? At a minimum, it requires addressing two broad questions. The first is "Who should pay?" The short answer is that employers and individuals should pay at least some of the extra costs incurred in making VET more universally available throughout the working lives of individuals. In fact, deciding who will pay is a fundamentally political decision, insofar as its answer depends on how society views the responsibilities of the respective relevant actors - government, firms, and individuals, and the relative importance given to different government roles. Judging by the commitment that Member States have made to constraining public spending, governments will not assume large new financing burdens (to make VET more broadly accessible, for example), unless they discharge others. Thus, at best, public authorities and social partners face a daunting task of resolving competing demands for scarce (and possibly shrinking) public resources.

In any case, the answer to the question of "Who should pay?" is not deterministic. It obviously should be guided by who benefits, in order to be credible and effective. If, for example, it is decided that individuals should pay more for VET, but the fruits of VET are not recognised in wage setting practices, the decision is not likely to have an enduring impact on financing arrangements. But the issue of who benefits depends entirely on institutional arrangements - ranging from collective bargaining practices, to tax policy, to practices for assessing and recognising skills and competences acquired in VET - that are malleable through public policy.

This brings us to the second question, "How to ensure that employers and individuals pay for VET"? In contrast to the first question, this second question is more technical in nature. It depends on two general conditions being met.

□ first, individuals and enterprises need to be reasonably sure of reaping returns to VET that are sufficient to offset the costs; they also need to be able to overcome the "liquidity constraints" inherent in any investment that requires an up-front payment, in order to produce future benefits; □ second, sooner or later the unit costs of VET need to be reduced, allowing increased supply at any given price. Otherwise, the rising demand for VET will lead to training shortages, higher prices or both, making VET affordable for only the most privileged.

Another way of answering the question is to say that, firstly, the private rates of return to VET, regardless of whether they can be observed, need to be raised, essentially by increasing the benefits they yield, by reducing their costs or both; and secondly that individuals and firms need to be able to finance current expenditures on VET, out of future benefits.

Regardless of whether and how much public authorities pay for VET, they have a strong role to play in helping to create the framework conditions to ensure that private actors are willing and able to finance VET. The discussion below describes possible areas for actions by public authorities.

## Enhancing the affordability of VET

Within the framework laid out above, there is a need to address three challenges in order to increase the affordability of VET:

□ increase the benefits from VET;

□ decrease its costs; and

□ find ways of making it easier for VET consumers to finance current VET investments out of future VET earnings. The discussion below addresses each of these.

### Increasing the benefits of VET

One way of raising the rate of return to VET, and thereby strengthening the incentive for individuals and employers or both to pay for it, is to increase the "benefits" flowing from them - both the size of the impacts of VET, and the probability of those impacts being realised.

In this regard, public authorities - possibly in concert with social partners - can act in a number of ways including acting to: "Regardless of whether and how much public authorities pay for VET, they have a strong role to play in helping to create the framework conditions to ensure that private actors are willing and able to finance VET."





"If the benefits of VET to various actors. exceed the respective costs of each, by enough to provide a substantial incentive for them to invest in it. we could sav that it is economically viable. In other words, that VET investments are sustainable investments, able to pay for themselves over time. That is one necessary condition to ensuring that VET is affordable. But it is not sufficient. The section below addresses the question of ensuring that VET investments are financially feasible."

□ improve the quality of VET. This can be accomplished through the establishment and application of standards for evaluating the curriculum and pedagogy, on the input side, and for evaluating skills, competences, know-how and knowledge acquired in VET;

□ improve the information available to individuals and employers, with regard to the nature and quality of VET opportunities. This might be accomplished through clearinghouses, as well as through guidance and counselling, and to allow a better match between individuals with learning opportunities;

□ ensure that the skills, competences, know-how and knowledge acquired in VET are sufficiently visible, so as to make them more visible and portable, and to increase the likelihood that they are fully utilised in internal and external labour markets, and to facilitate their use in wage determination, as appropriate. This might be accomplished through mechanisms for assessing and recognising learning outcomes, regardless of where they occur;

□ ensure that there is sufficient flexibility in the structure of jobs and use of capital equipment to allow full utilisation of acquired skills and competences, thereby increasing the likelihood of employers and employees realising the productivity potential of VET.

### **Reducing the costs of VET**

Regardless of whether the benefits are enhanced, the incentives to invest in VET can be strengthened by reducing its unit costs. There are a variety of strategies that public authorities and social partners can pursue for doing this as well, including:

□ simply to increase awareness of the different components of costs of VET (including both direct costs, such as those for instructors, materials, and facilities, and indirect costs, such as the cost of production that is foregone when employed workers are released for VET), and their relative importance. This can help focus attempts to improve efficiency. This might be accomplished by seeking more detail in surveys of training costs to employers, for example, or case study analysis of costs incurred by VET providers; □ ensuring wider dissemination of information on the cost-effectiveness of different teaching and learning approaches, including those that are technologically based. This would ensure that VET consumers, as well as providers, have better knowledge of efficiency and quality benchmarks;

□ a third strategy, that depends on the first and second, is to otherwise ensure that VET markets function smoothly: that there are no undue barriers to entry of new VET providers who can demonstrate their effectiveness, that information on cost-effectiveness of different providers are widely available and that VET consumers have discretion in choosing VET providers;

□ well-established systems for the recognition of skills, competences, know-how, and knowledge, regardless of how they are acquired, can also play a role in reducing costs, by making it easier for VET consumers to evaluate the cost-effectiveness of less-structured forms of learning, relative to that of structured VET;

□ another strategy is to lower the cost of VET by lowering employers' cost of capital for VET investments. This might be accomplished, for example, through the establishment of standard reporting practices by which employers (including small and medium size enterprises seeking bank loans) could disclose to capital markets, information on VET and how it contributes to enterprise performance.

If the benefits of VET to various actors, exceed the respective costs of each, by enough to provide a substantial incentive for them to invest in it, we could say that it is economically viable. In other words, that VET investments are sustainable investments, able to pay for themselves over time. That is one necessary condition to ensuring that VET is affordable. But it is not sufficient. The section below addresses the question of ensuring that VET investments are financially feasible.

## Paying for current VET out of future earnings

Even if the benefits of VET exceed its costs enough to provide a substantial incentive



to invest in VET, there remains the question of whether various actors are financially able to afford it. This issue of financial feasibility arises because the mismatch between the timing of costs and benefits: VET costs are incurred before the benefits are realised. This risks posing a liquidity constraint, a cash-flow problem on actors if they cannot pay for VET immediately.

The problem is typified in some countries by the lack of willingness on the part of banks, for example, to lend money at a "reasonable" interest rate for higher education ("reasonable" being a rate that is less than the rate of return that the individual expects from higher risk) most importantly because a university degree cannot serve as collateral in case of default. This problem is overcome in some countries through policies by which the government guarantees loans, thus allowing a lower interest rate.

There is a related problem of very poorly qualified adults. Because of low levels of initial educational attainment, they have a higher risk of being unemployed, and therefore, a relatively lower probability of realising the benefits of VET. Caught in vicious circle of lower earnings, larger financial needs (due to need for large amounts of general and vocational education and training), and lower probabilities of benefiting from VET, they have relatively larger borrowing requirements, and face higher interest rates than others who are more qualified.

Past practice from outside and inside Europe provides some lessons on how to help ensure that VET is financially feasible.

The experience in North America, for example, of governments guaranteeing loans, often at below-market interest rates, allows individuals to borrow money at a relatively low interest rate, to pay for the up-front costs of higher education, including post-secondary vocational/technical education. These loans are repaid after students graduate. But the repayment obligation can prove onerous for students who have difficulty finding jobs that pay enough to cover living expenses and loan repayment.

In Australia, under the Higher Education Credit Scheme, the state pays the initial cost of higher education (which can include various forms of VET); after graduation, students "pay back" the implicit loan in the form of a 1 percent surtax on their income, after their income exceeds a certain threshold. This helps alleviate the hardship of the guaranteed loan approach.

In France, the Law of 1971 ensures a substantial flow of financial resources to pay for work-related training, by imposing a "train-or-pay" tax on employers. However, by not taking account explicitly or implicitly of whether such training generates benefits that exceed costs, the scheme does not provide incentives for employers to pursue VET that is economically viable.

While past experience should be some guide, it does not necessarily follow that incremental changes in or wider application of existing financing arrangements will be sufficient. The problem of a lack of financial resources is magnified by the challenge of finding resources to finance, what in all likelihood will be, an expanding volume of VET. The potential scale of the resources involved combined with the fact that VET increasingly covers teaching and learning situations that are found beyond those usually associated with existing formal education and training, make the problem of financial feasibility qualitatively and quantitatively different from what has been encountered in the past.

This would suggest that other approaches should be considered. In view of the clear investment nature of VET expenditure, development (or wider application) of alternative approaches might place primary emphasis on strategies that are consistent with those used for financing other forms of investment. For example,

□ employers might be able to provide more financial resources for VET by allowing them to deduct VET expenses plus a premium from operating costs;

□ employers might also be more able to finance VET when they are under shortterm pressure to reduce costs, if they were allowed to list VET costs as investment costs, and spread them over time in the form of depreciation;

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□ individual resources for financing might be augmented by granting tax credits for training costs, or allowing them to be deducted from current income. Alternatively, they might be allowed to set aside a share of pre-tax earnings to pay into individual training accounts (possibly supplemented by employers or the state, in the case of low-income individuals) that would be drawn on to pay for VET throughout their lives.

## Conclusions

The increasing demand for VET raises questions as to how it can be made affordable. The answer depends on meeting two general conditions: raising the rate of return to VET, in order to strengthen the economic incentives to invest in it; making it easier to finance current VET out of its future benefits, in order to ensure adequate financial resources to pay for VET. This article has discussed strategies for meeting these two general conditions. The strategies for raising the rate of return to VET, focus on increasing the benefits of VET, and reducing its costs. Implementing such strategies depends heavily on increasing the availability and quality of information on the nature and costs of VET provision, and on VET outcomes. The strategies for financing VET out of future benefits require overcoming market failures in capital markets, principally with respect to the lack of information on the economic benefits of from VET, and the absence of institutional arrangements that would allow VET to be treated as a source of wealth.

The implication is that the goal of making VET affordable requires simultaneous action by public authorities in a number of diverse policy areas, by VET providers, and by social partners. Other articles in this Journal investigate some of these actions in more detail.

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## Levies, leave and collective agreements incentives for enterprises and individuals to invest in training<sup>1</sup>



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## Introduction

In market economies employer investment in training is to a large extent driven by competition. Certainly financing mechanisms for vocational education and training should generally reflect the principle that training is a service and that its direct and indirect *beneficiaries should bear the cost*. Where education and training generates *private benefits* for employers in the form of higher productivity and profits, or for individuals through higher salaries or career prospects they can reasonably be expected to finance training.

However, despite the private benefits that accrue, there are many arguments, both economic and political, which may constrain private investment in training by employers and individuals, including the mobility of labour and the loss of training investment, the availability of skilled workers in the labour market, lack of access to training capital, and a lack of training capacity. These disincentives and other arguments pointing out the wider public benefits that accrue to large groups of the population (such as higher national employment, productivity and income, the promotion of equal opportunities, including for those at a disadvantage in the labour market, by improving employment prospects, and a more equitable income distribution), have led some governments to conclude that employer training expenditures are insufficient and that some form of public intervention is required.

There is a wide range of financial incentives used by governments to increase investment by employers in vocational education and training. This article looks some of the major initiatives taken by governments and the social partners to set up financing arrangements that increase investment in training by employers and employees, namely,

□ compulsory training taxes or levies (with a look at arrangements in Denmark, France and Sweden);

□ paid education and training leave (in France and Belgium); and

□ sector training funds set up by employers and trade unions in collective labour agreements (in Denmark, the Netherlands and Belgium).

Each is discussed below in turn. The article then goes on to look at the advantages and weaknesses of incentive schemes, and then outlines some conclusions.

## Compulsory financing schemes

Some governments, for example those in France, Belgium, Denmark, Ireland have opted for *compulsory financing schemes* which attempt to raise the level of training beyond that which is voluntarily provided by enterprises and to encourage a

Governments use a wide range of financial incentives to increase investment by employers in vocational education and training. **Compulsory training taxes** or levies and paid education and training leave are major initiatives taken by governments in this area. In addition, the social partners through sector training funds set up under collective labour agreements have also sought to establish financing arrangements to increase investment in training.

1) This paper draws from the manuscript: V. Gasskov: Managing vocational training systems: Handbook for senior administrators. (ILO, Geneva, 1997)

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"Revenue-generating schemes have been the most sheltered and reliable source of financing training and are commonly used in the countries which encounter a persistent shortage of public education funds. In Europe, the revenue-generating principle is used mostly for financing labour market training for the entry level workforce and the unemployed, while the money generated through the unemployment insurance taxes is often complemented by government financial support."

move towards the concept of lifelong training.

Three major types of compulsory schemes for financing training are commonly applied:

□ revenue-generating levy (tax) which are assessed on company payrolls. Governments use the money for funding national vocational education and training initiatives;

□ tax-exemption schemes which establish minimum levels of employer investment in training as a percentage of a company payroll. Employers can be exempt from or reduce their levy obligations, if they provide a minimum level training for their employees; and

□ levy-grant schemes which assume that enterprise levy contributions are collected and distributed between those enterprises which, for instance, undertake training programmes considered as a national or sector priority.

These funding mechanisms have certain differences and some common features that are discussed below.

### **Revenue-generating levies**

Revenue-generating schemes have been the most sheltered and reliable source of financing training and are commonly used in the countries which encounter a persistent shortage of public education funds. In Europe, the revenue-generating principle is used mostly for financing labour market training for the entry level workforce and the unemployed, while the money generated through the unemployment insurance taxes is often complemented by government financial support. A revenue-generating tax is commonly assessed as a percentage of the enterprise payroll as well as of the employee wages.

Less frequently, training taxes are assessed on company's production value or export value or value of work contracts. Although in the UK sector training levies were abandoned some time ago, purchasers of construction services are still liable to pay a training levy. The Engineering Construction Industry Training Board and the Construction Industry Training Board remain operational and raise levies from employers to cover the cost of their activities. The levy amount is fixed and is collected from three sources: a percentage of the payroll of all site employees, a much smaller percentage of the payroll of employees other than site employees, and the amount (if any) by which a percentage of the labour-only payments (services purchased) exceeds the same percentage of the labour-only receipts (services rendered).

Experience of using revenue-generating levies for financing labour market training can be found in Denmark. The Danish financing mechanism, although based on the labour market tax as elsewhere, divides responsibilities for using certain proportions of the collected training funds between the government and the social partners.

### **Revenue-generating levies** in Denmark

In Denmark, labour market training is administered by the National Labour Market Authority (AMS). The funding for training is provided by the state. However, this government expenditure is refunded annually from the Activation Fund (one of the three Labour Market Funds), raised from the 8 % tax imposed on gross wages of employers and employees. This Fund provides grants for financing training of both employees and the unemployed although employees have first priority.

The money collected for labour market training is allocated to three major groups of institutions. Firstly, the national training agency (AMU) receives a central allocation amounting to one-third of its budget, to cover its basic operational costs and the cost of training programmes for disadvantaged groups. Secondly, the Minister of Labour has formed bipartite Labour Market Training Committees for four major economic sectors - industry, construction, commerce and services, and the public sector. These committees are responsible for programming and financing training courses in their sectors. They decide on and claim government funds for adult training in their economic sector. The committees contract out training



to providers including the AMU (which receives another third of its budget from the orders placed by the Labour Market Training Committees). Thirdly, the Regional Labour Market Councils obtain funds for the procurement of initial training courses and programmes for the unemployed. They also purchase training from the AMU centres and colleges (accounting for the final third of the AMU budget).

## Levy exemption schemes

A levy-exemption mechanism allows firms to eliminate or reduce their obligations by the amount of training they provide or purchase. This approach assumes that firms know their training needs and will spend their money on appropriate training programmes. The major advantage of this mechanism is that it eliminates the burden of employers having to pay a levy at the beginning of a financial year. Funds earmarked for training remain with the employer who prepares a plan for spending them effectively. The levy-exemption mechanism operates through employers' individual actions and is normally supervised either by ministries of labour or the national revenue service. However, as levy-exemption deals with each employer individually, it provides less opportunity to develop national or sector training policies and activities. Such funding schemes have strong advantages over other schemes in terms of satisfaction of employers with their relative freedom of training and funding operations, low cost of administrations and true impact on industry training. The classic example of the levy-exemption mechanism is found in France.

### The levy-exemption system in France

French firms are assessed on two payroll levies that operate as levy-exemption schemes:

□ the "apprenticeship tax" which aims at the promotion of apprenticeships and provides funds to apprenticeship centres; and

 $\Box$  a second levy called "training tax", which primarily finances training of employees.

## Table 1: Training related taxes in France

*Financing apprenticeships*: From the **apprenticeship tax of 0.5** % the employer should allocate:

- 0.1 % to apprentices' wages or to make payments to apprenticeship centres; from this allocation, if not spent, firms can give grants to training institutions;
- 0.05 % to the compensation fund which reimburses the cost of apprenticeships to employers with low levy allocations;
- 0.35~% to agencies that provide preliminary technological training to apprentices.

*Financing youth on-and-off-the-job(alternance) training schemes.* The employer has to allocate:

- a **0.1 % supplementary** (to the apprenticeship tax) levy;
- 0.4 % (within the training tax) to be spent by the employer or transferred to special training funds;

*Financing continuing training*. From the **training tax of 1.5 %** the employer should allocate:

- 0.2 % to special training funds which finance individual training leave;
- 0.9 % to training under the employer training plan.

The overall allocation not spent should be paid to the Treasury

Levies are not collected at the beginning of the fiscal year, nor are employers' training expenditures reimbursed at the end of the fiscal year. Payment is due at the end of each year unless an employer can present evidence that the amount equalling these tax bills has been spent on authorised training. The apprenticeship tax is unique in that it legally allows for employers to give grants to vocational education and training schools.

The apprenticeship tax obligation is divided into two parts: 0.5 % of a payroll is to be spent on apprentice training expenditures and wages, or granted to training centres. A supplementary of 0.1 % of payroll is to be spent on the training of youth seeking their first employment. The authorised training expenditures include instructors' wages, with the limit of one supervisor per ten apprentices, and the costs of fellowships and tools for apprentices. Compulsory contributions of enterprises to the Chambers of Commerce and Industry and to the National Fund of Compensation, which promotes apprenticeship in small firms, are also made from this tax (see table 1).

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"Levy-grant funding schemes assume that payroll contributions are collected from enterprises/ employees by specially established funds and distributed between firms/individuals as grants."

"A levy-grant scheme allows a much greater redistribution of levy-based funds towards firms which train." The *training tax* rate has increased since its introduction from 0.8 % to 1.5 % of payroll. Its focus has also shifted from general educational and cultural development of personnel towards continuous education and training for employment. At present, within the framework of the training tax, 0.4 % of the payroll is destined for government training programmes for young people seeking first employment, 0.2 % is allocated to paid training leave, and only 0.9 % can therefore freely be spent on employee training. The employers accepting young people on onand-of-the-job (alternance) training schemes may deduct from corresponding allocations FF50-60 per training hour per young trainee. Small firms having small levy allocations prefer to make payments to approved training agencies instead of providing training themselves.

Joint organisations responsible for administering the levy-based funds (OPCAs) have been established under the collective agreements. They operate as training funds and are administered by councils which must comprise an equal number of employer and trade union representatives. Training funds are legal entities operating under the control of the national vocational training authorities and are allowed to receive public subsidies, donations, and inheritances. No fund collecting agency can be approved if it cannot levy FF 100 million minimum, except only for funds received from agriculture, crafts and the professions. Training providers can no longer collect funds. Through this mutual funding, employers with low levybased allocations can have more money to finance on-and-off-the-job training. At the national level the association for the management of on-and-off-the-job training funds (AGEFAL) was established with the responsibility for necessary transfers between OPCAs in surplus and in deficit. There are more than 90 OPCAs which administer levy-based funds.

## Levy-grant schemes

Levy-grant funding schemes assume that payroll contributions are collected from enterprises/employees by specially established funds and distributed between firms/individuals as grants. Grants usually do not closely reflect firms' levy payments and can be destined towards priority training programmes, to strengthening training facilities in individual enterprises, and the development of sector training curricula, advisory services, etc. A levy-grant scheme allows a much greater redistribution of levy-based funds towards firms which train. Some levy-paying firms may receive no training grants at all if they do not offer training or if their activities do not follow training priorities. Administration of levy-grant schemes requires certain bodies to be established as they involve many case-by-case decisions requiring management competence and involving some cost.

Levy-grant systems can be used to finance training for the unemployed and paid educational leave. applying the levy-grant scheme in the area of training for the unemployed is described below. Although social security schemes focusing on the unemployed are established by governments as compulsory, the Swedish Employment Security Fund (TSL) was set up by employers and unions voluntarily without government intervention, and shows a remarkable consensus between the social partners.

## The Employment Security Fund (TSL) in Sweden

The social partners in Sweden established joint-bodies in areas of common concern, such as training, job security and corporate development. The TSL was established in 1983 as part of the collective bargaining process between the Swedish Employers' Confederation (SAF) and the Swedish Trade Union Confederation (LO). The Fund has two main purposes: to promote job security for workers who have become unemployed or risk becoming unemployed as a result of production cutbacks, factory closures, or improved production efficiency; and to promote employment opportunities through financial support for the development of existing companies or the establishment of new companies.

Some 95,000 companies, employing 1.1 million workers, are associated with TSL. Its activities are financed mainly through fees paid by the affiliated companies. The



fees are based on company payrolls, and the size is determined annually in the process of collective bargaining. Applications for support from TSL are submitted jointly by employers' and trade union organisations, either locally, regionally, or centrally, who then share responsibility for implementation and decided upon by the Board of Directors, which consists of six regular members and six deputies, with employers and trade unions represented equally.

It has been estimated that in Sweden, almost 80 % of employer training aimed at the improvement of the firms' competitiveness is delivered by enterprises themselves. TSL is, therefore, a small actor in such enterprise training. TSL is used mainly for training for job security. About 90 % of the support given by TSL in recent years has gone to individual companies, including assistance to redundant employees starting their own business. Training grants account for 80 % of the total support. Applications to TSL for financial support have increased greatly during the recent recession, which suggests an increasing willingness on the part of both management and labour to use slack production periods for training. TSL's scale of operations is almost US\$ 40 million, representing a dramatic increase in expenditure on training in recent years. It is estimated that annually 10,000-12,000 people have participated in training supported by TSL.

TSL supports corporate development projects for firms to prevent or solve their problems, in cases where insufficient financial resources are available. Financial assistance to individual firms is given primarily in order to promote implementation of measures which will support longterm company development, through raising the competence of workers. This is often done in connection with organisational changes which create a need for wider and deeper professional skills.

TSL has made financial resources available to regions where business has been faced with structural problems and where employment problems have consequently been severe. The needs for adjustment and renewal have been obvious. Through joint projects, SAF and LO have been able to offer consultancy services to firms to help them identify problems and opportunities. Resources have also been made available for implementing development activities which emerged from the joint work of the consultants and the companies concerned. A large share of the TSL support for training has been channelled to basic industries, including the iron and steel industry, engineering, the automobile industry, and forestry.

When an employee has been given notice or is in danger of being given notice as a result of changes taking place in the company, individual assistance can be obtained from several different sources. one of which is the TSL. As the TSL always channels assistance through the employer, it is only available to the employed. Support can be given to cover most of the extra costs incurred if the employer assumes a larger proportion of the cost of reducing the labour force than that prescribed by law and by labour market agreements. For example, employment may be extended to retrain an employee for a new job. Financial support is also available in the form of individual grants for retraining workers to improve their opportunities in the labour market when they are made redundant.

## Paid education and training leave

A number of European countries, for example France, Belgium and Italy have introduced, through national collective labour agreements, paid education and training leave for employees. Leave is funded by a combination of contributions raised from enterprises' payrolls and from general revenues. Legal arrangements specify the amounts to be contributed, the type and duration of education and training programmes, the employee's eligibility for the paid leave and the administration of the scheme. The aim of the paid leave is to legally and financially secure the employee's right to paid absence from work for education and training.

### Individual training leave in France

Private-sector employees with an indefinite-term contract have the right to individual training leave. Individual training "(...) paid education and training leave for employees. Leave is funded by a combination of contributions raised from enterprises' payrolls and from general revenues."



leave is financed by the 0.2 % contribution (within the above described training tax) to be paid by employers to joint management-union bodies set up for the administration of individual training leave (OPACIFs). Alternatively it may be a fund specifically set up to administer training leave, for instance a regional joint management-union body administering training leave in a group of industries (FONGECIF). Employees receive 80% to 90 % of their remuneration. If the training lasts for more than a year or 1200 hours, in the second year they receive 60 % (in any case it should not be lower than twice the national minimum wage). A fund reimburses the employer, who advances payment. An employee's application for a paid leave may be refused if the central fund does not have the necessary money. Control of financial operations is conducted by the government authorities.

The state contributes to funding individual leave under agreements with the joint management-union bodies responsible for interpreting the legislation on individual training leave (COPACIFs). State funding enables these bodies to accept responsibility for training of employees of small firms with fewer than 10 people. Any application for obtaining a "level V" qualification gives the applicant the right to a 50 % state contribution to the cost of funding, which is paid to an OPACIF. In 1990 about 75 % of applicants were at that level. **OPACIFs** accept some 20,000 applications a year, only 70 % of those submitted. On average individual training leave lasts 850 hours at a cost of some \$20,000. Training usually consists of long courses leading to a qualification. Any employee who has worked for 5 years is also entitled to absence for a skills audit in a audit centre. The absence should not exceed 24 working hours and the cost of the skills audit and payment of remuneration is covered by the OPACIFs.

### Paid educational leave in Belgium

Paid educational leave (PEL) in Belgium entitles full-time workers in the private sector to be absent from work for a certain number of hours to attend recognised education and training courses. The employer cannot oblige employees to attend, or prevent them from attending courses. Since 1995, employees have been entitled to the annual maximum 120 hours of PEL for vocational training and to a maximum 80 hours of PEL for education courses. Employers pay the wages of employees on PEL. Trainees' wages and social security contributions are reimbursed to the employer by the Federal Ministry of Labour and Employment (FMLE) with a maximum amount set at BEF 65,000 gross per month.

The state pays the full cost of PEL-related general education programmes but only half of the cost of vocational courses. The state contribution is directly allocated to the FMLE. The other half of the cost of vocational courses is covered from a payroll training levy of 0.04 % collected from employers by the transferred to the FMLE. Employers who have employees on PEL claim reimbursement of the related expenditure from the State Service for PEL. They have to declare the number of workers on PEL, the number of training hours effectively taken up and related salaries (including social security contributions), the certificates of subscription to courses as well as certificates of course attendance.

Because of the Belgian budget deficit, the state contribution to PEL has been reduced. As a result the Commission for Recognition of PEL has abolished a number of recognised courses and employers have been required to raise their contribution to PEL. Therefore, the rate of another payroll levy, normally aimed at financing training for groups "at risk" in the labour market has been increased by 0.05 %. The previous duration of PEL has been cut almost in half due to increasing demand, but a reported weakness of the PEL system is that it can be easily abused. Reimbursement may be claimed by enterprises without employees actually attending courses. Since reimbursement is authorised on the basis of course attendance, this requires a costly control system to audit both enterprises and education and training providers. Regulations set limits to the number of employees allowed to be on PEL simultaneously. In addition entitlements to PEL can be reduced or stopped for trainees found absent from PEL-related courses or who failed to pass exams

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## Collective agreements and sector training development funds

Some countries have applied the concept of joint responsibility of the government and social partners for vocational training and employment. The pressure to expand training has evolved through collective bargaining at the company, sector, and state levels, and has resulted in the inclusion of special training clauses in collective agreements, specifying minimum levels of resource allocations for training. Such clauses have also resulted in a number of sector, national and territorial training funds being established focusing on the development of training activities rather than on their provision. The funds are financed by employers' and sometimes by employees' contributions. Governments may intervene to promote training clauses, to co-finance industry training funds - to promote particular types of training, for example, apprenticeships and training for low skilled employees - or to support paid educational leave for employees or both. Governments may even supervise the agreements.

Collective training arrangements usually cover only part of the national workforce and channel relatively small financial contributions, giving freedom to employees to decide on their training policies. Although individual employers usually invest in training amounts far exceeding their contributions to the training funds, the funds have the important advantage of focusing on sector collective training activities and, sometimes, on training of those employees who for some reason have been excluded from enterprise training programmes. Through sector funds, close employer-government co-operation in training has been achieved.

### Sector funds in Europe

In Denmark, there are 15 sector funds set up through collective bargaining, covering about half the workforce (Blanpain, Engels and Pellegrini, 1994). Training funds have been established by a special clause in collective agreements for the metal and plastic industries, transport, retail, and other sectors. Employers are

required to contribute an amount that varies across sectors from Danish Krone (DKK) 0.03 to DKK 0.13 per working hour. Annually the funds collect at least DKK 60 million. These sector funds do not finance training courses directly, but provide funding for the development of courses, gualification analyses and pilot projects. Government provides a substantial contribution. In addition, all employers are required to pay a flat rate levy of DKK 1,500 per employee per year into the so-called AER Fund which is guided by the social partners. Those employers who enter into apprenticeship contracts are entitled to have 90 % of their apprentices' allowances paid during the schoolbased training periods and 80 % of their travel expenses reimbursed from the AER Fund.

In the Netherlands, employers' organisations and unions have established socalled Industrial Social Funds (ISFs) that are involved in the development of training (Veeken, 1994). Of the 7 million people in the Dutch labour force, nearly 3 million are covered by the sector collective labour agreements which are the framework for establishing and administering the ISFs. More than 80 % of collective agreements concluded in 1990 contained training clauses with provisions for the ISFs and with obligations for enterprises to pay levies. The ISFs are voluntary rather than statutory, they are established by employers and workers themselves without any intervention from, or obligation to the government. In addition, they do not require registration with public bodies. Of the 78 ISFs (1994) in the Netherlands, only 23 have financing and promoting employer training as their main goal. Most enterprise training is financed directly by individual employers. The ISFs aim to provide financial support for sector training and training-related activities, including training needs assessment and advisory services, apprenticeship programmes, skills upgrading, and, most recently, training for the unemployed. The average rate of levies is about 0.44 % of payroll. In some sectors, in addition to employers' contributions, workers also pay part of the training costs. Subsidies from the ISFs may cover both direct training costs and part of the losses from trainees' absence. The entitlement of enterprises to subsidised training is commonly

"The ISFs are voluntary rather than statutory, they are established by employers and workers themselves without any intervention from, or obligation to the government. In addition, they do not require registration with public bodies."





"The major advantage of incentive schemes is their ability to raise and maintain a high degree of employer-based training through self-financing. They also contribute to the development of enterprise facilities and an employerbased training culture. To a certain extent, such schemes also allow management of the profile and of the training offered by employers through the establishment of conditions that must be met if a given programme is to be eligible for financing from levybased funds."

"On the other hand, serious liabilities have also become apparent. Incentives may not have enough influence to mobilise additional training. As a result they may end up subsidising programmes that would have been provided by firms in any case (...)."

"Under incentive schemes, many firms tend to implement programmes that accomplish little beyond meeting the compulsory training level and do bring any real change. Therefore, training content and quality require supervision which can be expensive and problematic." limited to only one training day per employee. In addition to the ISFs, most industrial sectors have established so-called "Subsidy Funds" which are the main actors in channelling government subsidies for industrial training. The ISFs and Subsidy Funds are run by their Boards with representatives from employers' organisations and unions.

In Belgium, the inter-industry wide collective agreement introduced a compulsory payroll levy of 0.25 % of gross wages to be collected from all enterprises with the aim to finance training of the groups "at risk" in the labour market. All economic sectors organised special finds which administer the money. Some sectors levy exactly the minimum amount of 0.25 %, some other sectors voluntarily collect a greater contribution which is used for developing sector training. For instance, the construction industry collects a levy of 0.3 % from which allocations are made for producing training materials (Blanpain, Engels and Pellegrini, op. cit).

While in Germany, the UK, Ireland, Italy, Portugal and Spain, the vast majority of collective agreements between social partners mention continuing training, they do not attempt to regulate its financing. Generally, training and its financing are considered as the employer's prerogative. For example, in Germany, about 200 collective agreements contain training clauses, but provide only for arrangements covering training leave. To date, special training funds have been established by collective agreements only in the scaffold construction and corset industries. Although employers finance the lion's share of the country's training costs in Germany, they do so on an individual basis (Bergner et. al., 1991).

## Advantages and weaknesses of incentive schemes

The major advantage of incentive schemes is their ability to raise and maintain a high degree of employer-based training through self-financing. They also contribute to the development of enterprise facilities and an employer-based training culture. To a certain extent, such schemes also allow management of the profile and of the training offered by employers through the establishment of conditions that must be met if a given programme is to be eligible for financing from levybased funds.

On the other hand, serious liabilities have also become apparent. Incentives may not have enough influence to mobilise additional training. As a result they may end up subsidising programmes that would have been provided by firms in any case (Ziderman, 1990). Often they serve as a windfall to those firms that already have well-established training programmes.

Debate continues over whether levy rates should be uniform or differ across sectors. Training costs vary among industries, as do skill levels. For levy rates not to reflect these differences seems counterproductive. Some argue that high-skill industries tend to pay higher wages and that accordingly, levies collected from payrolls already reflect the difference in skill levels (Middleton, Ziderman and Van Adams, 1993). However, this line of argument assumes a rather simplistic relationship between skills and wages. After all, company profits also affect wages: if the profits of skill intensive firms are declining, wages may follow suit. In addition, some high-paying firms require less human capital than others and can use less skillintensive technologies.

Under incentive schemes, many firms tend to implement programmes that accomplish little beyond meeting the compulsory training level and do bring any real change. Therefore, training content and quality require supervision which can be expensive and problematic. Sometimes supervision is carried out by tax auditors or other departments that lack training competence (Geber, 1993). Competent supervision and technical assistance thus often require the creation of a special bureaucracy which can present its own problems and costs. In addition, under levy-grant and reimbursement mechanisms, employers never recover their contribution in full. Procedures for the clearance of bills are often cumbersome and scare smaller firms away.



Special efforts should be made to administer incentive schemes at low cost and with higher flexibility. Sharing decisionmaking between employers and employees would do much to improve the quality of levy-financed training. Employers tend to make prudent decisions about what types of training should be undertaken. In most countries, such choices are the employers prerogative.

Large enterprises with a well-established training administration tend to benefit disproportionately from incentive schemes. Many smaller firms pay levies but for various reasons fail to participate, thus losing their money. However, it would be naïve to expect the same scheme to work equally well for all firms, whether large or small, well-established or vulnerable. Those firms and sectors that show little sensitivity to a particular training incentive should be assisted by other, potentially more attractive, schemes. In general, incentive schemes as well as their administration should be characterised by flexibility.

Can incentive schemes help to distribute training more equitably in enterprises? If they can, should they? In most countries employer training is offered to managers, technical professionals, or (as in the US) sales assistants, rather than shop-floor workers. One might argue that training should not be regarded as a perk or welfare benefit, but as a need arising from the business. It makes little sense to offer front-line workers additional training if technological or organisational changes are not forthcoming (Geber op. cit).

Employers defend their right to choose what levy-financed training should be offered and to which employees. Employers are likely to be interested in training shop-floor workers only if they are convinced that such training will contribute to greater productivity and higher earnings. The desire for equity in levy-financed employer training should be handled very carefully.

On the other hand, employees and unions are becoming all the more sensitive towards a more equitable sharing of enterprise training funds. In Belgium, for example, workers excluded, for whatever reasons, from enterprise training programmes are eligible for training courses financed from a particular allocation within the levy imposed on employers. Any resources for this purpose remaining unspent should be returned to by employers to the central National Employment Fund.

Most incentive schemes impose rather strict conditions for eligibility, governing factors such as training content, course duration, unit cost and even the age of trainees. Such conditions are a management tool and cannot be avoided. Through them, governments try to reconcile the preferences of individual employers with society's future training needs.

Levy-based interventions are often undertaken without sufficient attention being given to their long-term implications. Mechanisms should not be applied without giving some though to the question of whether or not a national training culture can be developed and, if so, in what time frame.

Although a time frame for reasonable and sustainable growth of employer training is hard to predict, monitoring should take place and management should act in accordance with achieved progress. If employer training expenditures consistently increase and the training market shows evidence of strength, it might prove useful to revise levy rates and conditions. For instance, in the French levy-exemption scheme, the rate has been raised several times in order to correct the training demand and raise training expenditures. It is believed, therefore, that even after the very long history of levy-financed employer training in France, a solid training culture has not yet matured. However, the opposite scenario, in which rates are lowered and market forces allowed a freer rein may also be conceivable.

Governments sometimes try to use incentive mechanisms to encourage the expansion of employer training in conditions of poorly developed or monopolised training supply. However, mechanisms that consistently fail to reward the improvement of productivity and efficiency are more or less ineffective and wasteful. Incentive schemes should be matched by policies that encourage the development of training markets and provide economic incentives for more successful firms. "Special efforts should be made to administer incentive schemes at low cost and with higher flexibility. Sharing decision-making between employers and employees would do much to improve the quality of levyfinanced training."

"Large enterprises with a well-established training administration tend to benefit disproportionately from incentive schemes. Many smaller firms pay levies but for various reasons fail to participate, thus losing their money."

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### **Conclusions**

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Dynamic economic development requires a certain balance between employer investment in technologies and in human resources development (HRD). There are several major forces that drive employer investment in training. First among these is market competition for greater productivity and lower production costs. Second is the growing pressure from employees and unions seeking higher wages as well as mobility in the labour market through ongoing upgrading of their skills. In addition, there is an increasing awareness by employees and unions of greater equity in both their access to continuing training and the sharing of enterprise training investment. Thirdly, in certain countries strong employer commitment to the lifelong learning of employees has emerged.

Obviously, both the mix and relative strengths of each of these factors is different in various countries. They range from the very conscious employer investment in human resources development and close co-operation in such matters with government and other social partners, on the one hand, to the employer's unwillingness to train and the need for government intervention, on the other.

The hope that the market competition will be able to strongly support the socially desirable level of the enterprise training expenditure is not always realised. There are many reasons for the market failure regarding training. When market demand for goods and services weakens, the employers interest in training follows suit. Recent developments in Germany, Austria and Switzerland which have always been known for very high employer commitment to financing training, have demonstrated that stagnated markets may strongly affect the enterprise willingness to invest considerable amounts in apprenticeship training.

Because market forces and employers' attitudes do not in most cases play a sufficiently strong role in maintaining the enterprises' socially desirable level of investment in training, government influence is justified and, where necessary, should be strengthened. Governments should take on the responsibility of regularly examining and maintaining national investment in HRD. In pursuing this goal, they should encourage, both legally and financially, industry to develop its own training initiatives. In the countries where markets have failed to send the right signals to employers or where such signals have not been received, the described above compulsory training instruments may be considered.

The principal problem, however, remains regarding the measure of the *socially desirable investment* in education and training, both, national and that of enterprises. In this vein, one of the most recent European initiatives relating to the long-term strategic development of national human resources has been the introduction in the Netherlands of compulsory vocational qualification for all, including employees, with the cost of this to be shared equally by the government and relevant industry sectors (Hövells and Meijer, 1994).

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# The introduction of market principles into the training system in England and Wales

### Introduction

The first part of this article is largely descriptive and gives some background to the reforms that took place during previous Conservative administrations. It goes on to describe the introduction of TECs, the current funding arrangements and the system of training credits for young people. The second part of the article discusses the extent to which the structures and mechanisms that have been introduced have provided for a training system that is effective and equitable. It should, however, be noted, that it is not our intention here to provide a thorough evaluation of the reforms that have taken place.

### Background

The reforms of the education and training systems in England and Wales developed from the late 1970s to the early 1990s during Conservative administrations. The Thatcher governments (1979 to 1991) were particularly keen to introduce market principles into a wide range of public services including both education and training. However, interest in such principles has a long history in England - as far back as 1862 'Payment by Results' was introduced into the education system whereby the amount of government grant received by schools in England and Wales depended on the results of an annual examination of pupils conducted by a government inspector. This method of funding continued until 1897 (see also West and Pennell, 1997).

### **Training and Enterprise Councils**

The White Paper 'Education and Training for the 21<sup>st</sup> Century' (1991), made a major contribution to the move towards a post-16 marketplace with the decision that control of the £2.5 billion training programme should be transferred from the national Training Agency (formerly the Manpower Services Commission) to a number of new, local employer-led Training and Enterprise Councils (TECs). These are private not-for-profit companies and their main function is to deliver public services.

The network of TECs replaced the Training Agency's Area Manpower Boards nominally responsible for overseeing the operation of Training Agency programmes. The inspiration for TECs, came from Private Industry Councils (PICs) in the United States and the German chambers of commerce (Bailey, 1993). However, the proposals for TECs took the principle of devolving control over government initiatives to the private sector far further than was attempted through PICs. Virtually all of the national training budget was delegated to TECs although around 90 per cent of their funds were specifically earmarked for intitial vocational training and training for unemployed adults (Finegold, 1993).

TECs are required to represent the interests of both large and small employers as well as a wide range of community interests. The means of achieving this is through the TEC Board. The composition of the Board of each TEC is contained



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Market principles have been introduced into the training system in England and Wales through the creation of Training and Enterprise Councils (TECs) and their funding arrangement. The specific focus is on two forms of governmentfunded training, namely initial vocational training provided through youth training and modern apprenticeships, and vocational training for adults who are unemployed.

#### Acknowledgements

We would like to thank the DfEE and the two TECs in South East England and in Wales for the information and help that they provided. Thanks are also due to John Wilkes for his help with the preparation of this paper.



"Each TEC has a contract with its regional government office to provide a range of services and receives money accordingly. TECs may also have contracts with other organisations in relation to specific services. The TECs in turn have contracts with a variety of training providers."

"The TECs vary in how prescriptive they are in relation to their training providers."

"TECs are responsible for two main forms of training provision - work-based training for young people and training for unemployed adults."

1) Whilst the funding mechanisms used by the FEFC are not the focus here, it is important to note that the funding methodology used by the FEFC provides colleges with incentives to expand, to lower unit costs and to reduce inequalities in funding between colleges (Barrow, 1997). The funding methodology also involves an element of output-related funding in its annual contract with the government (Employment Committee, 1996). Twothirds of the TEC directors must be drawn from Chairmen and Chief Executives from the private sector. The remainder must be drawn from the Chief Executives (or equivalent) from education, economic development, trades unions, voluntary organisations or the public sector. The Chairman of a TEC must be a director of a private company with either a turnover exceeding £25 million (37 million ECU) or 25 or more full-time employees.

The strategic guidance for TECs (issued in November 1996 by the previous Conservative Government) set out three key priorities for TECs, namely:

□ to create and maintain dynamic local economies with strategic partners, in particular with local authorities;

□ to support competitive business, through effective investment in innovation and the development and management of people, and increased use of business support services through the network of Business Links; and

□ to build a world class workforce and create a learning society with the skills essential to successful businesses and individuals.

Government funding for English TECs comes from a variety of sources, including the Department of Trade and Industry and the Department of the Environment, Transport and the Regions, but the largest part - around 90 per cent - comes from the Department for Education and Employment (DfEE). TEC expenditure is largely accounted for by the two key government-funded training programmes:

□ Youth Training; and

□ Training for Work.

### **TECs' contracts**

Each TEC has a contract with its regional government office to provide a range of services and receives money accordingly. TECs may also have contracts with other organisations in relation to specific services. The TECs in turn have contracts with a variety of training providers. Training provision in England and Wales is diverse in character. Providers include further education colleges, private training providers, and training provided by employers. It is important to note that in 1993, the government removed further education colleges (the main initial vocational training providers in England and Wales) from local government and transferred them, as corporate bodies, to a government agency, the Further Education Funding Council (FEFC). The funds to support further education also passed from local authorities to the FEFC.<sup>1</sup>

The TECs vary in how prescriptive they are in relation to their training providers. In one study, for example, focusing on basic literacy and numeracy training, (West et al. 1993) it was found that three of the six TECs studied required training providers to use appropriately qualified staff and four required literacy and numeracy training to be integrated with vocational training.

In terms of general requirements, TECs have to address equal opportunities, health and safety and quality assurance. In addition, and of particular relevance in the present context, the TEC has to set out in its "Business Plan" its strategies for achieving the aims and objectives for each 'block' of funding it receives. Within each funding block the TEC has to set out the main targets it is aiming to achieve in taking those strategies forward within the available resources. A number of the "Business Plan Targets" include "Minimum Performance Levels" that reflect areas of particular priority within each funding block. Achievement of these levels trigger additional flexibilities in how the TEC uses its budget, whilst failure to meet them may lead to the witholding of some or all of these 'budget flexibilities' for the following year.

TECs are responsible for two main forms of training provision - work-based training for young people and training for unemployed adults. The TECs' objectives are laid down by the government and include the delivery of 'high quality' workbased training to young people so that they can obtain National Vocational Qualifications through youth training and modern apprenticeships (the latter result in higher level qualifications).



"The funding that TECs receive for the provision of youth training is based on : - the number of young people starting the programme;

- their attendance on the programme; and

- their successful completion of the programme (output-related funding)."

"The TEC is responsible for making the arrangements for the delivery of youth training and modern apprenticeships. (...) Access to these two forms of training is through a 'training credit'. This is in essence a quasi-voucher, which may not, in general, be 'topped up' by private contributions."

"TECs are also responsible for training for work (TfW). This is aimed at helping unemployed adults get jobs as quickly as possible (...)"

Delivery of youth training and modern apprenticeships

Youth training is open to young people who have reached the minimum school leaving age, who are not in full-time school or further education college, higher education or employment. Young people are assessed on entry to youth training to determine whether or not they have special training needs as a result of disability or poor literacy or numeracy skills and the TEC receives a higher weighting for such trainees.

The funding that TECs receive for the provision of youth training is based on:

□ the number of young people starting the programme;

 $\hfill\square$  their attendance on the programme; and

□ their successful completion of the programme (output-related funding).

DfEE expects payment for the number of starts to account for 20% (plus or minus 5%) of the total payment to the TEC. Certain categories of trainees with special training needs receive a higher weighting than others reflecting the importance the government places on these groups and also the higher costs associated with certain categories of trainee.

Payment for attendance is expected by the DfEE account for 50% (plus or minus 5%) of the total. The output-related element to the funding now accounts for a smaller proportion of the total than before in most TECs, and is expected to be around 30 per cent (plus or minus 5%). This output-related element is dependent on certain qualifications being achieved.

The TEC is responsible for making the arrangements for the delivery of youth training and modern apprenticeships. There is a youth training guarantee, whereby eligible young people are guaranteed a place on a training programme - youth training and modern apprenticeship. Access to these two forms of training is through a 'training credit'. This is in essence a quasi-voucher, which may not, in general, be 'topped up' by private

contributions. The notion of training credits was raised by the Confederation of British Industry in 1989 as a key step in what it called the 'skills revolution'. The Conservative government responded within eight months to the CBI's suggestion and in March 1990 set up 11 pilot credit schemes to operate from April 1991 (Unwin, 1993).

Training credits are now operational across the country and are available for two levels of nationally recognised qualification and training - a lower level and a higher level (modern apprenticeship). Both lead to National Vocational Qualifications (at lower and higher levels). All young people in their final year of compulsory education (age 15 to 16 years) are told about training credits by their careers adviser. They are issued with, or given details of how to obtain, a training credits information pack or card (the arrangements vary according to the TEC). In one TEC, the young person interested in vocational training will normally be advised to contact their local careers service which will arrange an interview with him or her. The young person will then be referred to a suitable training provider who will help him or her find an employer who can provide him or her with a job and training to meet his or her needs. It is the training provider who contracts with the TEC and who works with the employer to develop a quality individual training plan for the young person. The training provider also reviews progress with the employer and young person at least every three months. The average training credit allows a contribution of about £1,600 per year towards the cost of training the young person. This is paid by the TEC to the training provider and covers most of the cost of the vocational training (the employer will be expected to make up any remainder). The employer continues to pay the young employees as normal.

# Delivery of training for work

TECs are also responsible for training for work (TfW). This is aimed at helping unemployed adults get jobs as quickly as possible through an appropriate mix of



"As in the case of youth training, there are payments for the number of people starting on programmes. There are also 'pre-vocational progression payments' which are important given 'the relative difficulty of this client group achieving an outcome quickly' (...)."

"There are also outcome payments. These are differentially weighted, with gaining a job having double the weighting of entry to full-time education or training. Qualifications at various levels also result in output-related funding."

2) From 1998/99 the focus for Training for Work programmes will be on long-term employability. EUROPEAN JOURNAL

guidance, training, approved qualifications, structured work experience, or both<sup>2</sup>. The main objectives are to achieve employability, through pre-vocational training, by developing the fundamental skills and attributes sought by employers; to encourage and help employers to recruit and train unemployed adults; to develop new or enhanced occupational skills leading to jobs; and to encourage and support self employment through training.

The funding arrangements are more complex than for youth training or modern apprenticeships, but, as in the case of youth training, there have been modifications to the funding regime. As in the case of youth training, there are payments for the number of people starting on programmes. There are also 'pre-vocational progression payments' which are important given 'the relative difficulty of this client group achieving an outcome quickly' (DfEE, 1997). These progression payments can be claimed for progress against the trainee's Individual Training Plan, or pre-vocational qualifications plus movement to another named type of programme (for example TfW). There are also outcome payments. These are differentially weighted, with gaining a job having double the weighting of entry to full-time education or training. Qualifications at various levels also result in output-related funding.

To be eligible for TfW, a person must be at least 18 but not more than 63 years of age, not be at the same time on another government funded programme, have been continuously unemployed for 26 weeks or more or be unemployed, be 'endorsed' as a person with a disability or with a literacy or numeracy need (or a need for English or Welsh for speakers of other languages), or be a qualifying exoffender or lone parent. To join TfW, a person must need training to help them get a job and have been assessed as having such a need.

### Have the reforms worked?

### **Effectiveness and efficiency**

Finegold (1993) identified a number of potential problems for TECs. In particu-

lar he argues that TECs have not been equipped with the tools necessary to transform the incentives to train:

'Unlike German or French chambers of commerce, they do not represent all the employers in their areas, and may have difficulty addressing the concerns of small firms. And they lack either the carrot of large discretionary funds or the stick of a training levy to sanction those companies who fail to pay for their share of education and training costs'

In practice many of these criticisms have proved to be valid, particularly the inability to transform the incentives to train. One of the conclusions of the parliamentary Employment Committee of the House of Commons (1996) was that the performance of the TECs in placing people in work and gaining qualifications appears to reflect economic conditions, and not to overcome them. This relates to another problem, namely that of defining the local economy and questions whether the current structure of the TEC system allows TECs to take a proper role in their local economy. In 1996, there were 81 TECs covering England and Wales in eleven regional groupings. A key issue here is the matching of function with space (geographical area), in other words over what spatial area will an administrative body be most effective in carrying out its operations? Bennett (Employment Committee, 1996) has argued that if TECs were designed to ensure that the training they promoted would reflect the industrial makeup of the local economy, in the current structure they may be either too large or too small to reflect their local labour markets. So, for example, in an area such as London, with a large population and effective transport links, the labour market is integrated and covers a wide area. However, it is served by a number of TECs, none of which can be said to serve a distinct labour market. In contrast, outside the cities, labour markets are far smaller:

*TECs which cover a large area are not able to get down to the local neighbour-hood or industry level where many unemployed people who need training are trapped* (para. 67)

Nor are the TEC boundaries and the structure of the TEC network ideal in terms of



their ability to engage in the local labour market and to collaborate as effectively as possible in local economic regeneration. Another issue concerns the TEC structure and in particular its local focus. The flexibility of the TEC system, which has allowed it to address the needs of local employers and has been one of its strengths, has also resulted in a lack of uniform standards and systems between TECs. A consequence of this is that employers and other bodies dealing with a number of different TECs have had to deal with them in radically different ways. Evidence submitted to the Employment Committee identified efficiency losses and significant additional administrative costs for national employers and training providers.

### **Equity and funding**

The Employment Committee has also addressed the issue of funding, focusing in particular on perceived problems with the principle of output-related funding for Training for Work. At the time the Committee was taking evidence TEC funding had been changed nationally following a pilot in seven TEC areas. Under the 'starts and outcomes' regime these TECs were, at that time, paid 25% of their training fee when an individual started a training programme, and the remainder on completion. This second element depended on the outcome achieved by the trainee, a 'successful outcome' being the trainee :

 $\Box$  obtaining a job;

□ becoming successfully self-employed;

 $\hfill \Box$  entering full-time education or training; or

□ completing a recognised qualification or units towards one.

A number of concerns were raised about this funding regime, in particular that the new system would prevent the most needy people in the training market from receiving good training - or any training at all - because training providers simply could not risk losing a large part of their fees if the trainees failed to gain their qualification or other outcome. Further, as noted by the Employment Committee:

'the new regime would tend to place people in jobs demanding fewer skills, rather than train them to higher levels; might reduce the range of training available, because training in areas which do not promise those kind of jobs is unlikely to be continued; and will favour the 'job ready' above those who really need help' (1996, para. 81).

One particular study addressed the issue of training providers 'creaming' by selecting the most 'able' of the unemployed who are likely to achieve a job or vocational qualification in a short period of time. This was carried out by Rolfe et al. (1996) and funded by the DfEE. It was aimed at identifying ways in which TECs might improve their success in achieving jobs and qualifications for disadvantaged groups in Youth Training and Training for Work. The specific groups of interest to the DfEE were ethnic minorities, disabled people and those living in areas of urban deprivation. These groups were chosen as the focus because their members' performance is consistently below that of trainees in general, particularly in achieving job outcomes. Interviews were carried out with key personnel in eight TECs. There were mixed feelings about the effectiveness of output-related funding in delivering positive outcomes for disadvantaged trainees. Some TECs preferred the 'old' system which was based on inputrelated funding. They argued that output-related funding worked against disadvantaged groups in several ways, amongst them:

□ training providers become more selective in their recruitment, so that those who were at risk of not achieving an outcome were denied access to courses;

□ a regime that is financially driven by meeting output-related targets for specified groups meant that those who were not targeted received lower priority, even when they had proven special or additional needs;

□ some TECs thought that output-related funding had reduced the financial resources available for pre-vocational training, considered essential for raising the success rates of disadvantaged trainees once they entered training for work.

However, there was not unanimity in relation to all these, with some TECs wel"Some TECs (...) argued that output-related funding worked against disadvantaged groups in several ways, amongst them:

- training providers become more selective (...);

- a regime that is financially driven by meeting output-related targets for specified groups meant that those who were not targeted received lower priority (...);

- (...) output-related funding had reduced the financial resources available for pre-vocational training (...)." "However, (...) some TECs welcoming output-related funding as it was felt to have narrowed the performance between disadvantaged trainees and others."

"(...) the various concerns discussed (...) were influential in modifying the funding regimes in both Youth Training and Training for Work; in Youth training, the output-related funding element has been reduced from 75% to 30% in most TECs and progression payments have been introduced in Training for Work."

"(...) TECs are 'effectively monopoly contractors with the Government' and as such 'comparatively immune to the competitive discipline of the private sector' (...). Thus, there are concerns about whether the mechanisms to encourage competitiveness that have been set up are adequate to meet their intended purpose." EUROPEAN JOURNAL

coming output-related funding as it was felt to have narrowed the performance between disadvantaged trainees and others. In these cases the TECs felt that the funding regime enabled them to target money at training providers who were most able to deliver results.

Turning to the providers themselves, the study by West et al. (1993) found considerable concern in relation to output-related funding for trainees with basic literacy and numeracy needs. Rolfe et al. (1996) also found that training providers were critical of output-related funding. They found that the greatest concern of providers was the incentive that the new system had created for them to become more selective in their recruitment of trainees. Those at higher risk of failing to achieve a qualification in the time allotted, or to enter a job, were those who were least likely to be taken on:

'They included older people, those with poor literacy and numeracy, and those who could be subject to discrimination in the labour market, such as severely disabled people and ethnic minority groups' (p.55).

It is likely that the various concerns discussed above were influential in modifying the funding regimes in both Youth Training and Training for Work; in Youth training, the output-related funding element has been reduced from 75% to 30% in most TECs and progression payments have been introduced in Training for Work.

### Other measures and their effectiveness

As part of the market reforms of the training system and to encourage 'best practice' and competitiveness, the performance of TECs is measured against a number of criteria and presented in a 'league table' format (the Inter-TEC comparison tables). There are, however, concerns about the tables which are not comprehensive as they do not provide long-term information on participants and they rely on employers to supply evidence that relate to trainees. Many of these fail to do so (Employment Committee, 1996). Moreover, TECs are 'effectively monopoly contractors with the Government' and as such 'comparatively immune to the competitive discipline of the private sector' (para. 127). Thus, there are concerns about whether the mechanisms to encourage competitiveness that have been set up are adequate to meet their intended purpose.

### The future of TECs

With the change of government, to Labour, in May 1997, there was a period of uncertainty about the future of TECs. But in December 1997 the government announced that there were no plans to make fundamental changes to the structure and function of TECs. However, the government's plans for the development of the English regions include the introduction of Regional Development Agencies (RDAs). One of the core functions identified for these bodies is to effect improvements to the skills base of the region, including developing a regional skills agenda and assessing the contributions of TECs towards regional objectives and promoting training for major investments. They will also have a specific role to work with regional government offices and TECs to monitor and enhance the TEC contribution to regional economic objectives (Education and Employment Committee, 1998). However, the relationship between RDAs and these other institutions needs to be clarified. The Education and Employment Committee drew attention to evidence from the Confederation of British Industry which recommended a significant slimming down of the government offices for the regions, and proposed that RDAs should, as far as possible, replace government offices as the channel of government funding for regional policy. The Education and Employment Committee report concludes with a very strongly worded warning:

'If Government Offices are to remain as funding streams for RDAs, TECs will have split responsibilities: on the one hand to RDAs in strategic matters, and on the other hand to Government Offices regarding contracting and performance. In fact, the situation may be worse in practice, as it is not clear that RDAs will have full authority over strategy. We believe that the proposed framework could be a recipe for confusion, duplication and frustration for TECs' (para. 30).



It appears that while TECs may be secure for the immediate future their role is becoming increasingly constrained to operating as conduits of funding for the training of young people, hampered by intervening tiers of bureaucracy and unable to act effectively in the area of local regeneration. Their longer term future looks less secure.

### Conclusions

Training provision in England and Wales has clearly been influenced by the introduction of 'market principles' into the system. TECs have been created and contractual arrangements established between them and the government. Contracts are made between each TEC and its training providers - private sector providers, further education colleges, individual employers and others. Additionally, further education colleges are no longer part of local government but are the responsibility of a government agency. The concept of a training credit can be seen as a 'quasi-voucher' giving a young person an entitlement to training. The principle of 'funding following trainees' is also evident. Finally, there is output-related funding for all main forms of government training provision - Youth Training, Modern Apprenticeships and Training for Work.

The studies that have been discussed above highlight various problems in relation to the market-oriented systems that have been set up, with concerns about the incentive mechanisms, and more in-

tractable structural issues relating to TECs and the local labour market. Major concerns about 'creaming' have been raised with the advent of output-related funding. Whilst this can be seen as an incentive for training providers to ensure that trainees succeed in terms of obtaining a qualification, for some trainees especially those most disadvantaged - it may not be appropriate as currently formulated (see Rolfe et al., 1996; West et al., 1993). The proportion of funding allocated on the basis of outputs, has recently been reduced and this may result in training providers 'creaming' less than they were doing. Additionally, in the case of Training for Work, the concept of progression payments goes some way towards meeting some of the concerns about output-related funding. Whether these modifications will be sufficient to deter training providers from 'creaming' is not, as yet, known. What seems clear is that there must be incentives for both TECs and training providers to train the most disadvantaged groups so as to facilitate their entry into the labour market. Without such incentives, problems of social exclusion are likely to be exacerbated as the least able will not be provided with the high quality training that they need.

Finally, it remains to be seen how TECs will evolve with the current Labour government and how they will co-exist with the new regional development agencies that are now on the agenda. What seems likely is that the market model will prevail in one form or another.

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# State intervention policies in the field of work-oriented additional training

### Introduction

In this article, additional training is defined as that part of continuing training which is work-oriented but does not lead to a formal qualification such as recognised diplomas or certificates. The purpose of additional training is:

□ to update the knowledge and skills, to enhance quality and productivity in the present job;

□ to support the implementation of changes and innovation in the organisation; and

□ to support professional and career development.

Most of this training is provided by the employer and called in-service training, but people also attend courses on their own initiative and at their own cost. Official statistics, however, often reflect only the training provided by the employer. Looking at the participation rates in different countries, on average, 25% - 40% of the employees participate annually in work-oriented additional training. Although the typical training events are relatively short, from three to five days, the large volume and continuity make it an important avenue of learning.

The role of the state in the field of additional work-oriented training is not as clear as in other types of education and training. The importance of publicly provided basic and further training, leading to recognised qualification is generally accepted. It provides general vocational or professional competences and skills to perform certain types of jobs in different work organisations. These competences and skills are practised in a variety of jobs and in carrying out tasks in an organisation. Similarly, it is accepted that the public authorities provide and finance retraining programmes for the unemployed in order to help them back to work. As the state is active in these fields of human resource development, one could argue that the state should also have an active policy in the field of additional training. Through selected policies important objectives could be enhanced, such as increased competitiveness, productivity and economic growth, as well as equality of opportunity, improved social mobility, and reduced income differences.

However, the major part of additional work-oriented training is in-service or employee training. It belongs to the management jurisdiction of the employer, it takes place during working hours, and the employer covers the costs. Such additional training is related to work assignments. Should the government have a say in this matter at all, and if so, which policy options should be used?

### **Government intervention**

Generally, governments can leave the area of additional training to market forces, or can intervene using some of the following policies:

- □ government production and control;
- □ regulation and standards;

□ income redistribution, e.g. to poor regions, disadvantaged groups;

incentives, e.g. tax exemptions, levies;
support measures, like grants and scholarships;

□ information to clients and producers.

Often many policies are used simultaneously. However, the following major

The major part of additional work-oriented training is in-service or employee training. It belongs to the management jurisdiction of the employer, it takes place during working hours, and the employer covers the costs. Such additional training is related to work assignments. Should the government have a say in this matter at all, and if so, which policy options should be used?



#### Table 1 : State intervention in work-oriented additional training: **Comparative analysis of different strategies** Operation Problems Strategy Maximal State provides training in Bureaucratic centralized Problems of adaptation 1. centrally guided institucontrol. and motivation. tions. Central curriculum planning. Mandatory participation every 4 - 5 years. State owns or supports in-Professional de-centralized Problems of prioritization 2. stitutions, which offer control. of needs. training free or for nominal fees. De-centralized curriculum planning. No obligation to participate. State gives norms about Problem of quality and Market control in stable 3. amount of training and standard distribution. demand condition. controls quantity. Arrangement is duty of employer. State gives grants to em-Market control guided by Problem of dependency on ployers and trainees to buy state facilitation. state aid. training on open market. Competition between producers, which are fee-financed. Minimal No state involvement. De-Market control in unstable Problems of fluctuation 5. mand and supply deterdemand conditions. and uneven distribution. mined by market forces.

policy patterns can be identified (see table 1). This article discusses the various impact of the different policies as observed by the author over many years of involvement in training. The article concludes by suggesting some general principles for the government intervention policies.

### Government production and control

This policy was used in centrally planned economies. As the state was the main employer of the labour force, it controlled the development of human resources directly. A good example was the Soviet training of higher administrative personnel. Training of ministers, assistant ministers and higher administrators was controlled by the Council of Ministers. The training was political as well as professional and organised by the Academy of National Economy in Moscow. The Academy also trained teachers for similar training centres in the different Soviet republics and produced curricula and training material for them. Participation was mandatory and financed by the state.

Similarly, the different ministries controlled networks of training centres in their respective sectors of the economy. Experts and managers were recalled for training every 4 to 5 years. The programmes were based on academic disciplines, and the structure of the centres reflected that of a university with 'chairs' and professorates. Standardization also applied to the physi-

"In market economies (...) the centralised strategy may be used in areas where there is only one employer. The armed forces have organised their training in all countries accordingly. In some European countries, such as Belgium, France, Spain, Italy and Greece, the national schools of public administration. established in the 1960s or earlier, play a central role in the training of civil servants. They organise pre-entry mandatory programmes ranging from 6 to 24 months for new civil servants (...)"

"With a policy of state support for institutions the training is totally, or to a great extent, centrally financed, but the production is decentralised. The state controls the volume and targets through budgetary means, by regulating the resources." cal facilities, and the centres were surprisingly similar in the various former socialist capitals. The layout and the standards were the same in the dormitories and classrooms in, for instance, Tallinn, Moscow and Bishkek.

In market economies as well, the centralised strategy may be used in areas where there is only one employer. The armed forces have organised their training in all countries accordingly. In some European countries, such as Belgium, France, Spain, Italy and Greece, the national schools of public administration, established in the 1960s or earlier, play a central role in the training of civil servants. They organise pre-entry mandatory programmes ranging from 6 to 24 months for new civil servants; some of them even recruit people for civil service careers. The schools are financed and controlled by the respective ministry for the civil service. (The schools also offer additional training courses, which are not mandatory.) Other European countries have opted for a decentralised strategy for the training of their civil servants (Zanghi 1994).

The advantage of a centralized system is that it offers systematic training for all categories of staff. It is relatively easy to reach a 'critical mass' and to transmit a message throughout the system. Uniform training supports shared values and a common culture and career advancement can be tied to training.

Problems are related to adaptation and motivation. Centrally controlled systems react slowly to changing needs and they create passivity and dependence on higher authorities. There may also be motivation problems, as participation is compulsory.

### State support for training institutions

With such a policy, the state owns, or supports, institutions, which offer additional training programmes free of charge or for a nominal fee. The analysis of training needs and the curriculum design and the marketing of the programmes is the duty of the professional staff of the institutions. There is no obligation to participate and the decision to attend is based on the assessment made of the expected value of the programme for the job. Many of the in-service training institutes established in western Europe in the late 1960s and early 1970s followed this model, for example the Civil Service College in the UK, established in 1970, and offered 3- or 4-week special programmes for civil servants. The annual report of the Director of the College was an indepth analysis of the state of the civil service and its training needs. (The CSC has been operating as an 'Executive Agency' since 1989, and the main concern of the director is now the financial results). In Norway too, the Ministry of Administration offered a 4-month programme in public management. In Finland, the State Training Centre designed a 12-week management-training programme for senior civil servants in the mid-1980s. All these programmes were financed by the central budget.

In addition, universities and vocational institutions established centres for continuing training. They were subsidised from the central government budget and offered courses for a nominal fee. The same model was also prevalent in the private sector: large companies had training centres or units attached to their headquarters and they offered their services free to the production units and departments.

With a policy of state support for institutions the training is totally, or to a great extent, centrally financed, but the production is decentralised. The state controls the volume and targets through budgetary means, by regulating the resources. The training curriculum is a matter for the board, management and professional staff of the institutions. In many countries, the social partners participate in the boards.

The advantage of this strategy is that relatively intensive and well-designed training programmes can be developed which would not be possible to sell under market conditions. Price is not an obstacle to participation and equal access can be offered irrespective of financial resources.

However, the absence of a price mechanism can also cause problems. Resource allocation and programme profile are based on professional deliberations. Training is 'production driven' but there is no 'market response' such as an indication



of training needs and priorities. A free service also attracts an excessive number of applications and gives power to the organisers to choose participants using whichever criteria they wish. Rigid funding does not allow institutions to expand services even if there is growing demand.

### Market model guided by quantitative norms

In a market model guided by quantitative norms, the basic idea is to create a market place for training services and to let market demand determine the production. The state may regulate the training market by giving quantitative norms about training or by setting general training obligations. The norms may concern certain professional groups, like pilots, teachers or health care personnel, who must participate regularly in training. The content of the training may not necessarily be regulated, and employers normally have a free hand to decide how to fulfil their obligations. For instance, in the Finnish laws on social services and health care services, there is a provision that personnel must attend additional training at least once in ten years. In the case of teachers, the annual additional training is included in the collective agreement between the employers and the teachers' union. The impact has been a steady demand for training in these fields and adequate funding by the employers. Consequently, universities and social and health institutes offer numerous programmes to these professional groups.

Some countries have included norms about training in their civil service law. For instance, in the Latvian civil service law of 1994, there is a responsibility to undertake in-service training. Consequently, the law stipulates, that 'the head of a public civil institution shall provide for civil servants to undertake in-service training for no less than 45 days in three years'.

An example of the general training obligations is the Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work. The Article 12 stipulates that the employer shall ensure that each worker receives adequate safety and health training. The Directive has been transposed to the national laws of Member States, and consequently employers have been training managers in control techniques and all employees in the general awareness of health and safety in the workplace.

Another option is to regulate the financial resources that should be used for personnel training. According to the 1971 French law on continuing training ('the Delors law'), firms with more than ten employees are required to spend a statutory amount on continuing training, or pay an equivalent 'continuing training levy'. Since 1993 the rate has been 1.5% of the total wage/salary bill. The firm's freedom to choose the providers, participants and courses is restricted in that the courses have to be recognised by the government and included in a continuing training plan. The firm must also comply with the requirements that 0.3% of the wage bill be spent on promoting the training of young people and 0.15% on 'individual educational leave' (Auer 1992). The administration of the training funds in France is carried out as part of the industrial relations system and works councils. However, according to Auer (1992), the central government plays an important role as regulator due to the general weakness of the unions.

Also in Denmark, the employers pay a training levy to finance the vocational education and training institutions. However, the state has handed over the decision-making power to the self-governing market oriented training institutions. Colleges are decision-makers in the framework of the legislation and they co-operate with the labour market partners.

The training levy has caused mixed feelings in many countries. In Germany, the Social Democratic government wanted to introduce a levy-system in the 1970s, but the unions dropped the proposal. They did not want government control in an area where they could have influence at the company level through the works councils. In Finland, the unions proposed a training levy in 1996 to enhance additional training and support employment, but the employers rejected the proposal immediately as an additional labour cost. In the UK, the levy system was abandoned in early 1980s, as we will see later on. However, according to Hillage's report

"In a market model guided by quantitative norms, the basic idea is to create a market place for training services and to let market demand determine the production. The state may regulate the training market by giving quantitative norms about training or by setting general training obligations."



"The advantage of introducing quantitative norms is that they establish a minimum level for the activity."

"The disadvantages are related to the costly bureaucratic administrative machinery needed no control and execute the funds. One can also question the justification for standard rates."

"In a market model guided by state facilitation, a price mechanism and competition between producers are the key elements of this policy. The government may (...) want to guide the training field (...) by giving grants to employers or individuals to buy services. Instead of giving the money to the institutes, the government gives it directly to the user of the training." (1996) on the British work-based training, there are voices demanding a return a to some form of a training levy.

The advantage of introducing quantitative norms is that they establish a minimum level for the activity. By statutory means funding can be secured and the share of the different partners be established. As all employers pay for training there is less temptation to poach trained people in order to save costs.

The disadvantages are related to the costly bureaucratic administrative machinery needed no control and execute the funds. One can also question the justification for standard rates. Training needs vary from case to case, and standardised solutions may not do justice to certain people. The norms may also be over-ambitious, as in the Latvian case, and the employers may not have the means to meet them. A steady demand may also contribute to lax quality. Finnish teachers often complain of the quality of their mandatory annual training days, which are included in the collective agreements.

### Market model guided by state facilitation

In a market model guided by state facilitation, a price mechanism and competition between producers are the key elements of this policy. The government may still want to guide the training field and ensure that important skills are being developed. This takes place by giving grants to employers or individuals to buy services. Instead of giving the money to the institutes, the government gives it directly to the user of the training. The client can then ask for tenders and choose the institute that gives the best value for money.

The Finnish government can provide an example. In 1987 the government decided to change its policy concerning financing work-oriented additional training. The principle was that because employers acquire the benefits from the improved skills, in the form of greater productivity, they must also bear the costs. State subsidies were gradually withdrawn from the institutes, and they were forced to levy fees to cover their costs. To alleviate the effects of the change, the government provided grants for employers and individual entrepreneurs who would otherwise have had difficulty in financing the training. In addition, training for the unemployed was changed accordingly in 1991. Government provides money via the central budget to the Ministry of Labour, which buys training programmes from numerous training institutes and universities for unemployed persons. The contracts are awarded after competitive tendering.

By providing aid the government can guide the supply and demand in the desired direction. The accession of Finland to the EU in 1995 created a considerable need for training in European integration and foreign languages. In 1994, the government established a fund of FIM 40 million to assist employers wishing to organise EUtraining for their staff. This injection into the demand side affected the supply, and there are now several institutions offering EU-training in Finland.

The advantage of the market model is that the decision is delegated to the client who also bears the costs. The person who pays can also demand highquality service and, if dissatisfied, he or she may go to another supplier. If state aid is directed at the buyer instead of the producer, it does not distort the competition between suppliers. It is to be expected that competition and fee-financing contribute to the quality and efficiency of the service production. By support measures, the government can guide supply and demand.

The disadvantages are related to the general problems of the market model, such as insufficient market information, unequal resources and capability to use services, and to the fluctuation in demand depending on the ups and downs of the economy. It is doubtful whether training needs fluctuate accordingly. The lack of information is reflected in a conservative demand pattern. Some organisers of MBA programmes complain that they do not dare to change the programmes because clients want to have the same as before. Clients do not ask for innovative programmes, and producers do not want to take risks and invest in innovative product development.

Another effect is that the supply tends to concentrate on topics with a large poten-

tial clientele. There is an abundance of programmes on the market which promise to develop generally valuable skills (e.g. computer skills, communication, languages, running meetings, writing business letters, time management, etc.), but hardly any programmes which enhance problem-solving in complex fields (e.g. as urban housing, traffic safety, prevention of juvenile crime, or economic revitalisation of disadvantaged regions).

The third negative effect, arguably, is the minimalisation of training. A typical programme seems to be a 3-day course, because employers do not want to pay for longer programmes. One may question the learning effects of such short training periods.

The negative effects have been softened by the means of state support. It is difficult to estimate when the support creates dependence on the aid. Perhaps the best policy might be to share the responsibility for the costs between the beneficiary and the state.

### Market control without state involvement

The process of commercialising and 'deregulating' the field of additional training started in the United Kingdom under Mrs Thatcher's Conservative government in the early 1980s. The British government abolished almost all the Industry Training Boards, which collected a training levy from firms to promote the training of employees. The government regarded the system as too elaborate and the administration too expensive. In addition, the employers tended to organise only the kind of training that was regarded as useful by the Training Board. The state has withdrawn from the continuing training of employees and left the initiatives largely up to employers and local groups. Within the civil service, the Civil Service College was converted to a 'Next Step Executive Agency' in 1989 and has since then been fee financed in market conditions.

Many governments followed the British model in the late 1980s. The new adult education policy of the Finnish government has already been mentioned. In Sweden and the Netherlands, the governments left the field to market forces in the early 1990s.

### Table 2. Main trends of in-service training and growth of GDP in Finland from 1984 to 1993

Percentage of employees who had received training:

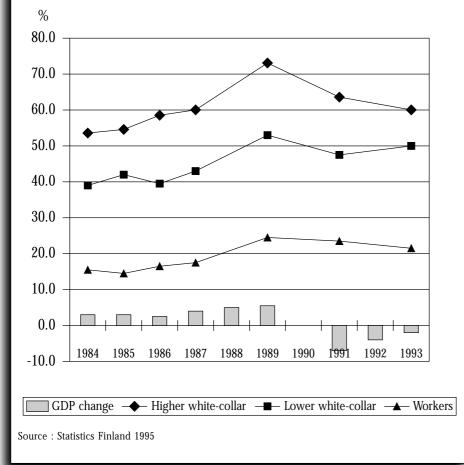
Gender and status group	1984	1985	1986	1987	1989	1991	1992	1993
All employees	30.6	31.5	32.7	34.4	43.8	41.7		41.4
- Men	32.0	30.9	34.0	33.9	42.6	39.0		39.6
- Women	29.1	32.2	31.3	35.0	45.0	44.3		44.1
Higher white-collar	54.0	54.7	59.6	60.4	74.5	64.0		60.0
Lower white-collar	38.8	41.9	39.1	43.2	53.1	47.6		49.9
Workers	15.6	14.8	16.8	17.8	24.8	24.1		22.5
Days of training per trainee:								
Gender and status group	1984	1985	1986	1987	1989	1991	1992	1993
All employees	7.4	7.1	7.0	6.5	6.0	6.8		6.2
- Men	8.5	8.5	7.8	7.3	7.1	7.7		7.9
- Women	6.2	5.8	6.1	5.6	5.0	6.0		4.8
Higher white-collar	8.1	8.5	7.8	7.9	7.4	7.6		8.1
Lower white-collar	7.4	6.2	6.9		5.5			5.8
Workers	6.2	7.6	6.1	5.9	5.4	6.3		4.3
Percentage change of GDP at constant 1985 price:								
GDP	3.1	3.3	2.4	4.1	5.7	-7.1	-3.6	-2.0
Source: Statistics Finland 1995, O	ECD 199	5						

Even the in-service institutes for civil service training have been privatised. In Sweden, the government closed down its central civil service training institute in 1992 and let the private suppliers take care of the market. In the Netherlands, the Government In-service Training Institute was converted to a private foundation operating in market conditions.

In the Federal Republic of Germany, government involvement in work-oriented additional training has always been low. It is limited to some examination requirements that can be reached by way of inservice training. The continuing training system is guided by the principles of the market economy. Firms are the most important providers of additional training, and they finance more than half the total volume. Their main task is to ensure their own success by enabling their employees to maintain and develop their skills (Weegmann 1992).



### Table 3 : The participation rate in in-service training by status groups and the change of GDP in Finland in 1984 -1993



"The advantage of the market model in the field of additional training is that the responsibility for the development of human resources is delegated."

"The most obvious problems are uneven distribution and market fluctuation." The advantage of the market model in the field of additional training is that the responsibility for the development of human resources is delegated. Management is fully responsible for this resource component, just as they are responsible for the other resources as well. Individual employees are also responsible for their own self-development and for their labour market value. As decision-making and financing are decentralized and as no public money is involved, no costly and time-consuming administrative controls are needed. This policy has been in fashion also for fiscal reasons as governments have wanted to curtail their budget deficits.

The most obvious problems are uneven distribution and market fluctuation. With free market conditions the differences between rich/productive sectors and poor/ less productive sectors tend to grow. The size of the company also plays an important role: The bigger the company the more training it tends to provide. It is also commonly observed that well-educated people are more active in additional training than less educated. The free market works against the objective of equality. Another problem is the fluctuation in demand according to economic cycle. Expenditure on training is often the first target when firms are forced to economise.

# The impact of different intervention policies

In assessing the impact of the different intervention policies, caution is called for when making international comparisons. The ways in which 'continuing training' or 'in-service training' are defined differ from country to country - in some countries apprenticeships are included into the statistics, in others on-the-job training is excluded, and so on. Nevertheless, the long-term trends may highlight some of the impacts that government policies have had. Let us take a look at two countries, Finland and France, in which the governments have had varying policies.

### **Finland: market forces**

The data about Finland are taken from a special labour force survey made by Statistics Finland. Since 1987 the special survey was done every two years. A sample of 6 900 people from 15 to 64 years of age were interviewed and the data generalised to regard the whole labour force. Three questions in the interview concerned the participation in employer financed training, and the main trends are identified (see Table 2). The change of GDP is given as an indicator of the economic performance.

A few trends can be observed in the Finnish data. The early period was marked by steady government subsidies to the training institutions and the growth of the participation rate was modest. In 1987 the policy was changed. Public funding was withdrawn and a market model was introduced. From 1987 to 1989 the volume of training jumped by 27% - it was a period of booming economy and low unemployment. Then the country went into deep recession and high unemployment.



Size of firm by staff	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
	]	Financial	participat	tion rate (	per cent o	of gross p	ayroll):			
10 to 19	1.13	1.14	1.15	1.30	1.34	1.31	1.29	1.29	1.51	1.61
20 to 49	1.20	1.20	1.22	1.36	1.42	1.43	1.46	1.53	1.63	1.80
50 to 499	1.46	1.51	1.54	1.72	1.88	2.02	2.17	2.28	2.33	2.50
500 to 1 999	2.02	2.12	2.24	2.44	2.71	2.92	3.19	3.33	3.45	3.57
2 000 and over	3.47	3.62	3.81	4.05	4.43	4.67	4.99	5.12	5.16	5.14
TOTAL	2.17	2.24	2.33	2.51	2.74	2.89	3.10	3.20	3.26	3.29
		Percenta	ge of emp	oloyees w	ho had re	ceived tra	ining:			
10 to 19	6.6	6.0	6.2	6.8	7.9	7.3	7.9	6.6	7.1	7.8
20 to 49	8.6	8.5	8.9	9.5	10.7	10.0	10.7	11.4	11.2	10.7
50 to 499	16.1	16.3	17.8	19.2	20.9	22.0	23.4	25.4	25.4	27.4
500 to 1 999	24.9	26.8	28.5	30.9	33.9	36.1	38.8	39.0	41.7	44.1
2 000 and over	38.2	39.5	42.6	44.5	49.3	50.7	52.9	52.1	53.1	53.2
TOTAL	22.3	23.0	24.7	26.2	29.2	30.1	32.4	32.3	32.9	33.2
		D	ays of tra	ining per	trainee (	7h/day):				
10 to 19	7.3	6.0	6.3	6.1	6.0	5.9	5.4	5.7	6.0	6.0
20 to 49	5.7	6.3	5.7	5.9	5.7	6.1	5.6	5.4	5.6	6.0
50 to 499	6.0	6.4	6.0	6.0	5.9	5.9	6.0	5.9	5.9	5.6
500 to 1 999	6.7	6.7	6.7	6.3	6.1	6.3	6.4	6.4	6.3	6.0
2 000 and over	7.9	8.3	7.9	7.7	7.6	7.7	7.7	8.0	7.7	7.4
TOTAL	7.4	7.4	7.0	6.9	6.7	6.9	6.9	7.0	6.9	6.4
		Percent	tage chan	ge of GDP	at consta	nt 1980 p	rice:			
GDP	1.3	1.9	2.5	2.3	4.2	3.9	2.8	0.8	1.4	-1.5

From 1990 to 1993 the unemployment rose from 3.5% to 19%. This development was reflected in the falling participation rates in training.

Market fluctuations affect the participation rates of the different status groups in Finland (see table 3). The booming economy, plus the market model, increased the training of all categories from 1987 to 1989, although most was of the higher white-collar employees. However, the highest status groups also suffered the most when the hard times came in the early 1990s. The market model seems to increase training inequality when there are good times, but it works to the contrary during recession. The average length of training per trainee does not show any systematic fluctuation, although there is a slight downward trend over the years. The annual average length of training was around 6 days per trainee, and 2.6 days per employee in 1993. As was expected, the training of the higher white-collar employees was more frequent and longer than that of the lower status groups.

### France: statutory minimum

In France, the law on continuing education has guaranteed increasing funding for this type of education, which is reflected in the steady increase in employees' participation rates (see table 4). From 1978 to "Market fluctuations affect the participation rates of the different status groups in Finland (...)"

"The market model seems to increase training inequality when there are good times, but it works to the contrary during recession."

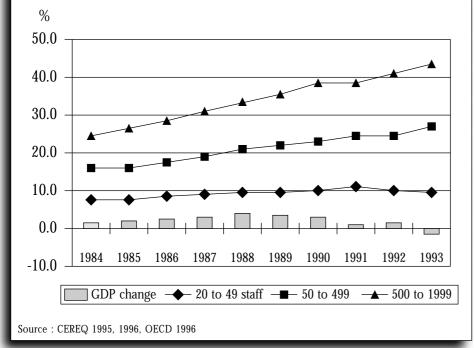
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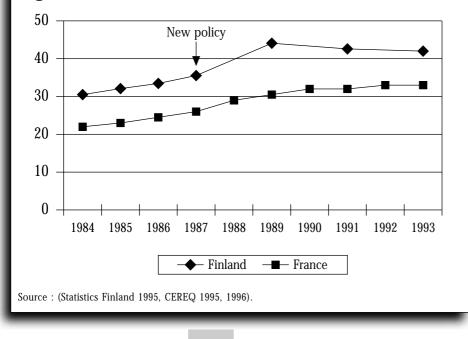
VOCATIONAL TRAINING NR. 13



### Table 5 : The participation rate in in-service training by firm size and the change of GDP in France in 1984 - 1993



### Table 6 : Participation rates of employees in in-service training in Finland and France from 1984 to 1993 (%)



1986 the statutory minimum rate was 1.1% of the gross payroll; from 1987 to 1991 it was 1.2% and since 1992 it was 1.4%, and since 1993 the rate is 1.5%. In fact, financial participation rates have been much

higher than the statutory minimum; in large firms two or three times higher. In this light, one can question the need for the statutory system and its administration if the actual performance of the firms has exceeded it through the years.

The French economy experienced strong expansion in 1988 and 1989 which was followed by slow output growth between 1990 and 1992 which turned into recession in 1993. GDP fell by -1.5% in 1993 and unemployment rate rose from 8.9% in 1990 to 11.7% in 1993 (OECD 1996).

In France, the participation in in-service training is not sensitive to the fluctuation of the economy (see table 5). Participation rates have risen steadily in all categories of firm sizes, but most in the biggest firms making the differential even wider between the smallest and biggest employers. The training performance of the French employers seems to be more dependent on the government statutory policy than the economic cycle.

### **Comparative observations**

As was said earlier, one should be cautious when comparing the national statistics. The definitions differ as do the survey techniques. However, it is interesting to look at the impact of the different government policies on the long term trends in Finland and France, for example on the average participation rates in both countries (see table 6). Economic performance fluctuated in both countries under the period of observation, but only in Finland was there a marked impact on inservice training activity. This is an effect of the government policy to let the market forces guide the demand and supply of the in-service training services. Similar effects can be observed in the UK where negative GDP growth rates of 1991 and 1992 were reflected in the declining inservice training participation (Hillage 1996). In France, the government has regulated the market by introducing minimum standards for the activity. This active policy may have been decisive for stability.

The average length of training per trainee is surprisingly similar in Finland and France, despite different policies. Both show a slight downward trend over the

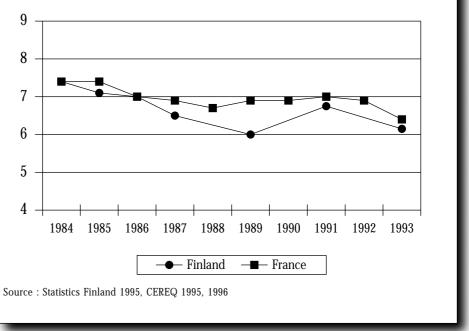
long term (see table 7). In both countries the average length of in-service training per trainee per year was about 6 days, and the average length of training per employee was 2.6 days in Finland and 2.1 days in France. As we have seen, this training input is distributed very unevenly between the high and low status groups and between large and small firms.

### When is government intervention wanted and needed?

The experience of this ten-year period has shown the strength and limitations of the market model in the field of additional training. The positive effects are related to the decentralised decisionmaking and flexibility: buyers and sellers of services meet without delaying administration; public money is not used; contracting and competition contribute to the efficient use of resources; and the price mechanism makes consumers more selective and careful in making decisions. The experience has also demonstrated limitations, such as increased inequality; 'mininalisation' of training inputs; and the concentration on learning skills rather than new conceptual models. The flexibility and dynamism of the market makes it almost impossible for the consumer to have reliable and comparative information about the supply and its quality. The consumer is often the target of impressive marketing campaigns with unrealistic promises.

Should the state intervene in this field and if so, in which way? The French policy to regulate the demand by establishing minimum standards has created a steady training market. However, the fact that employers have outperformed the statutory requirements through the years leads to the question, whether such regulation and the administrative control are at all necessary. The French policy has not been effective in one of its main objectives, that is, according to Mr. Delors, as quoted by Germe and Pottier (1996), that the law of 1971 attempts to allow 'every man and woman to cope with the predictable and unpredictable changes that take place in professional life ... and to play a part in the fight for equal opportunities'. The training opportunities are increasingly dependent on the size of the company, in France as in other countries.

# Table 7 :Days of training per trainee per year in Finland andFrance 1984-1993



The Finnish experience demonstrates that without government involvement training performance correlates closely with the economic performance of the firms. In times of recession firms are forced to economise and they tend to cut down development activities, like product development, marketing and training. The Finnish statistics show that the training of higher white-collar employees dropped dramatically, whereas the training of workers remained stable in times of recession. This phenomenon is obviously related to the nature of training provided to different status groups. The staff in higher level occupations have more access to training for promotion and other developmental non task-specific reasons, whereas the training in lower-level jobs aims at short-term and job-specific objectives (Hillage 1996). The statistics suggest that the employers tend to maintain the closely productivity related workers' training even in hard times, but are ready to cut down the development oriented training.

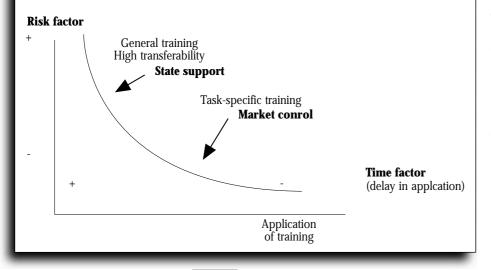
This behaviour can be explained in a number of ways. From the employer's point of view, training may have different objectives. Training can be focused "In France, the participation in in-service training is not sensitive to the fluctuation of the economy (...)."

"The training performance of the French employers seems to be more dependent on the government statutory policy than the economic cycle."



### Figure 8.:

### Relation between the risk factor and the time factor in in-service training and the proposed application of the state support and market model.



"There is no need for the state to intervene and support task-specific training. which leads directly to increased productivity and profitability. There are no high risks for the employers, and they should finance it fully. Market control is appropriate. However, state support may be needed in programmes that intend to develop new professional orientations and capabilities for complex problem solving and change."

on the person's current work assignments with the intention of enhancing quality and productivity in the present job. Training can also be an investment in the future to create human resource capacities to meet the future requirement. Training varies from specific training related to current tasks, to general training related to new conceptual models and scientific discoveries. The gains of the specific job related training can be quickly realised in the form of a steeper learning curve, whereas learning more general competences may or may not pay back the investment in a reasonable period of time. There is an investment risk related to the specificity and the time factors of training.

Another aspect is the transferability of training. The more specific the training is, the smaller is the learning transfer, i.e. the less useful the training is outside the learning context. And vice versa: the more general the training and the cognitive structures are, the more widely they can be used outside the learning context. General principles are transferable from one working context to another. Most widely applicable are new conceptual models and theories that explain the phenomena in the environment. These are also the ingredients of innovation and development. Learning such concepts is important for the firm and for the economy as a whole, but it also increases the labour-market value of the trainee. There is a risk that the employer loses the trained person to another employer (see table 8) through this poaching phenomenon (Auer 1994).

This model can be used to argue for the focusing of state support on additional training. There is no need for the state to intervene and support task-specific training, which leads directly to increased productivity and profitability. There are no high risks for the employers, and they should finance it fully. Market control is appropriate. However, state support may be needed in programmes that intend to develop new professional orientations and capabilities for complex problem solving and change. Such competences cannot be developed in short 2-3 day seminars. They need more intensive training and learning. Such programmes become expensive and they are difficult, often impossible to sell under market conditions and need state support to take place. State support for such programmes is as justifiable as state support for product development projects. So, how could such training be characterised?

### Training for complex problem solving and innovation

Competences which are needed for change are qualitatively different than those which intend to enhance productivity and efficiency in the present job (Venna 1992). Increased productivity is realised through faster learning of operational skills, through steeper learning curve of the sequences of operations necessary for accomplishment of the tasks in a job. The skilful performance of the job can be recognised by the smooth and determined execution of the necessary operations to produce a useful result that can be passed on to someone who needs it. Operational skills can be learned onthe-job through tuition and experience. Some of the skills, such as computer skills, languages and mathematical skills, are autonomous. They can also be learned outside the job context and are highly transferable from one job to another.

For development purposes the competence must exceed the task-specific level. Even modest process or product innova-

Efficiency in present

tåsks

Development of

professional praxis

cooperation

tions require a successful combination of two things: the understanding of the problem, and the knowledge that the information needed to solve a problem exists. Such information can be existing practice that can be applied creatively to the problem at hand. It can also be knowledge of new scientific discoveries that may open opportunities for development. In both cases, the new information is theoretical, it requires conceptual learning. Such learning may take various forms, including in-service training. However, it can be argued that in most professions the necessary up-dating of knowledge is poorly organised. Such learning is well catered for only in the medical profession. It is made possible partly with the state support, and partly with financing by private donors and employers.

For complex problem solving competences must be lifted from the professional level to the multidisciplinary level in order to understand the complex interrelationships of the object area of ones work. Many current problems, such us management of large organisations, environmental and protection and waste treatment, deterioration of urban inhabitants, social welfare for ageing populations, or energy supply, are too complex to be solved from only technical, economic or social angles only. Professional approaches must be combined for sustainable, economic and socially ac-

#### Table 9: **Directions for competence development** Multidisciplinary Operative Latest professional knowledge of knowledge and skill knowledge object area Complex problem **Object-area** solving in competence

ceptable solutions. Co-operation is called for, and in order to be able to co-operate, professionals need to have a common knowledge base. How this common orientation can best be developed is still an open question, but it is most likely that measures of this type would need state support in order to take place.

Professional

competence

**Task competence** 

In summary, it is proposed that the state support be used to raise competences from the task level to the developing edge of professional knowledge and practice, and from there to broader understanding of the complex interrelationships of the area of ones work (see table 9).

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# The alternatives for the financing of vocational training: the example of emerging countries in Latin America

Although the approaches taken to training in Latin America have differed, the universal trend is to regard it as a marketable good to which classic trade theories apply. As such, to a growing extent it is subject to competition. Consequently, the conditions have been met for the emergence of a training market, although this does not exclude some public funding.

### Introduction

For about a decade now, the emerging countries of Latin America have been launching vast economic and fiscal reforms that have helped to contain inflation, reduce public-sector deficits, open up the economy to the outside world and revitalise investment. As in Europe these measures, inspired by free market principles, have brought about profound changes on the labour-market and are leading to a redistribution of labour and jobs.

Long dominated by the public sector, the training programmes proved unsuited to, and unable to keep pace with, the rapid developments of knowledge and the new needs on the labour-market. Aggravating this lack of flexibility and innovation was the low level of private-sector investment in training. Training efforts have traditionally been financed out of government funds and by a compulsory levy on employers, which has been blamed for conflicting with the smooth operation of the training market.

In this context, Argentina, Brazil, Chile and Mexico have embarked on ambitious reforms of their education and training systems. The measures adopted have related to the method of funding vocational training and, more broadly, the role of the State on the labour-market. Nevertheless, even in Chile, the country that has advanced furthest on the liberal path, the State has retained its central role in funding training, and above all in creating a regulatory and institutional framework that would promote the emergence of a training market dominated by private operators.

Faced with the same kind of constraints and having comparable objectives, the four big Latin American countries have adopted a variety of approaches which provide a good illustration of the range of instruments that can be used to reform the funding of vocational training. The creator of a model inspiring the whole region, Brazil seems to have opted for gradual change, consisting of supplementing the compulsory levy on employers with a contractual approach. Argentina and Chile are adopting a more radical line, based on the establishment of a true training market. To this end, public funding is used for policy of State disengagement, based on decentralisation and privatisation of the provision. Lastly, in Mexico, modernisation of the training infrastructure and the labour-market is based on a reform of the certification system, adopting a competence-based model. The question of funding is relegated to the sidelines, the priority being to create conditions for transparency on the labour-market as a prerequisite for triggering off individual and company investment in training.

Designed to introduce greater flexibility and give employers greater weight, these various forms of regulation to an extent

### Table 1 Development indicators (Argentina, Brazil, Chile, Mexico)

Country	Population 1995 (in millions)	Aver ann grov (%	ual wth	Per capita GNP 1995 (\$)	Adult illiteracy 1995 (%)	Child in full educa 1995	-time ition	% of GNP allocated to public- sector education 1995
		1980- 1990	1990- 1995			Elementary (Net rate) (		
Argentina	34.7	- 0.3	5.7	8,030 (Greece: 8,210)	3.8	113 (gross)	77	4.5
Brazil	159.2	2.7	2.7	3,640 (Czech Rep.: 3,870)	16.7	90	45	N/A
Chile	14.2	4.1	7.3	4,160 (Hungary: 4,120)	4.8	86	69	2.9
Mexico	91.8	1.0	1.1	3,250 (Croatia: 3,250)	11.4	100	58	5.3

Sources: World Bank, Report on development in the world, 1997. UNESCO, World Report on Education, 1998. N/A: not available

reflect the current debate on the reform of the funding of vocational training in Europe. Some of the options tried out, moreover, are reminiscent of – perhaps inspired by – the measures adopted in one or other European country.

### Emerging from the crisis and new configuration of employment and earnings

### Converging but staggered developments

Argentina, Brazil, Chile and Mexico are the four main economies of Latin America. Developing in the 1930s, the pattern of growth established in those countries was based on the internal dynamics of replacing imports by domestic production. This strategy helped to create a true industrial fabric. From the 1960s on, certain imbalances made their appearance, in particular rising unemployment and slow progress in education. From the 1970s massive recourse to outside capital meant that the economies of the region were caught up in a spiral of debt. This trend led to galloping inflation, stagnant or even falling production and employment, and a serious loss of purchasing power.

In the wake of Chile, by the late 1980s all the countries in the region had relinquished the model of development based on State intervention and protectionism. Budget reform was the core of stabilisation measures, which imposed tight constraints on the funding of education and training. At the same time a set of recovery measures was introduced to accelerate growth, the particular aim being to make exports more competitive, following the path taken by East Asian countries.

In general the reforms have had beneficial economic effects, as testified by the resumption of growth, the marked reduction in inflation rates and the healthier state of public finances. But there are still great disparities between countries, both economic and in terms of human resources (see Table 1). Since 1980, per



### Table 2 Unemployment trends in Argentina, Brazil, Chile and Mexico (%)

Country	1980	1985	1990	1994-95
Argentina Brazil	$\begin{array}{c} 2.3 \\ 6.3 \end{array}$	5.3 5.3	7.5 $4.3$	18.6 4.7
Chile Mexico	11.8 4.5	17.2 4.8	6.5 2.7	5.6 6.4

*Sources:* Economic Commission for Latin America and the Caribbean. **Balance Preliminar de la Economía de América Latina y el Caribe 1995** (Santiago. December 1995) and **Annuaire des statistiques du travail** (Geneva, International Labour Office, various issues).

capita income has edged up in Brazil and Mexico, whereas it has risen considerably in Argentina and above all in Chile, which embarked on its reforms in the 1970s. Wealth as measured by per capita GNP reveals a dividing line. In 1995, Argentina was close to Greece according to this indicator, whereas the other three countries were closer to certain Eastern European countries (see Table 1). In addition to these disparities in level, there are differences in trajectory. Chile and Mexico achieved stability ten years ahead of Argentina and Brazil which, from 1990 to 1994, were still experiencing hyper-inflation. Today, due to its dynamic development, it is Chile that seems furthest ahead on the road to modernisation and economic progress.

### The consequences of adjustment for employment and earnings

Stabilisation and structural adjustment measures have everywhere taken the form of restructuring the labour-market. Economic reform, however moderate, has been accompanied in all four countries by the State's withdrawal from economic activities and the restructuring of the public sector. These moves have resulted in falling employment in production sectors and in a civil service often considered to be over-staffed (Salama, 1995 a). In industry, traditional sectors became obsolete and there was mass redundancy. Nevertheless, the impact of these measures on unemployment seems to have taken different forms in individual countries. Argentina stands out for its far higher rate of unemployment (see Table 2).

Today, especially as a result of monetary appreciation, labour costs are less competitive than those of certain Asian countries. If the trend continues, there is a risk to the viability of labour intensive activities, which means that certain sectors may focus more on leading-edge technologies calling for flexibility and sophisticated skills (Weinberg, in Caillods & Mosqueda, 1998).

The challenge of competitiveness is being met by regional integration, a process that started in the early 1990s. In joining the North American Free Trade Agreement (NAFTA). Mexico has dissociated itself from the Latin American movement that has fired Argentina, Brazil and Chile - as well as Paraguay and Uruguay - as members of the Mercado Común del Sur (MERCOSUR). Whatever the setting, however, the pursuit of a strategy of opening up to the rest of the world calls for improvements in labour productivity, and therefore in workforce skills as well (Hausman, Reisen, 1996). The figures for output per worker tend to show that although the ground lost since the 1980s recession has been made up, more than made up in the case of Chile, labour productivity was still far below that of an Asian emerging economy such as Taiwan (see Table 3).

Besides the imperative need to modernise production, emerging economies are faced with the problem of persistent poverty. The aftermath of recession and the rising cost of living have worsened the conditions for the most vulnerable households (Salama, 1995 b). Inflation control and revival in growth will probably help to combat poverty. The trends here vary from country to country and from one period to another. Over the past few years, the recession suffered by Argentina and Mexico in 1994 has increased the number of households living below the poverty line. On the other hand, the recent slowdown in inflation in Brazil and growth in Chile in 1995 and 1996 have had beneficial effects in reducing poverty.

From the late 1980s, the constraints imposed by regearing the economy and the shocks arising from the segmentation of the labour-market made heavy demands on the adaptability of the vocational training structures. A study published by the



ILO Regional Bureau (CINTERFOR, 1991) gives a searching analysis of the renewal efforts required and the progress in this direction made by each country in the region. The report highlights the important role of vocational training in new fields such as the retraining of employees who have been hit by the adjustments, the introduction of new technology, the entry into the working world of young people in difficulties, women's participation in the working world and the consolidation of production segments of the informal economy. In parallel, the sources of funding for training have been diversified by joint financing agreements with companies or branches of industry, the participation of local authorities and the introduction of mechanisms for recovering training costs (Ducci, 1991).

The crisis years followed by recovery have also had a major impact on the provision of training. Whereas the public sector or the employers (in the case of Brazil) enjoyed a virtual monopoly in the 1970s, today there is a veritable 'explosion in the provision of training' (CINTERFOR, in Caillods and Gallart, 1998). This movement has ensued from a combination of several factors: intervention by employment ministries in carrying out active measures to promote employment, the programmes introduced by the social partners, shop-floor training and the rising number of private training bodies. This new configuration of the provision of training has undoubtedly affected the question of funding.

In outline, originally the priority could be said to have been to construct a training system to serve industrialisation. To finance this, the introduction of a special levy on the wage bill seemed to be a good way of achieving the initial objective. A second concern was to encourage training in the workplace. Besides the statutory obligation, tax deductions and reimbursements for training reflected the desire to influence the attitude of employers with a view to fostering skills. Today, the establishment of a training market is restating the problem of funding. The allocation of resources is becoming a lever to activate the expansion, diversification and improvement of the provision of training by competing operators, increasingly in the private sector.

### Table 3 GDP per member of active population in employment, in 1990 international dollars<sup>1</sup> (United States = 100)

County	1950	1973	1992
Argentina	53	53	47
Brazil	21	29	27
Chile	44	43	49
Mexico	28	39	37
Spain	23	58	83
Hungary	22	29	27
Taiwan	11	26	60
United States	100	100	100

Source: Maddison, The World Economy 1820-1992, OECD 1995.

1) International dollars is a weighting scheme, devised by the IMF, derived from exchange rate conversions of national data to aggregate rates of output growth into regional and global totals. Local currencies are converted using purchasing power parities (PPPs).

### From statutory obligations to contracts: the case of Brazil

In Brazil the initial and continuing vocational training system was created as a result of the statutory obligation placed on employers to fund training. This measure, a complete innovation when it was introduced over fifty years ago, has led to a training apparatus controlled by employers with a virtual monopoly. Even though it has made an indisputable contribution to the development of training, this system is now the target of growing criticism. The main complaint is that such a mechanism works in favour of the large firms. The dominant position of this training apparatus lays it open to the charge of working against the public interest. Up to the present such charges have led to adjustments to the system rather than to its complete overhaul. In this instance, the employers' compulsory contribution to funding has been matched by a contractual measure granting an exemption to any enterprise undertaking to develop training under an agreement negotiated with a training body.

The Brazilian vocational training system is dominated by four large training bodies, each serving a particular sector (industry,

"In Brazil the initial and continuing vocational training system was created as a result of the statutory obligation placed on employers to fund training. This measure, (...) has led to a training apparatus controlled by employers with a virtual monopoly. (...) this system is now the target of growing criticism. (...) Up to the present such charges have led to adjustments to the system rather than to its complete overhaul. (...) the employers' compulsory contribution to funding has been matched by a contractual measure granting an exemption to any enterprise undertaking to develop training under an agreement negotiated with a training body."



### Table 4 Budget for training establishments - Brazil - 1994 (million US \$)

	SENAI	SENAC	SENAR	SENAT	Total
INCOME Statutory levy	273.2 (70.5%)	124.1 (43.8%)	32.6 (55.5%)	21.2	451.1
Total	387.3 (100%)	283.3 (100%)	58.7 (100%)	N/A	729.3*
EXPENDITUR	E				
Current	302.7	125.7	13.2	N/A	441.6*
Capital	41.0	24.2	3.2	N/A	68.4*
Total	343.7	149.9	16.4	N/A	510.0*
<i>Source:</i> Leite, in C <i>*: excl. SENAT</i> ; N/A: not available		rt, 1998.			

commerce, agriculture and transport). Depending on the sector, the provision of training is structured around SENAI (Serviço Nacional de Aprendizagem Industrial, set up in 1942), SENAC (Serviço Nacional de Aprendizagem Commercial, set up in 1946), SENAR (Serviço Nacional de Aprendizagem Rural, set up in 1991) and SENAT (Servicio Nacional de Aprendizagem em Transportes, set up in 1993).

The status of these bodies is fairly unusual: they are bodies under private law, administered by federations of enterprises but financed out of public funds derived from the statutory levy. The bodies are two-tiered in structure: national and regional. Although they come under the authority of employers' federations in the sectors they serve, they number representatives of the Education and Employment Ministries on their management boards. The only body to have a joint and tripartite structures is SENAR.

The regional tier enjoys considerable autonomy, especially as its resources and powers do not depend on the central level. This delegation of resources and powers is also enjoyed by the training centres, giving them broad freedom of action. The rationale of this policy is to an extent linked with the continental scale of the country and its federal political structures.

Most of the training provided is in the form of short or medium-duration courses. The average course ranges from 185 hours (SENAI) to 30 hours (SENAC). There is no equivalence of the qualifications with the educational system. Most of the trainees are young people (from the age of 14) and adults.

Besides these non-formal types of training, SENAI and SENAC administer a technical education apparatus, although this accounts for a relatively marginal part of their provision (1% of the total in the case of SENAI).

The funds used by SENAI, SENAC and SENAT come from a compulsory levy of 1% of the wage bill of companies liable to the tax. Large concerns - those with a workforce of over 500 - have to pay an additional contribution of 0.2% of their wage bill.

Although SENAR's resources are also funded by a special tax, the fiscal arrangements are different in that production is taken as the base and the rate is 2.5% higher. Unlike the other training institutes, SENAR devotes a substantial portion of its budget to financing social programmes. This broader scope and the relatively low proportion of agricultural workers are the reasons for the method of funding differing from that of the other bodies.

In 1994 tax resources constituted 44% to 71% of the four institutes' total income (see Table 4). The other sources of income were mainly the sale of goods and services and above all investment proceeds, in that the placement of substantial amounts of money generates a large volume of interest, especially when rates are high. When there was a fall in employment in the 1980s, this investment income formed a balancing reserve. When the crisis is at its height, preserving the training instrument should thus be attributed to this anticyclical effect of the financing system (Atchoarena, 1994).

But despite the undeniable achievements of the Brazilian system, its funding method



has in the event failed to bring about a radical change in the attitudes of employers, especially smaller employers, to training. The introduction of a contractual arrangement between the employer and the training body has in fact been an effort to remedy this inadequacy. The amendment has created a framework for negotiation within the statutory obligation.

The objectives of contracts signed between employers and training providers are many. Apart from the primary aim of improving employees' skills, the idea is to keep pace with technological change, to contribute towards developments in the organisation of labour and to match the training provided more closely to the employer's needs and the realities.

Under joint financing agreements, employers may be exempted from part of their statutory contribution (up to 80%). In return, an equivalent amount must be devoted to training in the workplace. In this framework, the training body helps to design and implement courses (40 to 80 hours) held in the workplace.

The rapid growth of such agreements is a demonstration of a measure of interest among employers. In São Paulo, where about 50% of industrial employment is concentrated, 43% of employers were partially exempted from the levy in 1993. It is difficult to measure the effects of this training efforts, but it should be pointed out that the productivity of labour rose by 25% between 1990 and 1993 (Amadeo, 1994). The training introduced was mainly in technology and safety at work, but also in basic educational attainments. It is a reflection of the shortcomings of the still very élitist educational system that such a high proportion of Brazilian manual workers are very poorly educated, some of them almost illiterate (see Table 1).

Ultimately the use of agreements will have made no more than a breach in the ordinary statutory obligation system. Even so this attempt at reform does reveal a more flexible attitude to the regulatory procedures for vocational training. It probably foreshadows a move to a new system with greater scope or incentives, especially for small and medium-sized firms, and encouraging the diversification of the provision of training. This tendency is somewhat reminiscent of current developments in certain European countries, particularly France, where the funding of continuing training is based on compulsory levies on employers. In France too, there is a debate as to the ways of moving from a system based on constraint to a framework leaving greater scope for contracts. The contractual policy instruments developed in France - undertakings to develop training, or contracts for forward planning studies - are other examples of departures from statutory obligations. They release from the obligation those employers producing a training plan negotiated with the authorities and their workforce. In return, the government gives a grant covering part of the training costs. In Brazil, as in France, such subsidiary measures foreshadow a new form of regulating training. The amendments introduced by both countries through recourse to agreements in the end are an expression of the search for an effective balance between statutory obligations and the voluntary adherence.

### The liberal option: Argentina and Chile

In contrast to the Latin American model of vocational training as developed in Brazil, Argentina and Chile have taken a different path towards organising financing and training. This is particularly true of Chile, which has broken away from its previous system, inspired by experience in Brazil, by privatising the body responsible for continuing training. INACAP (Instituto Nacional de Capacitación), which now operates as an ordinary training agency. In Argentina, on the other hand, vocational training has never been conceived as a system derived from a central institution (Gallart in Caillods & Gallart, op. cit.).

In line with the economic liberalism by which they are inspired, Argentina and Chile have adopted reforms designed to make the provision of training subject to the logic of the free market while reforming public funding by the introduction of competitive mechanisms. The two countries' training policies seem to be conceived along the same lines, but there are variations in the ways those policies have been



Table 5Vocational training in Chilean companies 1987-1993						
	1988	1989	1990	1991	1992	1993
No. of trainees	174,724	186,857	199,604	232,728	293,679	308,423
Trainees/ Employment total (%)	5.6	5.7	6.1	6.9	8.0	8.8
<i>Source:</i> Murillo. 19	998.					

"The funding of continuing training is thus based on two complementary principles: stimulating demand by means of incentives and placing the provision of training at the service of companies, with the release of funds for training being directly linked to the needs expressed by the employers. These provisions have replaced the employers' compulsory contribution which corresponded to 1% of the wage bill and was abolished in 1980."

implemented, especially as there are differences between the two training systems.

The particular feature of the Chilean configuration today is its institutional structure, which combines a technical education system coming under the Ministry of Education and a vocational training system administered by the Ministry of Employment through a specialist body, SENCE (Servicio Nacional de Capacitación y Empleo). Forty per cent of those in secondary education are in the technical stream, and about 20% of the 15-19 age group.

Although technical and vocational secondary schools come under the authority of the Education Ministry, they are run by the local authorities, non-profit-making associations and private undertakings. Between 1980 and 1993, the proportion of those in technical education who trained in privatesector establishments rose from 28% to 56%. But although the Ministry is gradually reducing its share of the direct provision of training, the financing of training is still the direct responsibility of the State, exercised by granting subsidies. Establishments run by the local authorities receive a grant for each pupil, whereas others are funded according to their pre-privatisation budget, plus an updating allowance. This difference in treatment has naturally introduced disparities in the operation of different categories of establishment. Training costs and quality also vary enormously, depending on the type of management body. In establishments run by the local authorities, unit costs are 2.5 times lower than in those run privately. The difficulties appear to arise not so much from decentralisation and privatisation as from the inadequacy of public funding. The search for additional funding has gradually led the technical and vocational schools to develop a continuing vocational training capacity as well.

Nevertheless, most continuing training is provided by the private sector in response to demand from companies. Each OTE (Organismo Técnico de Ejecución), a training body participating in the publicsector continuing training system, is Staterecognised and supervised by SENCE. Employers pay for training but can recoup their investments from a tax exemption of a maximum of 1% of their annual wage bill. The funding of continuing training is thus based on two complementary principles: stimulating demand by means of incentives and placing the provision of training at the service of companies, with the release of funds for training being directly linked to the needs expressed by the employers. These provisions have replaced the employers' compulsory contribution which corresponded to 1% of the wage bill and was abolished in 1980.

To take advantage of the measure, small firms can come together to form a group with a special legal status, the OTIR (Organismos Técnicos Intermedios). As federal bodies organised at sector or regional level, the OTIRs are intermediaries between the training agencies and employers.

There has been a rise in the number of trainees, but even so the provision of continuing training is small compared with what is needed (see Table 5).

Furthermore, despite their growing involvement, the majority of small and medium-sized enterprises do not avail themselves of the training support measure (see Table 6); in other words, in practice it has worked in favour of the large companies in a country whose economic fabric is made up mainly of the small units that account for most employment in Chile.

In addition to the measure designed to reinforce competences in the workplace, the government offers grants as part of active job promotion measures. For example, it finances agencies that plan and implement training for vulnerable target groups. In 1990, the Chilean Government launched a major programme of vocational training for young people, 50% funded by a loan from the Inter-American Development Bank. The initial fouryear phase is said to have involved 100 000 people. Under the project, there are also plans to strengthen SENCE's institutional and training capabilities for young people's integration.

As regards the effects of the new system on the provision of training, competition has reduced costs but often at the expense of quality. The lack of a national certification system has led to a plethora of paper qualifications, reducing transparency and hampering the smooth operation of the labour-market. The problem of certification has inevitably affected decisions on recruitment and training.

In Argentina as in Chile, vocational education accounts for a considerable proportion of the secondary education. In 1994, for example, the technical and commercial streams constituted 19% and 28% of secondary education. In Argentina, the growth in technical education is part of the wider process of reforming secondary education and its curricula. The new structure makes technical education one of the streams in the second cycle of the secondary school (Ministry of Culture and Education, 1997). The reform is not only of structure and teaching, but also of institutions, under the policy of decentralisation (Pueyo in Caillods & Gallart. op. cit.). While in Chile the process of decentralising is towards the communes, Argentina has chosen to strengthen the responsibilities of the provinces. In 1992, for instance, the network of technical educational establishments, formerly managed by CONET (Consejo Nacional de Educación Técnica), was transferred to the provinces and to the city of Buenos Aires. As in Chile, therefore, funding is still provided by the public sector.

The effort to rationalise the institutional framework continued in 1995 with the creation of INET (the National Institution of Technological Training) and the establishment of a national council for education and work within the Education Ministry. Most of the provision of vocational

### Table 6 Rate of take-up of tax incentive – breakdown by size of firm - Chile

Size of firm	Take-up of incentive (%)			
	1990	1991	1992	
Small (workforce of 1-49)	3.7	2.5	5.1	
Medium (workforce of 50-199)	11.8	12.1	14.8	
Large (workforce of over 200)	84.5	85.4	80.1	

Source: Murillo, 1998.

training in Argentina comes under the educational system, unlike the situation in Chile or the Brazilian model.

The reform will not be fully effective until the year 2000. Nevertheless, certain administrative difficulties, in connection with the economic and social context, have already become apparent. There have been problems with the funding of certain measures because of the climate of austerity, from which provincial budgets too have suffered. The increased spending necessary for modernising facilities and retraining teachers is causing difficulties. The reform has also come up against resistance from the people involved, especially teachers anxious to preserve their status and already suffering from a decline in their purchasing power. In this context, the final outcome of the reform is still uncertain.

Side by side with the renewal of secondary education, the Ministry of Employment has undertaken a vast programme of training for young people, on the same lines as in Chile. Launched in 1993, this measure is directed towards the training of 200 000 young people over a four-year period. Its US \$400 million has been negotiated with the Inter-American Development Bank. The reason for these efforts is the marked imbalance on the labour-market, the main victims of which have been the young (see Table 2).

Apart from the main objective of integration for young people, this programme is a means of building up a training market. The aim is to encourage the development of private bodies to diversify the training "(...) funding is still provided by the public sector." "For Mexico, the challenge is to find a new form of regulation that can impart more weight to the private sector and employers while mobilising complementary resources."



available and to revitalise technical education establishments. Although financed out of public funds, training will be the responsibility of bodies selected by competitive tender.

### From funding to certification: the Mexican approach

Caught up in the movement towards North American integration and boosted by the economic growth of the United States, Mexico is in the front-line of the battle for competitiveness. Its modernisation of the production apparatus will determine how Mexico integrates into the NAFTA. The challenge is to switch from a model based mainly on a fairly unsophisticated production system, using a low-skilled labour force, to more highly technological niche sectors. This progress to an era of flexible specialisation calls for sound technical skills among the workforce. Mexico, however, is still suffering from the lack of training of its active population (see Table 1). It is estimated that workers have on average had six years' education and that young people joining the labour-market today have had eight years' education, in other words up to the second year of secondary school.

The Mexican training system follows a fairly traditional pattern in that it is broadly in the public sector, with responsibility shared between the Education and the Employment Ministries. For a reform of this system, there should be both a more diversified provision and an increase in private investment in training. For Mexico, the challenge is to find a new form of regulation that can impart more weight to the private sector and employers while mobilising complementary resources. One of the ways of achieving this is to highlight market indicators and incentives - in other words to bring transparency to the acquisition of human capital. In Mexico, as in a growing number of countries, this concept has taken practical shape through the gradual adaptation of a competence-based system of training.

Its principle is to recognise the competences of an individual, however he or she has acquired them (through technical education, continuing training or learning on the job). This concept inevitably influences the provision of training, in that it is based on curricular modularisation. It must thus contribute towards flexibility and facilitate lifelong education. Modular-based certification is primarily a response to the objectives of adaptability and mobility. But modules also allow people to retain validated training components and to complete their certification later when they can and wish to do so.

This plan for the reform of vocational training is being moved forward by a public-sector agency, the CNCCL (Consejo de Normalización y de Certificatión de Competencia Laboral), set up in 1995 as part of a project for the modernisation of technical education and training in which the Education and Employment Ministries are jointly involved (Ibarra Almada, in Caillods & Mosqueda, op. cit.). By gradually building up a system for the evaluation and certification of competences, the Council hopes to stimulate the demand for training and to develop a training market.

The model being tried out in Mexico breaks occupational competence down into three components:

□ basic skills, i.e. general education as expressed in reading and oral and written skills;

□ general skills, i.e. abilities common to many trades and sectors of activity (ability to work as a team, plan, negotiate, etc.):

□ specific skills, i.e. abilities founded on technical knowledge, utilising technological terminology and associated with a given production function.

Backing up the market incentives, particular attention is being devoted to ensuring that small firms and the unemployed have access to training. As far back as in 1980, Mexican law was amended to guarantee the right to training for all workers. Employers are thus required to set up a bipartite committee to define training policy and plans. In spite of these statutory provisions, however, many firms have failed to set up such a committee, and very few have a training plan, especially in the case of small units.

The new 'integral quality and modernisation' programme (CIMO) is intended to

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promote training and quality in small firms by offering appropriate technical support. This arrangement is operated by 63 centres, which work in close association with companies, employers' associations and educational services at local level.

The programme of training grants for unemployed workers (PROBECAT) helps those wishing to do so to acquire modular training geared to their skills step by step. It is implemented through the National Employment Department's 99 offices, plus 51 mobile units. In 1996, 8 000 jobless people took advantage of modular training courses by this means.

The new concept of certification has been grafted onto a system of qualifications dominated by the Education Ministry. Although the initial training apparatus is currently being modernised, for the time being it seems to have been little involved in this approach (de Ibarrola, Bernal, 1998). In time the adoption of a certification system based on competences should lead to the harmonisation of provision, particularly in areas where technical education is now rigid and segmented.

The Mexican competence-based approach is still experimental, but it is a first departure from the previous arrangements, whose financing was mainly the responsibility of the State through the Education and Employment Ministries. The way ahead for public intervention is no longer to influence the provision of training but above all to create a propitious environment for investment in training. The key instrument for such strategy is not funding but rather the evaluation and recognition of competences, with the additional objective of a gradual withdrawal of public funds from the vocational training sector

The Mexican reform is reminiscent of the system of National Vocational Qualifications (NVQs) developed in the UK. There too the aim was to simplify the system and make it more transparent so that it operates better on the labour-market and so that training providers are more closely aware of the needs of employers and individuals. The introduction of NVQs thus reflected a change of strategy, with the priority being shifted to the results of training rather than the means. It is the same reasoning that is inspiring the modernisation of training in Mexico today.

### Conclusion: public intervention and the training market

According to the traditional Latin American model, vocational training used to be regarded as a public service. The arrangements were entirely directed towards the provision of training and little importance was attached to the demand. The imposition of a legal obligation to fund vocational training reflected this concept closely. Because of its monopoly position, the provision of training then had as its function to guide expansion in demand at the same rate as economic modernisation. This approach to the development and financing of training was feasible in a strong State with a more planned economy. When an autonomous method of growth was abandoned, the demands of structural adjustment brought about profound changes in the training systems, although the pattern varied from one country to another.

The approaches may have differed considerably - the Brazilian model in particular seems to have been more resistant but they share the same liberal inspiration. Training is universally tending to be regarded as a marketable product to which the classic theories of trade apply. As such, to an increasing degree it is subject to competition. This has created the conditions for the emergence of a training market, without this excluding public funding - as demonstrated by Argentina and Chile, the countries furthest ahead on the road to change.

Current reforms illustrate an evolution in the use of vocational training policy instruments. Whereas the authorities' traditional targets have mainly been the provision of training and funding, they now seem to be attaching growing importance to information, dialogue and the creation of an environment that will encourage private investment in training. This move is far from stabilised, especially in Argentina and Mexico.

Brazil, a pioneer in the development of vocational training, seems to have opted

"The Mexican competencebased approach is still experimental, (...) The way ahead for public intervention is no longer to influence the provision of training but above all to create a propitious environment for investment in training. The key instrument for such strategy is not funding but rather the evaluation and recognition of competences, with the additional objective of a gradual withdrawal of public funds from the vocational training sector."





for the most moderate route by merely amending the system. The gradual development of a contractual approach, however, testifies to its desire to create scope for dialogue within the statutory obligation. Heading beyond Brazil, this innovation raises the wider question of the role of the contractual approach in public-sector training policies.

Chile and Argentina are the most radical examples. The priority placed on decentralisation and privatisation is a complete departure from previous concepts. The reforms question the missions and above all the principles of government action (Peterson, 1997). They seem to be introducing new methods of regulation governed by market-forces. But while the provision of training is subject to the rules of competition, the funding function remains the province of the public sector.

In Mexico, the formulation of a qualification and certification system based on competences has brought a wind of change in the very manner of thinking about the funding of training. According to the new approach, the inadequate level of investment in training is primarily due to the shortcomings of the labour-market. A lack of transparency

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would mean that the providers, individuals and employers are unable to reveal their preferences in a rational fashion. By correcting this fault, the establishment of a national system of norms of competence should encourage individuals and firms to devote more resources to training, rendering the traditional types of fiscal intervention - obligation or incentives - obsolete. The issues in the debate are the same as those at the heart of the reform of training systems not only in the UK but also in Australia and New Zealand (Bertrand, 1997).

Latin America has embarked on a process of structural reform subject to the constraints of competition and budgetary orthodoxy. In the final analysis it is a landscape in many ways reminiscent of the situation of the more highly industrialised countries and, curiously, the European Union. The strategies for the reform of the funding of training in emerging economies (Argentina, Brazil, Chile, Mexico) illustrate the range of possible interventions. This diversity clearly reflects current thinking on public-sector training policies and is due to the problems of general application that arise in the quest for a fair and effective balance of obligation, contracts and the market.

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# Investment in continuing vocational training by enterprises



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### Introduction

In 1993, 43 % of the nearly 900,000 enterprises with 10 or more employees in the then twelve Member States of the European Union offered training courses to their employees. Over 15 million employees (28 %) participated in training courses and enterprises spent some 1.6 % of their total labour costs on providing these courses. These are some of the main findings from a survey of enterprises carried out under the FORCE Programme in 1994 and recently published by EUROSTAT. This article describes briefly the background to this survey and some of its key findings with respect to the investment made by enterprises in continuing training.

In enterprises, expenditure on training is treated as a cost of production. In other words, money spent on training is taken into account before the profits of the enterprise are calculated. For this reason it has not been thought necessary, until recently, for accounting conventions to be developed for defining and recording separately the expenditure by enterprises on the training. It is true that in France, continuing vocational education and training has been defined by law since 1971 and what comprises continuing vocational training for the purpose of the fiscal returns on training is defined in the French Labour Code. In other countries, however, surveys undertaken to measure investment in training have inevitably adopted concepts and definitions which are appropriate to their national requirements and institutional or cultural traditions.

Although, therefore, it is increasingly recognised throughout the European Union that training workers is an investment, rather than a current cost of production, international comparisons of this investment within the EU have not been possible until recently. Earlier attempts which tried to draw on national data sources have shown that the data are very sensitive to four factors; these are

 $\Box$  the definitions of training used;

- □ the sectors of the economy and the sizes of enterprises covered;
- □ the expenditures or costs taken into account;

 $\Box$  and how the expenditure is measured.

### The Continuing Vocational Training Survey

A survey carried out in 1994 sought to remedy this situation. The Continuing Vocational Training Survey (CVTS) was a sample survey of 50,000 enterprises carried out under the FORCE Programme in the then twelve Member States of the European Union (EU12)<sup>1</sup>. It was designed to represent all enterprises with 10 or more employees excluding those in the agriculture, forestry and fishing sectors. The public administration, health and education sectors were also excluded. Data are available from the survey for 20 sectors of the economy and for enterprises in each of six size groups. The purpose of the survey was to discover which enterprises offered continuing training in 1993, by size and sector, the types of training offered and the number and proportion of employees who participated in them. Initial training delivered through apprenticeships and dual-systems was not included in the survey. The types of continuing training identified were:

The continuing vocational training survey provided some insights on some of the factors that influence investment by enterprises in continuing training. This include the size of the enterprise, the sector it operates in, the sex and occupation of the participants, the subjects of training and whether or not the training is provided within the enterprise or purchased from outside.

1) The twelve Member States were Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Portugal and the UK.



## Table 1 : Types of training offered by enterprisesin 1993 and employee participation rates - EU12

Type of training per	centage of enterprises offering training	Employee participation rate (%)
Courses	43	28
Training in the work situation	38	20
Conferences etc.	34	8
Job rotation	14	4
Self learning	13	3
Any type	57	n.a

□ courses;

□ training in the work situation (including on-the job training);

□ attending conferences, workshops seminars etc.;

□ job rotation, quality circles;

□ open and distance learning including computer based learning.

For each of these types of training it was a requirement of the survey that activities should be included only if the primary purpose of the participant taking part in them was to improve or broaden their skills or knowledge or both, and that the activity should have been planned, as such, in advance. Practical experience could form part of the activity but work experience alone was not counted.

For training courses, additional information was collected on the gender and occupation of the participants in training, on the duration of the training, the time spent on training courses in different subjects, the type of external training providers used by enterprises and the costs of providing training courses. Enterprises providing training were also asked questions on how they planned and managed their training which included questions on whether they had training plans or budgets.

This article focuses on the information obtained about the provision of training courses. To put these into context, however, it is first necessary see how training courses compare with other types of training offered by enterprises (see table 1). Training courses were the most common type of training offered by enterprises with also the highest proportion of all employees participating in them.

Considerable variation was also found between enterprises of different size and in different sectors, as well as between countries in the proportion of enterprises offering training courses and the participation rates in them. Only 36 % of enterprises with 10-49 employees offered training courses compared with 92 % of those with 1000 or more employees. Among sectors the differences were more marked with training courses offered by over 80 % of all enterprises in the banking and insurance sector compared with 15 % in the textile sector. The proportion of enterprises offering training courses and the participation rates in them of all employees covered by the survey are shown was also calculated for each country (see table 2).

The investment made by enterprises on training courses will be affected by a number of factors. These include the sex and occupation of the participants, the duration and subjects of training and whether the training is delivered within the enterprise or purchased from an external trainer. It is beyond the scope of this article to examine these variables in detail but some summary data may be illuminating.

Overall, the differences between male and female participation rates in training courses were small - 29 % among male employees and 27 % among females. Much bigger differences were found between occupations. Over 40 % of managers, professional and technical staff participated in training courses in 1993. This contrasts with 34 % of clerical and shop workers and only 17 % of manual workers. In the EU 12 as a whole the average time spent on training courses per participant was estimated to be 45 hours in 1993, with only small differences observed between males and females and between occupation groups.

The time spent on training courses per participant varied considerably between countries, ranging from 139 hours in Greece and 84 hours in Portugal to 25 hours in Ireland. The high figures for Greece and Portugal may be explained by the fact that, although participation rates in these countries were low, many of the courses offered will have been supported by the European Structural Funds and will have been of longer duration.

Enterprises were asked to allocate the time spent on training courses between different subjects of training. Overall, in the then twelve Member States, over guarter of the time spent on training courses was devoted to training in the techniques used in the making of the goods or services produced by the enterprise. Nearly 16 % was concerned with either general management or human resource development and 13 % with data processing. Other subjects accounted for between 4% and 8 % of training, although over a fifth could not be allocated to individual subjects. The distribution of training time between subjects did not vary greatly between enterprises of different sizes.

In the twelve Member States there was an almost equal distribution of training time between internally managed courses and those purchased from external providers. But this ratio varied between countries. In Denmark nearly three-quarters of all training course time was provided through external trainers while in Portugal the same proportion was delivered through internal courses.

# Investment in training courses

In the CVTS, enterprises were asked to identify the following costs of training courses:

□ labour costs of the participants;

□ travel and subsistence costs of trainees when attending courses;

□ labour costs of trainers and personnel involved in training;

 $\hfill\square$  costs of premises and equipment used; and

□ fees to external training organisations.

In addition, enterprises were asked to include the net cost of any training levies paid minus any grants received from external organisations.

In most countries, the labour costs of participants accounted for between 40 %

# Table 2 : Enterprises offering training courses andparticipation rates by country - 1993

Country	percentage of enterprises offering training courses	Employee participation rate in courses(%)
Belgium	42	25
Denmark	79	32
Germany	60	24
Greece	13	13
Spain	21	20
France	48	37
Ireland	64	43
Italy	9	15
Luxembourg	50	25
Netherlands	46	26
Portugal	13	13
United Kingdom	58	39
EU 12	43	28

and 60 % of total training costs, fees to external trainers usually varied from between nearly 20 % to 30 %, while the labour costs of internal trainers and other training personnel accounted for around 15 % of training costs.

Exceptions to these broad patterns were found in the UK, which reported that 36 % of the total cost of training was due to the costs of internal trainers and other training personnel, while, in Greece, only 8 % of the costs were attributed to fees paid to external training organisations. Explanations of these exceptions serve to illustrate the difficulties in collecting and interpreting figures on the costs of training.

It seems likely that the high proportion of costs in the UK attributed to internal trainers and other training personnel is due to the fact that in the UK the questions asked in respect to this item of expenditure were more detailed than those asked in the other countries. It is thought that the UK questions could have helped enterprises to identify costs that may have been overlooked if more simple questions had been used. This would explain, in part, the high overall cost figures for the UK which needs to be borne in mind when making comparisons. The percentage of costs on fees to external trainers "Overall, in the then twelve Member States, over quarter of the time spent on training courses was devoted to training in the techniques used in the making of the goods or services produced by the enterprise."





### Table 3 : Costs of training courses as proportion of labour costs and per participant in courses – by country, 1993

Country	Training costs as % of labour costs	Training costs per participant (PPS)
Belgium	1.4	2065
Denmark	1.3	930
Germany	1.2	1216
Greece	1.1	1607
Spain	1.0	1450
France	2.0	1563
Ireland	1.5	764
Italy	0.8	1591
Luxembourg	1.3	1535
Netherlands	1.8	1775
Portugal	0.7	1112
United Kingdom	2.7	1539
EU 12	1.6	1420

# Table 4 : Costs of training courses adjusted for relative labour costs-by country, 1993

Country		l for relative labour costs PPS)
	Per Trainee	Per hour
Belgium	1441	35
Denmark	1052 1273	27 37
Germany Greece	2292	57 17
Spain	1300	26
France	1544	28
Ireland	883	35
Italy	1339	33
Luxembourg	1366	34
Netherlands	1798	27
Portugal	1265	15
United Kingdom	1805	45
EU12	1420	31

in Greece looks low even allowing for the relative small proportion of training provided by external trainers in that country. However, because a high proportion of training in Greece was supported by the European Structural Funds, it is possible that these payments may have been made direct to the external trainer thereby offsetting the direct cost paid enterprise.

Despite these qualifications, however, the CVTS reveals some interesting patterns. As already mentioned, enterprises throughout the EU spent some 1.6 % of their total labour costs on providing training courses, although there are differences between the Member States (see table 3).

The cost of training courses as a percentage of labour costs was highest in the UK at 2.7 % and lowest in Portugal 0.8 %. As mentioned earlier, however, it is thought that the high figure for the UK may be due to the fact that there are more costs associated with internal trainers and other personnel involved in training were identified. When this is taken into account by adjusting the UK figures to bring them more into line with those obtained for other countries the proportion of labour costs spent on training courses would be closer to the 2.0 % observed in France.

Because the costs of training were reported in national currencies, the figures on the costs per participant in (see table 3) have been expressed in Purchasing Power Standards (PPS). The PPS are agreed internationally and attempt to eliminate difference in prices between countries and variations in exchange rates. On this basis the highest expenditure per participant was found in Belgium. Closer examination reveals, however, that this cannot be due to the longer duration of training in Belgium, the occupational mix of the participants or to the type of subjects in which training was given. Also, the proportion of labour costs devoted to training in Belgium is not exceptional in fact it is slightly lower than the EU 12 average. Rather, the explanation appears to be found in the higher labour costs in Belgium. Using the PPS conversion an index of the relative labour costs per employee can be calculated using data from the survey. This shows that, taking EU 12 as 100, the index for Belgium is 143 with Italy next on 119. Figures for other countries include France (101), Germany (96) and the UK (85). The index of relative labour costs was lowest in Greece (70).

Using this index the costs per participant in each country, as well as the costs per

70



Differences between countries in the cost of training courses per participant remain but it can be seen that these are now largely explained by the differences in the time spent on training courses. For most countries the costs per training hour are close to the EU 12 average. There are three exceptions. The low figures for Portugal and Greece are probably due to the high level of support given to these countries from the European Structural Funds, while the high figure for the UK is due to the different approach used in collecting the cost data in that country as explained above.

The survey found that the proportion of labour costs spent on training varied quite markedly between enterprises of different sizes with the proportion increasing with the size of the enterprise (see table 5). This pattern is largely explained by the fact that the proportion of enterprises offering training also increases with the size of the enterprises. The costs per participant do not vary greatly between the enterprises in different size groups.

The investment in training courses varies much more between sectors. In the construction sector, for example, only 0.6 % of labour costs were spent on training courses. This is partly explained by the fact that many construction firms are small and therefore less likely to provide training. It is also possible that this sector may be able to rely more heavily on skills obtained through initial training such as apprenticeships and other forms of dualsystems. In contrast, the finance, gas electricity and water and post and telecommunications sectors all spent over 2.5 % of their labour costs on training in 1993 at a cost per trainee well in excess of the average for the EU 12 as a whole.

### **Training plans**

In the CVTS, enterprises providing training were asked whether they had training plans. In the EU 12 as a whole, 28 % of these enterprises said that they did with the proportion increasing from 21 % among those with 10-49 employees to 79

# Table 5 : Costs of training courses as percentageof labour costs and per participant in courses,1993 – by size of enterprise

Enterprise size	Training costs as % of labour costs	Training costs per trainee (PPS)
10-49	0.8	1281
50-99	1.0	1254
100-249	1.1	1166
250-499	1.4	1232
500-999	1.7	1380
1000 and over	2.3	1585
TOTAL(EU12)	1.6	1420

### Table 6 : Participation rates in training courses of enterprises with and without a training plan – by country

Participation Rates of Employees in Enterprises Offering Training Courses (%)<sup>1</sup>

Size group	Enterprises with training plan	Enterprises without training plan
10-49	44	33
50-99	40	25
100-249	41	30
250-499	47	33
500-999	46	42
1000 +	49	45
EU10	47	34
(1) Excluding Germany and	l Netherlands	

% among those with 1000 or more workers. In Ireland, two thirds of enterprises had training plans as did between 40 and 50 % in Greece, Italy and Portugal. In contrast only 15 % of enterprises in Germany reported that they had training plans. Such differences may exist because in some countries plans are needed before assistance is given from external sources such as the EU or through national support arrangements such as the levy/grant system in Ireland. It is also possible that in some countries, in which the training culture is more strongly em-



bedded and in which enterprises have more resources available, there is less need for enterprises to have training plans.

What is interesting, however, is that there does seem to be an association between whether an enterprise has a training plan and the amount of training offered (see table 6). In small enterprises particularly, the rate at which employees participated in training courses in 1993 was much higher in those with training plans. What the survey does not show, however, is which is the cause and which the effect. The action of drawing up a training plan may make the enterprise more aware of it's training needs and that, as a result, it offers more training. Alternatively, it may be that enterprises that do a lot of training anyway then find that they need a plan to help them manage it.





# Financing vocational education in Russia: issues and options<sup>1</sup>



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### Introduction

In striving towards the creation of a market economy and civil society, the Russian Federation is characterised by deep economic, political and social reforms. This process has repercussions for the education system, a system that helped transform Russia into an industrialised nation with a very strong sense of cultural identity. The challenge is to preserve the strong elements in the Russian education system, while at the same time introducing flexibility and adaptability to meet the demands of a market economy and of individuals.

In this respect the position of vocational education and training is extremely important. In a typical developed economy, vocational education and training caters to requirements of between 60% to 80% of the labour force.

Today, the Russian system of vocational education and training (see Box 1 for a brief description) faces many problems stemming from the era of central planning. The deficiencies in the system of vocational training during central planning have been explained elsewhere (Heyneman, 1994; ILO, 1996; OECD, 1997).

Under the old system one objective was to provide the majority of school leavers with formal, entry-level qualifications to prepare them for the world of work. There was little choice for young people other than the formal education system. Alternative routes to the labour market did not really exist and this resulted in a vast network of uniform schools, with too many teachers training too many people for too long. A second objective was to attain a close match between the training provided and the requirements of the job. This resulted in the 'vertical' organisation of vocational training, where sector ministries controlled the state-sponsored training for that sector. In the past, a typical basic vocational or technical school was built to prepare trained workers for a given enterprise. This was reflected in the training curriculum with students being trained in skills specific to a particular job performing a specific function. This led to the multiplication of vocational and technical training programmes.

Vertical training separated schools by sector, assuming, generally, that skills and people remained within their sector for life. This assumption might have been safe under the circumstances of a planned economy, but is no longer relevant in one based on market competition. To make a positive contribution to a market economy, the system of technical and vocational training needs to be adapted and become more flexible.

Two recent trends can be distinguished in analysing Russia's current vocational education and training system. The first is a disturbing one of sharply declining resources and financial support, worsening the overall conditions of the educational process and jeopardising the continuation of existing educational establishments. The second is a more positive trend towards educational diversification and innovation, strongly linked to the process of decentralisation and a move towards more school autonomy. With decentralisation, the sources of finance have become more diversified, but overall the system is still facing a serious resource crunch.

The Russian Government has played a major role in the financing of vocational education and training. Pressed by budgetary problems, it is seeking to develop arrangements to share the financing more widely, primarily with those that benefit from training: students and employers. In addition, the present mode of financing, based on enrolments or inputs, does not provide any impetus for change. A new budget allocation system, based on outputs, is required to trigger financial incentives to institutions to change their behaviour.

1) This paper was written while on assignment for the EU-funded project 'Addressing the Social Impact of Economic Restructuring and Privatization in the Russian Federation'.

CEDEFOP



### Box 1: A brief description of the Russian VET system

The Russian vocational education and training system can be divided into three parts: a **school-based system** for youth; an **enterprise-based training system** for workers; and a **retraining system** for unemployed adults.

Traditionally, the **school-based system** was the largest of the sub-systems, providing the majority of Russian youth with entry-level qualifications. It consists of two streams:

□ **basic vocational education**, provided in institutions that are called 'professional-technical schools', or PTUs; and

□ **technical secondary education**, provided in specialised higher vocational institutions, called 'technicums' or colleges.

Basic vocational education aims to continue general education and to promote specific vocational skills. Basic tuition is free. Traditionally, PTUs are under the Ministry of Education and obtain their funding directly from the federal budget. In 1996, the system comprised 4,200 educational institutions with a student population of 1.7 million (see table 1).

In contrast, technicums prepare students for middle-level specialists and technician occupations. Approximately 40% of the technicums are controlled and financed by sector ministries, while the remainder are under the Ministry of Education. In 1996, there were 2,600 institutions with a student population of almost 2 million (see table 1).

The **enterprise-based system** of upgrading and re-skilling workers has virtually collapsed. The Enterprise Law of 1990 eliminated the statutory requirement for enterprises to invest in training of workers. Prior to 1990, each enterprise was required to train and upgrade its workers. Having a training institute of its own was the norm for large Soviet enterprises. The process of enterprise restructuring, which started after 1990, has largely caused the demise of enterprise training.

A **re-training system for unemployed adults** did not exist prior to 1991. Retraining of the unemployed became the task of the Federal Employment Service and its network of regional offices spread around the country. It is interesting to note that the Federal Employment Service does not have any training institutions of its own, but buys training for the unemployed making use of the available material base of the PTUs and the technicums.

> This article looks at the way the vocational education system is financed in the Russian Federation and will show how the present system of financing perpetuates the old situation. It argues that a revised system of financing, based on performance indicators or outputs, could provide the building blocks for the gradual overhaul of the system, so that it becomes more labour market relevant and more efficient.

The present VET financing system will be discussed, taking into account both

budget finance and non-budget finance. The article then presents an alternative form of financing to provide incentives to schools to change.

### Financing vocational education and training

The financing of the vocational education and training system is divided between several levels. The system has become rather complex due to the decrease in budget allocations to the education sector because of the fiscal crisis, and the current trend of decentralisation in the Russian Federation.

Basic vocational training institutes receive financing from:

□ the federal budget, in 70 of the 89 regions of the Russian Federation

□ the regional budget, in the remaining 19 regions of the Federation (this comprises 15 regions that have opted out from the tax-sharing arrangement making them no longer eligible for federal grants, plus 4 regions, that on an experimental basis, have taken over the legal ownership of the vocational schools and the resulting financial responsibilities  $^2$ ).

Technical secondary education institutes are either financed from the regional budget (in case of the 15 "opted-out" regions), or financed from the federal budget, either through the Ministry of General and Professional Education, or through one of the sector ministries.

In principle, the financing of basic and secondary vocational education, either by the federal level or by the regional level, is based on student norms and the projected rate of admittance and graduation. The norms are meant to cover staff salaries, student meals and grants, as well as money for teaching materials, consumables, maintenance, renovation and utilities.

However, in 1996 the allocation for the basic vocational institutions from the federal budget was approximately two-thirds of the approved budget (see table 2). In practice, the federal budget only allocates

2) These four regions are: Novgorod, Nizny Novgorod, Samara and St. Petersburg city.

100% of the funds to pay for the so-called 'protected items', teacher salaries and student grants. Paying for meals, basic utilities, such as heating, lighting and water, have become highly problematic for vocational schools. Anecdotal evidence suggests that for the year 1997 approximately one third of the approved budget was transferred to vocational schools.

The Treasury of the Ministry of Finance transfers the funds to the regional Finance Departments, which co-ordinates with the regional Education Department how the funds should be distributed over individual educational establishments. Regional administrations are free to allocate additional resources to the schools from their own revenues.

There is considerable regional variation as the federal level cannot meet the norms. What a region receives from the federal level, ultimately depends on its past revenues. Regions rich in natural resources as financial donors to the centre with greater authority to negotiate a good deal, tend to receive substantially more on average per student. This contributes to the growing inequality of education expenditure across regions.

Nothing is budgeted for capital expenses or for the purchase of equipment. As a consequence, schools have been seriously under-funded. This was generally the case even before transition, making the vast system seriously out-of-date in terms of equipment, facilities etc.

How have schools survived under these dire financial circumstances? Several mechanisms have been adopted by school principals and regional education administrations to generate additional sources of revenue. These can be grouped under the following headings:

- □ administrative measures;
- □ the introduction of user charges;
- □ contract training; and
- □ production activities.

#### Administrative measures

Salary payments to teachers and staff are being delayed, utility bills for electricity, water and heating are not being paid, or the responsibility for paying these bills is

### Table 1a.Enrollment trends in basic vocational educa-tion (PTU) (budget and extra-budget funded)

	1991	1993	1995	<b>1996</b> (projected)
No. of institutions	4321	4273	4166	4214
No. of students admitted ('000s) - budget-funded - extra-budget funded	1306.7 1234.4 72.3	1106.7 1007.1 99.5	1121.7 928.2 193.5	1067.1 882.7 184.4
No. of students enrolled ('000s)	1841.5	1741.6	1689.5	1703.9
No. of graduates ('000s) - budget funded - extra-budget funded	1210.0 1140.7 69.3	1031.8 921.5 110.3	1034.1 840.6 193.5	955.0 784.9 170.1

Source: Ministry of Education

# Table 1b.Enrollment trends in secondary vocationaleducation (total of budget funded and extra-budgetfunded)

1001	1001	1000	1000
2605	2607	2612	2608
732	644	665	662
2202	1994	1923	1976
623	546	473	494
	2605 732 2202	2605     2607       732     644       2202     1994	2605     2607     2612       732     644     665       2202     1994     1923

1991

1991

1995

1996

Source: National Observatory Report on the Vocational Education and Training System: Russian Federation, ETF, Moscow, 1997

taken over by the regional administration (e.g. in Astrakhan). In addition, renovation and maintenance of the schools have been postponed, and any money received for this purpose has been siphoned off to other uses. Procurement of teaching materials is limited.

#### Introduction of user charges

Although the constitution makes basic vocational education free to the population, this does not prevent schools from offering a number of commercial courses through evening classes and short-programme certification courses. Popular programmes include computer classes, preparing for road tests (theoretical part), and courses in cutting and fashion design. "There is considerable regional variation (...) What a region receives from the federal level, ultimately depends on its past revenues. Regions rich in natural resources as financial donors to the centre with greater authority to negotiate a good deal, tend to receive substantially more on average per student."



### Table 2.Federal funding for PTUs in 1996 (in billion Roubles)

Expense item	Approved for 1996	Actually realized in 1996	% Realization
Payroll and related charges	996.3	996.3	100.0
Purchase of clothes	303.7	59.8	19.7
Food	1,056.3	512.7	48.1
Training expenses	35.5	-	-
Utility payments	306.2	276.0	90.1
Student stipends	211.1	211.1	100.0
Other transfers	199.0	35.3	17.7
Other expenses	107.1	3.8	3.5
Total	3,224.2	2,095.0	65.0

Source: National Observatory Report on the Vocational Education and Training System: Russian Federation, ETF, Moscow, 1997

Technicums have even more freedom and resources to exploit commercial activities (see *table 3*). First of all, they are allowed to accept fee-paying students in their regular programmes, albeit limited to a maximum of 25 % of total enrolments to avoid fee-paying students dominating the institution's training programme. Secondly, because of their more qualified teachers, they are in a position to offer commercial courses in high demand such as in accountancy, marketing, information technology, either as evening courses or as distance learning programmes. Thirdly, they offer short-term preparatory courses to would-be applicants in those subjects tested in entrance examinations.

It is interesting to note that schools have not yet started to charge for other services, such as board and lodging, meals, use of textbooks, tools and protective clothing. It is not clear if the concept of free education, as spelled out in the constitution, prevents charging for these services. Anyway, schools attach importance to providing free education to their students, who mainly come from poor families. The ability to pay for certain services, even at nominal fees, is rated as very low, if not zero. For this reason, schools attach importance to the meals they provide to their students.

#### **Contract training**

Contract training, or the design and conduct of a customised training programme at the invitation of a third party (e.g. enterprise or employment service) forms a third source of additional revenue. The impression is that direct contracts with enterprises have been quite limited. The facilitatory role between, on the one hand, the enterprise and, on the other hand, the training provider is being played by the regional Employment Service departments (ES). The ES engineered contract training for the unemployed, based on job guarantees given by enterprises. Training usually lasts between 3-6 months and is financed from the budget of the ES.

Some 50,000 unemployed people benefited from this kind of job-oriented training in 1996. This dropped substantially in the first half of 1997, to only a few thousand owing to the budgetary squeeze faced by the ES as a consequence of increased contribution collection problems.

It should also be noted that the ES has been selective with the signing of contracts with schools. Because of the strict labour market orientation of the re-training programme, only selected schools can offer a tailor-made programme geared to the requirements of the future employer. Not all vocational schools qualify. Some operate in a branch of industry for which there exists very little effective demand. Others have not yet adapted to the market environment, still conditioned by the habit of following and implementing only instructions from above.

#### **Production activities**

This is by far the most widely used mechanism to generate additional revenues. All schools employ some way to capitalise on the resources they have, either by selling the products the trainees produced in the course of the training programme or by engaging in outright commercial activities to produce saleable goods or services outside training hours. Some schools also have facilities (a banquet hall, an auditorium, a guest-house) that can be leased or rented to outsiders to host special occasions, or be exploited commercially. Most of the proceeds the schools obtain from these commercial activities are being retained by the school to increase their resources. In some regions, a small percentage of the revenues is being siphoned off to the regional Education Department. The advantage of these activities is greater financial autonomy for individual establishments, allowing them to cover up any deficits in the federal (or regional) financing, and to invest in new facilities and equipment (such as computer laboratories). The downside is that it can divert them from their main mission and distort their training agenda, a fact keenly acknowledged by many education administrators.

In conclusion, greater school autonomy and decentralisation have diversified the sources of finance for schools, but overall they have not made up for the deficit created by the reduction in federal (or regional) grants. Moreover, it has resulted in greater inequality between schools. The majority linked to one of the old industries are in a dire financial situation. A minority, in particular technicums that have been re-labelled 'colleges', have been extremely successful in generating additional revenues, to a point where the federal (or regional) grant is a minor share in their total budget. The best colleges now only depend on 20 % of their revenue from direct grants from the state.

### Survival of the system

Two questions arise: why did the system of vocational schools not collapse in spite of acute financial cuts and weak links with enterprises? Why has the system largely remained intact?

The answers can be grouped under three headings:

- □ long-standing traditions;
- □ system inertia;
- □ demand-pull factors.

### Long-standing traditions

In Russia, students with lower-abilities (from problematic and poor families) will eventually end up in the system for vocational education. There existed, and still

# Table 3.Commercial training in secondary vocationaleducation institutions, 1994 - 96

	1994	1995	1996
Admittance - total	629.6	664.6	662.0
Including on commercial terms	56.8	121.2	127.9
% admittance on commercial terms	9.0	18.2	19.0
Admittance - daytime courses	450.9	477.6	480.0
including on commercial terms	33.3	68.9	74.0
% admittance on commercial terms	7.4	14.4	15.4
Total number of students	1,870.9	1,923.3	1,975.8
including on commercial terms	119.3	228.4	282.3
% students on commercial terms	6.4	11.9	14.3

Source: National Observatory Report on the Vocational Education and Training System: Russian Federation, ETF, Moscow, 1997

exist, few alternatives for them. The social motivation is to keep potentially troublesome youth off the streets and into these institutions to avoid anti-social behaviour. This is reinforced by the other Russian tradition: to obtain a vocational qualification before entering the labour market.

#### System inertia

The institutions themselves have every incentive to keep the schools full and maximise the budget they can extract from the federal and regional level. By having more students, budgets will increase and the jobs and incomes of the teaching staff will be protected.

#### **Demand-pull factors**

Paradoxically, there has been a continuous demand for vocational education, even during times of enterprise downsizing. While old professions have become obsolete, new ones have sprung up. Parents and students alike realise that they can improve the chances for meaningful employment by acquiring vocational skills in demand in the labour market. The rules of the game have changed and a number of schools have started to re-orient their programmes and made them more labour market responsive. Students have been quick to pick up the signals the labour "(...) greater school autonomy and decentralisation have diversified the sources of finance for schools, but overall they have not made up for the deficit created by the reduction in federal (or regional) grants. Moreover, it has resulted in greater inequality between schools."



"Pressed by budgetary problems, the federal government is seeking to develop arrangements to share the financing more widely (...) by promoting (...) multi-channel financing, (...) transfer part of the expenses of vocational education to the users of education, (...) multi-level financing, (...) transfer the costs of vocational education to the lower tiers of administration (...)" market is sending out and selecting the schools with the best opportunities. This can be dubbed the labour market motive.

At the risk of painting a caricature, it can be said that during the first five years of reform the two first motives have been the driving force in keeping the system of vocational education largely intact, albeit at a very much reduced rate. In the coming years, the system's survival will ultimately depend on its efforts to be more responsive to changes in the labour market, to make its final product more attractive for employers and students alike. Only this reversal of priorities can make the system healthy in the foreseeable future.

### Financial policy issues and options

The federal government in the Russian Federation has so far played a major role in the financing of vocational education and training. Pressed by budgetary problems, the federal government is seeking to develop arrangements to share the financing more widely. It does so by promoting what it has dubbed multi-channel and multi-level financing. With multichannel financing, the federal government attempts to transfer part of the expenses of vocational education to the users of education, namely students (or their parents) and enterprises. With multi-level financing, the federal government tries to transfer the costs of vocational education to the lower tiers of administration, in particular the regions.

An issue that has received rather less attention from policy-makers is that the present mode of government financing, based on enrolments or inputs, provides no impetus for change. Despite a larger envisaged role for students and enterprises in the financing of VET, it is obvious that for a long time to come most resources will need to come from the government.

From this perspective, an alternative is to use the available resources more efficiently and build a new *budget allocation system*, based on performance or outputs, that will trigger financial incentives to institutions to change their behaviour. The various options under consideration are discussed.

#### **Multi-channel financing**

Vocational training should not be seen as the public's interest alone. The benefits of vocational training also accrue to the individual undergoing training, because the student can expect higher life-time earnings after training, and to employers who hire trained workers, because they will increase productivity and profits. Thus financing of vocational education should in principle also involve others than the state.

The acceptance of this argument in the Russian context leads to the following question: How much of the responsibility to contribute to the cost of education should be transferred to the users of the training: students and employers?

The contribution that students should make is a difficult question in today's Russia. It is widely perceived that individuals have no capacity to pay for schoolbased vocational education. With 22 % percent of Russians (32 million people) living below the official poverty line (defined as a minimum subsistence level of 349,000 Roubles a month - \$ 70), there is a lot of truth in that.

On the other hand, a multitude of commercial courses exist that attract individuals who are prepared to pay a (nominal) tuition fee. These courses can be extracurricular (e.g. English, information technology), preparatory (to pass certain entrance examinations), or modular (management, marketing, accounting, catering, hairdressing, fashion design etc.). Some of these courses are provided by PTU's and technicums, many are provided by private training establishments. This system of fee-paying education proliferates not only in Moscow but also in the regions.

Coupled with the fact that a large number of technicums do attract fee paying students for some of their regular programmes, this means that among segments of the population there is certainly a capacity and willingness to pay for vocational education. More so, if it im-



proves their chances to secure a better paid job.

Schools have not yet started to explore this avenue because of the constitutional obligation to provide free basic vocational education. But an option for the future might be to increase the student contribution in the financing of vocational education.

In many countries employers play an important part in the funding of vocational education. No longer so in Russia. Their statutory requirement to invest in training has been scrapped. This coupled with the economic decline many enterprises are facing, has led them, more or less, to stop investing in training.

So far, changes in vocational and professional education in Russia have bypassed employers' involvement to a large extent. Except for the involvement of the Federal Employment Service, at some stages, the decisions have merely been taken by educational decision-makers. If Russia intends to reform its system of vocational education and training and make it more labour market responsive, it will need to develop an effective strategy that involves major employers, businesses and their representative organizations.

One possibility would be to expand the education tax of 1% - 2% on enterprise payrolls or profits which a number of regions have instituted. A proportion, or all of the proceeds of this tax could go into a special fund earmarked for financing (part of) the regions costs for the vocational education system. The fund could be administered on a tripartite basis with representation from employers, employees and the Government. A legal obligation on employers to contribute to the training fund, would encourage employers to take an interest in the reform of the system.

Hungary has created such a "Vocational Training Fund", together with the legal obligation imposed on companies to spend 1.5 % of their payroll on training. It is not necessary for companies to remit the full 1.5 % to the Fund. They are allowed to finance their own courses as well as provide direct assistance to vocational schools. However, the dire economic situ-

ation in many Russian regions prevents the widespread creation of such funds in the immediate future. Russian enterprises are responsible for 85% of all tax revenues, in sharp contrast to the norm in EU countries. Because of these high levels, compliance is low and enterprises employ many strategies of tax evasion. Adding an additional tax on enterprises in this environment, is not guaranteed to lead to impressive results. The creation of these funds will need time and better economic conditions, as well as a reformed tax system, lowering the overall rate on companies.

#### **Multi-level financing**

The call for multi-level financing is triggered by the federal government's requirement to reduce the state budget substantially. Such a reduction can be achieved simply by reassigning government functions among different levels of government. The responsibility for the financing of vocational education, up to the present a federal responsibility, could be delegated to the sub-national governments, or the regions. The question is where will the regions find the revenue to meet the new expenditure assignments.

Ideas of this nature were floated during 1997. However, expenditure assignments need to be quantified and resource requirements established before expenditure can be shifted down.

This is a serious issue that needs urgent consideration. From the perspective of public finance theory, public services whose benefits are reaped within local boundaries should be provided by local government. This is certainly the case with vocational education, where local communities and local businesses benefit from the existence of vocational schools. Educational policy-makers at the federal level thus have a point in arguing to shifting vocational education and training expenditure assignments to the regions.

However, before doing so, a very important first step is to quantify the expenditure responsibility for vocational education and training in each region and to check if these expenditures are matched with available regional revenues. The federal record here is far from perfect, since "In many countries employers play an important part in the funding of vocational education. No longer so in Russia. Their statutory requirement to invest in training has been scrapped. This coupled with the economic decline many enterprises are facing, has led them, more or less, to stop investing in training."

"The responsibility for the financing of vocational education, up to the present a federal responsibility, could be delegated to the sub-national governments, or the regions. The question is where will the regions find the revenue to meet the new expenditure assignments."





"(...) the budget process in the Russian Federation has been dominated at all stages by the logic of a passive distribution of available resources among existing structures and services. An altogether new logic is required: a logic where structures and services compete for scarce resources, triggering an adaptation of those structures to new policy priorities and resource constraints."

"The principle is that schools receive their funds as revenues for rendering services in the market while the education department is the major client. Output can be defined in many ways, but best is perhaps best linked to 'formal' outputs which are embedded in the educational structure."

3) not only in education, but in all sectors.

many social protection expenditures have been shifted down to regional and local governments without addressing the question of matching local revenues.

The intergovernmental financing issue in Russia is complex and still evolving. The re-allocation of expenditure assignments among different levels of government is one side of the coin, the sharing of tax revenues, tax-rate setting and equalisation formulae between high-income and lowincome regions is the other. These issues have not yet been settled, and this makes it difficult to shift VET expenditure responsibility to the regions.

On an experimental basis, 4 regions have accepted the responsibility to finance the VET system from the regional budget as from 1997 onwards. In return, they have obtained a promise from the Federal Government that they will receive the full norm-based financing over 1995 and 1996. This experiment will be worth evaluating, although it needs to be said that the regions participating in this experiment are industrialised and relatively betteroff than the average.

#### A new budget allocation system

Up to the present, the budget process<sup>3</sup> in the Russian Federation has been dominated at all stages by the logic of a passive distribution of available resources among existing structures and services. An altogether new logic is required: a logic where structures and services compete for scarce resources, triggering an adaptation of those structures to new policy priorities and resource constraints.

In the West, the understanding has grown that the method of budget allocation could contribute largely to desired institutional behaviour. In other words, by using the right method of budget allocation, incentives for aspired behaviour by education establishments can be passed on and change can be brought about.

A supply-driven budgeting system that is based on per capita student expenditure norms and enrolments (inputmodel), does not allow education authorities to re-allocate resources. Such a system is inflexible. It makes it difficult to reward schools that offer innovative programmes and penalise schools that are not adept at changing their programme. It tends to reinforce the status quo. So long as schools manage to attract a minimum number of new enrolments, their existence is not threatened and they can continue to operate as they did before.

In view of the transition of the Russian economy, from a centrally planned to a market economy where individual producers and consumers make decisions, the present system of expenditure norm financing is hindering necessary changes in the school-based system of vocational education. Changing the way the federal (or, as appropriate, regional) level is financing vocational education could send important signals to both schools and students.

How can a financial system be designed to support this reversal in priorities? An alternative would be the adoption of a performance-oriented model or outputbased budget system. In this model the sum of money available for vocational education and training is directed towards the actual output of the system: the number of students that actually graduate.

The principle is that schools receive their funds as revenues for rendering services in the market while the education department is the major client. Output can be defined in many ways, but best is perhaps best linked to 'formal' outputs which are embedded in the educational structure. In this sense, output is narrowed down to students that receive certificates after completing a certain course, or receive their final diploma.

The schools could be given the authority to spend the resources from government grant as they see fit, giving them flexibility to decide, for example, to top up teacher salaries, or buy more equipment at the expense of other budget lines.

The funding system could be designed along programme lines. This would allow the education authorities to stop the flow of money going to outdated, irrelevant courses and trigger the re-allocation of resources to innovative, more labour market-oriented courses.



In this programme-oriented budget model, schools compete for students based on the course they follow. Courses are divided into groups on the basis of the programme costs. All training programmes fall into one of the programme groups which each have a different grant per student. Schools could receive the grants once a year or several times a year based on the auditing reports presented to the education authorities. If students drop out, the total amount of grants shrinks automatically. In effect, the model now becomes a combination of input-financing and output-financing.

The price paid for each student would be determined taking into account the total sum of money available for the sector and the cost of education (teachers, buildings, equipment etc.), diversified by programme. Programme groups will thus have different unit-costs. Such a system has been pioneered in Denmark and the Netherlands and could form a model for the Russian authorities.

### Conclusion

The Russian system of vocational education and training is in disarray at present. The old way of doing things is clearly deficient in meeting the requirements of a market economy. The system risks becoming less and less relevant without major innovation and change.

Fortunately, many individuals employed in the system are aware of this risk and the enormous task which lies ahead of them. At local level, there is evidence of many worthwhile initiatives attempting to re-orient the system. However, there is often an undercurrent of trying to preserve as much as possible, while waiting for the good times to return. It has not dawned on some that the good old days will not return.

The federal government has gradually been reducing its allocation to sectors, creating structural deficits that will be hard for regional governments to make up. This trend is likely to continue, with, in a few years, a complete transfer of responsibilities to regional budgets. Once regions carry the financial responsibility for the vocational education and training system (and have the legal ownership of the underlying assets land, buildings, equipment etc.), the power for the overhaul of the system, tuning in to the demands expressed by the emerging private sector, will be vested in the regions.

Here lies the crux of the problem. Many regions do not yet have a business sector to speak of, much less one that is making new investment. Nonetheless, the region is best placed to undertake the role of reorienting the system, to review the number and distribution of vocational schools, to take difficult decisions about closing or merging courses, and to stimulate the opening of new ones. The region is also more knowledgeable about the local business environment and can quickly promote and invest in new programmes, provided that these new programmes meet the required education quality standards.

While starting with this task, it is inevitable that regional governments will require greater cost sharing among direct beneficiaries: students and enterprises. However, it can not be assumed that cost sharing will be achieved automatically. The public's perception of vocational education and training courses is that of a rather mediocre education that hitherto has been for free. Why start paying for it?

(Future) cost sharing can be sold if this includes (a promise for) higher quality education which will require a concerted and continuous effort by everyone in the system: policy makers, administrators, managers, principals, teachers. And in order to push it, it will require a budget allocation system that passes on incentives to education establishments to improve the quality of their education. In other words, that money no longer trickles down to each establishment in proportional shares; instead, those establishments that improve quality receive more money, those that fail to improve quality receive less money.

It is not an easy task to design such a budget allocation system. Governments in the West have experimented with it and learned that such an approach should be transparent, easy to administer and diffi-

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cult to tamper with. The rules of the game should be clear. For example, how to measure quality (by lower drop-out rates, higher pass rates, reduced number of hours, or other indicators, or a combination? These and other questions need to be discussed and resolved before the decision is taken to introduce an output-oriented budget allocation model. Technical assistance, based on the experience from the West, can certainly assist in this endeavour.

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### Introduction

Germany

The position of the employers' associations is explained below by Jobst R. Hagedorn of the *Bundesvereinigung der deutschen Arbeitgeberverbände* (National Federation of Employers' Associations), Cologne:

**Interview on financing** 

the Federal Republic of

vocational training in

Making enterprises financially responsible has proved a success. Of course, a few details in the present system need to be changed, such as the time spent at vocational schools and the high training remuneration in some branches. However, a restructuring of financing by means of a levy is firmly rejected for fear that companies would then offer fewer training places. These fears are fuelled by the negative experience France has had with a levy.

The trade unions, however, as Dr Regina Görner, member of the executive committee of the DGB, (the Federation of German Trade Unions) explains, are in favour of in-company vocational training financed by a levy. The trade unions criticise the current system for failing to provide sufficient in-company training places for all young people. They believe that a levy would provide sufficient means to prompt companies to provide training beyond their own requirements. The AER system in Denmark is cited as a successful example of this alternative financing structure.

#### How is financing of vocational training in the dual system fundamentally regulated? How is in-company vocational training financed?

**R.G.:** Each enterprise covers its own personnel costs for trainers, the material costs for in-company training and the communes. The *Länder* and local authorities bear the personnel costs for vocational school teachers and the material costs for equipping the vocational schools.

This balanced financial responsibility has now become a burden for the public authorities. With the private sector's growing reluctance to offer training, companies which provide training are increasingly being subsidised by the taxpayer. In the new Länder this already applies to more than two thirds of all training contracts signed. In western Germany as well, more and more public financial incentives exist for in-company vocational training. In addition, an increasing number of fulltime, school-based training courses are offered for occupations in the dual system to compensate for the companies' reluctance to train.

In the German building industry, in-company vocational training has been financed for years by a generally-binding collective agreement which levies all companies in this sector.

**J.H.:** The funding of in-company vocational training in Germany is shared. On In Germany, vocational training is conducted in training enterprises and vocational schools, in other words in the dual system. In general, the financing of this type of vocational training is shared: on the one hand enterprises finance their share of the training, i.e. remuneration for the young people and the costs for trainers. On the other hand, the authorities (the German Länder and communes) fund the vocational schools. Currently not only the political parties but also the employers' associations and trade unions are in dispute about who should finance in-company vocational training.





the one hand, enterprises bear the training costs which are incurred on the premises. Here we must mention in particular the monthly training allowance paid directly to trainees. Additionally, the company pays the usual German social security contributions to the pension, unemployment, health and invalidity schemes as well as the full rates for accident insurance. The company also pays the same extras received by their regular staff such as Christmas bonuses, holiday bonuses and other benefits. In addition to these direct training costs, enterprises also bear indirect training costs, such as the cost of training personnel, training resources, material costs for machinery and its use, wastage due to training in production areas, as well as teaching material, etc. The second part of vocational training, the more theoretical training at vocational schools, is financed by the Länder.

This system has been recognised for decades and has not been called into question, at least as far as companies are concerned. The benefit for enterprises is that a well-qualified team of future staff is properly trained. The advantage for all enterprises in the economy is that because the certificates are by and large standardised, comparisons of qualifications can be made. It is also easier to recruit suitable new staff from the external labour-market on the basis of their qualifications and the time spent familiarising such staff with their new jobs is reasonably short.

For the employees who gain their qualifications in a company under the dual system it is very important not only that they have excellent chances of finding a job in the training company after completing their training there but also that their certificates are recognised elsewhere. Occupational qualifications obtained in the German dual system enable a young person to change jobs relatively easily as these qualifications are generally recognised and appreciated.

### What criticism can be levelled at the present financing structure?

**R.G.:** The existing financing structure provides no guarantee that all young people will find an in-company vocational training place. At the start of this training year

only three in-company vocational training places are available for every four applicants. Cyclical fluctuations and demographic changes lead repeatedly to imbalances in supply and demand.

Subsidising in-company training places with taxpayers' money makes enterprises less willing to finance training themselves. Consequently, the system is increasingly undermining itself.

Long-term economic demands are not taken into account in individual company financing decisions. Enterprises are trying to cut back on costs in general and on training costs as well. In view of the short-term drop in demand for skilled workers and the large number of qualified staff on the labour-market, training to meet companies' own needs is often hard to justify, especially as the benefits of training are difficult to quantify.

The current financing system offers no incentives for expanding training activities. It tends rather to deter companies from training. Because training enterprises incur costs which their competitors who refrain from training do not have, distortions of competition occur, which favour those companies not training.

Even if the benefits of training to meet a company's own needs are recognised, training beyond this can no longer be justified from the cost angle. For quality and practical reasons there is no point forcing companies to train their own junior staff. Training in excess of current demand is, however, vital. In practice it has always played an important role. At present fewer than 30% of companies offer training, and increasingly only to meet their own needs. With the current financing system, enterprises will never be willing to allow training in excess of their own requirements to become the norm again. One must also criticise the fact that compensation for lost training places, a burden which must be carried by the State, leads to a higher percentage of government financing.

**J.H.**: Employers criticise the developments of the past decade. The reduction in working hours during training pushed through by the trade unions is one of the factors



contributing to the huge drop in the number of hours trainees spend in the company. Although working time in the metalworking industry, for example, was cut from 40 to 35 hours per week, the time trainees spend at a vocational school has remained unchanged at twelve hours per week. In addition, the schools often split these twelve hours unfavourably into two daily sessions of six hours each. As a result trainees spend only three days a week in companies. This is not sufficient for enterprises to meet the vocational training costs of around DM 100 000 without difficulty. While training, trainees can certainly already be working productively in the company and in this way also help to lower the costs of their training.

For this reason, the National Federation of Employers' Associations is calling for abolition of the trainees' second day at vocational school from the second training year onwards, while teaching during the first year should be intensified. This, as well as bringing vocational school classes more into line with the needs of the enterprises, would enhance the time spent in the company from the second year of training onwards.

In recent years, the amount of the training allowance has also been subject to discussion. With the trainees' high wage levels and the increases that were agreed upon in recent years, some branches are faced with rates which could justifiably be reduced. The goal here is to maintain or even boost training capacities in a given sector or company by reducing training allowances. Additional training places could be created in this way. The National Federation of Employers' Associations is demanding opt-out clauses in collective wage agreements which allow every enterprise to decide whether to make use of this possibility of reducing training remuneration at the same time as consolidating or increasing their training capacities.

Despite the high gross - and ultimately high net - costs of training, successful vocational training can pay for enterprises. However, this will only be the case so long as well-qualified skilled workers are needed in the medium term. A tally of the opportunity costs for hiring external staff quickly indicates that training in one's own company is worthwhile. Companies which offer training places anticipate a demand for replacements or new staff in the medium term.

This system of placing economic responsibility in the hands of enterprises has proved successful. Even the difficulties caused by the economic collapse of the GDR. which led to enormous losses in traditional training capacities, could be addressed relatively quickly. Now 92% of all vocational training places in the former GDR are provided by enterprises. In East Germany, full funding because of structural adaptation problems is only necessary for 8% of the trainee positions offered. Despite a steep cut in personnel since 1992, which has resulted in a total of 1.5 million job losses, every suitable young person willing and able to be trained could be offered a training place in western Germany. Although in 1997 more than 400 000 jobs were lost, the number of training places available could even be increased. Around 1.6 million young people are still being trained in the dual system. That is almost 65% of the young people in any one birth cohort. So the dual system is neither 'threatened' nor 'in decline' as, for example, some trade unionists claim.

The dual system of in-company vocational training is stable. However, in the coming years we can expect certain challenges as the demand for vocational training places rises due to higher birth-rate figures. Enterprises will have to make a greater effort to meet these challenges. This must, however, be accompanied by a few changes to certain aspects of the present system, some of which have already been mentioned. Besides more flexible vocational school hours and lower or frozen training allowances, more occupations of e.g. two-year training periods must be reimplemented. Many of the current occupations originated in the forties and fifties. They are in dire need of modernisation. These occupations will offer a better chance to those young people who, due to the increasingly demanding training regulations, have difficulties with a three-year, theoretically very demanding training course. In more practically-orientated occupations with a twoyear training course, these trainees would have every chance of completing their course successfully.





#### What do you expect from a new financial structure for vocational training?

**R.G.:** Firstly, if in-company vocational training is financed by a levy, the distortion in competition between training and non-training companies will be eliminated. The decision in favour of training would be easier. Companies would consider carefully whether to train themselves or to pay the levy. This would reverse the trend of fewer companies offering training.

Additionally, means would become available to encourage companies to train beyond their own needs. There would then be sufficient training available to guarantee training places for all young people.

The almost 20 years' experience with levy financing in the building industry shows how justified such expectations are. This branch, regularly hit by crises, trains to a far greater extent than other economic sectors. It has also proved its efficiency in the new German Länder, where the expansion of dual training is making very slow progress. The building trade offers by far the most training places. Statutory levy financing will on the whole ensure that more emphasis is placed on the qualification needs of the country's economy. While individual companies would still make training decisions, there would be fewer reasons to cut back on training, and incentives to train would be increased. In this way, economic structural changes can also be backed by channelling training funds into industries with a future.

**J.H.:** The German training market has diverse problems, so only a multifunctional approach can succeed in creating more training places. The German trade unions, however, are of the opinion that a 'monofunctional' approach will solve the various problems. They are pushing for a completely new financial structure by means of a 'training levy' which will forcibly include enterprises in the funding of a State-controlled training system.

The new financial arrangement involves an serious structural breach. The concrete form of the draft legislation currently under discussion in Germany on this 'compulsory levy' clearly contains aspects of a planned economy which bombard enterprises with State intrusions. This approach, which contradicts the very concept of a free and social market economy, goes hand in hand with a large degree of bureaucracy and accompanying high administration costs. These costs must be borne, directly and indirectly, by the enterprises. Training thus becomes more expensive for the national economy. In addition, the new financing system will bring about change in form as Stateplanned training will increasingly be based on applicants' wishes. The requirements of the enterprises, which demand certain qualifications by providing training places, will become secondary.

This approach will lead straight to high unemployment. Many of the young people trained 'according to their own wishes' will find that their qualifications are not needed or are not in sufficient demand. The resulting unemployment and ensuing costs will further increase the overall economic impact of a compulsory training levy.

The economy in general, which is essentially to finance the fund, will experience a steep rise in costs. As a result, jobs will be endangered or even lost in the German economy, which is already confronted with fierce international (cost)competition. If additional jobs are lost due to the levy, creating training places will become more than difficult.

A training levy therefore threatens to destroy training places. It is significant that the trade unions as well as the political parties, who are vehemently calling for this levy, do not train at all themselves or do so on a very small scale only. They are neither willing to face up to the social and political responsibility of training, nor do they seem to have a total grasp of the problems the levy would pose to the overall economy and individual companies.

For these reasons the National Federation of Employers' Associations firmly rejects proposals for a levy.

### What organisational costs would this financial structure involve?

**R.G.:** This depends, of course, on the form the measure takes. If we can avoid estab-



lishing new bureaucracies and make use of existing institutions, administrative costs can be kept to minimum. The Danish levy system, for example, has administrative costs of less than 2%. It is a matter of utilising measurement variables which are ascertained in any case, and attaching the levy payments to an existing tax procedure. As far as possible the system should be based on prior deduction of a lump sum that comes off actual training costs to avoid money being transferred back and forward.

Centralised bureaucracy is unnecessary. The 'purchase' of additional training places should be made on the spot in line with the labour-market situation in the region. The management committees of the *Arbeitsämter* (employment offices) already have the necessary competencies. They are manned by representatives of the State, the employers' and employees' associations and can thus take the interests of all parties concerned into account. They know local market conditions and have experience in acquiring further training and retraining offers as well as in jobcreation schemes.

Levy financing should render present public subsidies for in-company vocational training superfluous. Existing administrative expenditure would therefore be reduced. In general, the DGB is in favour of avoiding excessive reglementation of the statutory levy procedure. It would be far better to limit the system to measures which reduce as far as possible the distortion of competition between companies and which facilitate the 'acquisition' of additional vocational training places.

**J.H.:** The expenditure which would go hand in hand with a new financing structure can be seen in the draft laws currently under discussion. The SPD (the German Social Democratic Party) is currently in favour of the Federal Labour Office (*Bundesanstalt für Arbeit*) assuming the main administrative tasks as far as the fund is concerned. This alone will require 10 000 people on a full- or part-time basis. Enterprises will need at least one person to spend about ten days a year on the necessary bureaucratic calculations and certification. Given 2.6 million places of work,

this alone would result in costs of between DM 3 000 million and DM 6 000 million. This corresponds to an increase in training costs in Germany of around 12%.

In clear terms, the fixed costs alone of the training fund without one single new job being created would correspond to a financial volume equivalent to the creation of 200 000 in-company vocational training places. These figures indicate most clearly the problems of training levies.

### What effects would the new financing system have on the quality of vocational education and training?

**R.G.:** The quality of vocational training is affected only indirectly by the financing system. Nevertheless levy financing can be expected to provide two benefits. If the supply of training places clearly exceeds the demand, young people will no longer be forced to accept vocational training opportunities which, for whatever reason, are of inferior quality. They can choose promising occupations that have good labour-market prospects.

A bigger supply of training places also boosts competition between training companies. In order to retain high performers, companies will improve the quality of their training and reduce their in-company training shortcomings.

J.H.: As a compulsory levy-financed training scheme would mean increased involvement of training centres outside companies, just to satisfy the applicants' wishes, the quality of training is likely to plummet. A central feature of the dual training system in Germany is the practical experience obtained in companies during training. This on-the-job experience will not be gained if trainees are taught under a 'bell jar'. This shortcoming alone will deplete the quality. Furthermore, trainers in external training institutions lack the experience of trainers working in trade and industry. Training in a non-enterprise environment is also far more expensive, as there are scarcely any earnings from training. In other words, if one attempts to finance external training with the same net financial amount as is needed for in-company training, a drop in quality is inevitable.



#### Are there comparable European examples for this new financing structure and what experience has been gained with them?

**R.G.:** The collective agreement measures in the German building trade, and especially the Danish AER system, which has been in operation since 1977, are excellent examples. The latter is the responsibility of the Danish social partners and has the support of the State. The French 'taxe d'apprentissage' is only partially comparable due to the limited significance

of in-company vocational training in France.

**J.H.:** The experience gained in France, where a levy has been imposed for years and where youth unemployment is much higher than in Germany, confirms the grounds for concern already mentioned. What is more, France does not have a distinct history of training in enterprises. Despite the levy, far less than 10% of the young people in any one birth cohort participate in in-company training schemes in France.



# Reading

This section has been

Ní Cheallaigh,

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documentation network

prepared by **Martina** 

### **Europe - International**

### Information, comparative studies

#### Application of ISO 9000 standards to education and training: interpretation and guidelines in a European perspective.

VAN DEN BERGHE W European Centre for the Development of Vocational Training, CEDEFOP Luxembourg: EUR-OP, 1998, 96 p. (CEDEFOP Document) ISBN 92-828-2822-0, en *EUR-OP, L-2985 Luxembourg, or from its national sales offices* EN ES

This report commissioned by CEDEFOP examines the usefulness of ISO 9000 certification of education and training providers. Such certification can provide a valuable framework for assessing the quality of education and training organisations. What remains unresolved is the question of cost-effectiveness of the certification process, as well as the maintenance of the quality system. After discussion of quality assurance systems in general, the author examines the ways in which the ISO standard 9000 can be applied to education and training. Then, the implementation of a quality system based on ISO 9000 standards is discussed.

## Indicators in perspective: the use of quality indicators in vocational education and training.

VAN DEN BERGHE W European Centre for the Development of Vocational Training, CEDEFOP Luxembourg: EUR-OP, 1998, 84 p. (CEDEFOP Document) ISBN 92-828-2820-4, en *EUR-OP, L-2985 Luxembourg, or from its national sales offices* EN DE

Following the European Council Resolution of 5 December 1994 on the quality and attractiveness of vocational education and training, CEDEFOP commissioned a series of studies on quality in vocational

training. This report on the use of quality indicators is a further contribution to this area. It is divided into 5 chapters. Chapter 1 defines the term "indicator" in general, its characteristics and classification. Chapter 2 looks at the quality concept itself and "quality indicators". Chapter 3 highlights VET indicators which have been developed for VET at European level, such as those from Eurostat, OECD, UNESCO and ETF. Chapter 4 presents quality indicators of VET providers from the Netherlands, Italy, Portugal, Belgium and Denmark. Chapter 5 looks at the possible problems of their design and use. It concludes that, whilst the development of such indicators is still in its early stages, there has been considerable progress over the last few years. Reliable design methods have emerged, data collection has been improved, and there is an increasing volume of publications about the topic.

### **Teachers and trainers in vocational training, volume 4: Denmark, Finland, Iceland, Norway and Sweden.** HARREBYE J (et al.)

European Centre for the Development of Vocational Training, CEDEFOP Luxembourg: EUR-OP, 1997, 216 p. ISBN 92-828-2304-0, en *EUR-OP, L-2985 Luxembourg, or from its national sales offices* EN

This publication provides a systematic description of the situation of teachers and trainers in VET in five European countries (Denmark, Finland, Iceland, Norway and Sweden). Each country report begins with an outline of the national context the country's geographical features; cultural history, religious considerations and economic developments are also included where they are relevant to vocational education and training. This is followed by a brief description of the overall educational system, of which vocational education and training is a part. The next section of each report examines the vocational education and training system within which the teachers and trainers, who are the sub-

# Reading selection

This section lists the most important and recent publications on developments in training and qualifications at an international and European level. Giving preference to comparative works, it also lists national studies carried out as part of international and European programmes, analyses of the impact of Community action on the Member States and national studies seen from an external perspective.



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ject of this publication serve. There then follows a description of the teaching and training faculty - in quantitative and qualitative terms to the extent that the relevant information is available - and an account of teachers' and trainers' legal standing, their rights and duties, and also of the teacher unions and other professional organizations which work on their behalf. The final section explores the in-service and continuing training opportunities open to teachers and trainers in VET and possibilities for career advancement.

#### Identification, validation and accreditation of prior and informal learning: United Kingdom report.

Scottish Qualifications Authority; European Centre for the Development of Vocational Training, CEDEFOP Thessaloniki: CEDEFOP, 1997, 40 p. (Panorama, 70) *CEDEFOP P.O.B. 27-Finikas, GR-55102 Thessaloniki, info@cedefop.gr* EN

This report focusing on the United Kingdom is one of several contributions to the CEDEFOP project on assessment of prior and non-formal learning. In most cases, the methods and systems aimed at the assessment of non-formal skills have been operational for a comparatively short period of time. In some countries, no permanent methodologies and systems have been established, thus opening up the possibility of a variety of solutions in the years to come. This is very much the case at the European Union level, where the idea of a European personal skills card was introduced in the White Paper on teaching and learning (1995). This report focuses on the following questions: 1) to what degree can methodologies for the assessment of non-formal learning be ascertained as valid and reliable? In other words, do they measure what they are supposed to measure, and is the quality of the assessment approach sufficient? and 2) to what extent are assessments accepted - by individuals, by enterprises and by the labour market? In other words, what type of legitimate basis are current (and future) systems 'resting' on?

#### Training and management of human resources in the service sectors: Seminar Brussels 24 September 1997.

European Commission - DG XXII Brussels: European Commission - DG XXII, 1998, 21 p. European Commission DG XXII, Directorate B-2, Rue de la Loi, 200, B-1049 Brussels EN

Industrial and economic changes which are occurring in the EU transform the borders between the "industrial sector" and the "service sector". These borders which have never been very well-defined become even more vague today, as the phenomenon called "outsourcing" shows. This process forms part of the flexibilisation of the labour market, which sometimes leads to certain employees in service sectors working part-time under fixedterm contracts. At the other extreme, there are other employees, who are highly qualified and follow training continually, who have much more stable working conditions. Thus, the question arises as to whether the social transformation and the modernisation of services bring with them new conditions for national and European actors in the field of vocational training. This report compiles the results of a seminar on the subject.

### Evaluation of activities in the field of management training in the NIS.

European Training Foundation, ETF Turin: ETF, 1998, 76 p. ETF Villa Gualino, Viale Settimio Severo 65, I-10133 Torino. info@etf.it EN

This report reviews a set of 20 projects in the field of management training and technical business training, initiated in the years 1991-93 in the New Independent States (NIS). The purpose of the review is to provide a global survey of early Tacis (Technical Assistance to the Commonwealth of Independent States) activities in management and business training, in order to help Tacis in its own evaluation of its policies in this and related fields, and also to provide operational recommendations, relevant to the planning and

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delivery of future assistance. URL: http://www.etf.it/mngtrainis-en.zip

#### Supplement to the study on the structures of the educational and initial training systems in the Member States of the European Union: the situation in Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia.

The European Education Information Network, EURYDICE Brussels: EURYDICE, 1997, 144 p. ISBN 2-87116-272-7, en EURYDICE European Unit, 15 rue d'Arlon, B-1050 Brussels, eurydice.uee@euronet.be EN

This supplement to the publication "Structures of the Education and Initial Training Systems in the EU" covers six of the countries of Central and Eastern Europe (Bulgaria, The Czech Republic, Hungary, Poland, Romania and Slovakia). It provides essential basic information on the organization of the education system of each country. It is divided by countries and for each country comprises: responsibilities and administration, pre-school education, compulsory education, basic education, secondary education, vocational education and higher education. This format facilitates comparison of the systems, while particularities of individual systems are also reflected.

#### Vocational education and apprenticeships in Europe - challenges for practice and research.

HEIKKINEN A; SULTANA R G (eds.) University of Tampere Tampere: University of Tampere, Department of Education, 1997, 293 p (University of Tampere.Department of Education. Series B, 16) ISSN 0786-5856 ISBN 951-44-4196-6 University of Tampere, Publication sales, BOX 617, FIN-33101 Tampere, Finland EN

This publication is an outcome of a conference (Malta, 19-23 September 1996) of a network of researchers from Finland, Germany, England, Norway, Switzerland and Malta, brought together through their interest in historical and cultural aspects of European vocational education and training. The discussion of the possibilities for co-operative research on apprenticeship as a type of vocational training begins with an overview of educational discussion on "vocationalism" and with historical and cultural reflections on apprenticeships in some European countries. The articles are concerned more generally with crucial political and practical challenges involved in apprenticeship as a form of vocational training. Finally, the problems of co-operation and comparison in doing research on apprenticeships at European level and how to proceed in the future are discussed.

#### Occupational segregation by sex in Nordic countries: an empirical investigation.

MELKAS H; ANKER R International Labour Review (Geneva) 136 (3), 1997, p. 341-363 ISSN 0020-7780 EN FR ES

The Nordic countries are commonly associated with strong political commitment to gender equality. but the reality is more complex. Examining data for some 200 occupations over the period 1970-90, the authors find that one-third of all workers in Finland, Norway and Sweden would have to change occupation to eliminate occupational segregation by sex, substantially more than in other OECD countries. Often working in female-dominated occupations or part-time employment, women are under-represented in seniors positions and typically earn less than men. The underlying segregation impairs not only gender equality but also overall economic efficiency.

#### University research in transition.

Organisation for Economic Co-operation and Development, OECD Paris: OECD, 1998, 103 p. (Science technology industry) ISBN 92-64-16030-2, en OECD Publications, 2 rue Andre Pascal, F-75775 Paris Cedex 16, Fax: 33-1-4910.4276, e-mail: sales@oecd.org EN FR







Universities are key elements in the science systems in all OECD countries. However, university research in OECD countries is currently the object of considerable tension in the context of globalisation, reduced budgets and a changing interface with industry. How can universities adapt to this new order? How can the potential of university research best be enhanced? This study surveys these issues, consolidating the most up-to-date data on resources and structures of research activities in higher education systems and providing illustrative examples of institutional adaptations. It discusses related government measures and formulates policy orientations to enable countries to rise to the challenges of the coming years.

#### Human capital investment: an international comparison.

Organisation for Economic Co-operation and Development, OECD; Centre for Educational Research and Innovation, CERI Paris: OECD, 1998, 113 p. ISBN 92-64-16067-1, en OECD Publications, 2 rue Andre Pascal, F-75775 Paris Cedex 16, Fax: 33-1-4910.4276, e-mail: sales@oecd.org EN FR

Investment in human capital is in the fore of debate and analysis in OECD countries concerning how to promote economic prosperity, fuller employment, and social cohesion. Individuals, organizations and nations increasingly recognize that high levels of knowledge, skills and competencies are essential to their future security and success. Investment in skills and competencies takes place in a variety of settings ranging from early childhood education to informal learning in the work place, and involves a wide range of actors from individuals to enterprises and governments. This report aims to clarify what is now known about human capital and how it can be measured. It responds to a request by governments represented in the OECD Council "to develop an initial set of indicators of human capital investment based on existing data, analyse areas where significant gaps remain in internationally comparable data, identify the cost of development of data collection for new measures and performance indicators, and report to Ministers in 1998".

#### El acceso a la universidad en Europa: problema común, soluciones diferentes

Muñoz-Repiso Izaguirre M.; Arrimadas Gómez I

en: Revista de Educación (Madrid), 314, 1997, págs. 115-134 ISSN: 0084-8082 ES

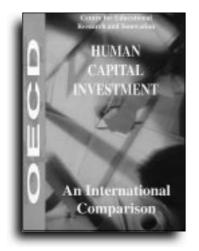
A comparative analysis of the different systems of access to University within the European Union and more specifically in the following countries chosen for the study: Spain, France, Italy, Portugal, Denmark, the United Kingdom and Germany. The themes to be analysed have been grouped as follows: A) general aspects of access such as the coordination of educational levels or organization; B) analysis of the matriculation exams from their elaboration, the subjects which make them up, and going on to their development, the type of exam and the form of correction. The mechanism for entry into University according to its type is also dealt with. Finally, a synthesis of the results is presented in the form of a table, and the conclusions comparing the different systems.

### European Union: policies, programmes, participants

#### Implementation of the First Action Plan on Innovation in Europe: Innovation for Growth and Employment: Communication from the Commission.

European Commission Luxembourg: EUR-OP, 1998, 26 p (Documents COM, (97) 736 final) ISSN 0254-1475, en ISBN 92-78-30202-3, en *EUR-OP, L-2985 Luxembourg, or from its national sales offices* EN FR DE DA ES EL FI IT NL PT SV

The link between innovation, growth and employment is characteristic of modern economies faced with international competition in which the deciding factor is





possession of knowledge and skills. The annex contains information sheets on action under the innovation plan. Action 4 - Education and training - involves the creation of a communications-linked multimedia platform ("Campus-voice"), the setting up of a European network ("Form-Inno-Tech") concerned primarily with developing training for innovation and a "Train-Re-Tech" information sheet on training for research and technology transfer within firms.

#### Council resolution of 15 December 1997 on the 1998 Employment Guidelines.

Council of the European Union Official Journal of the European Communities (Luxembourg) C 30, 1998, (28/01/ 98) p.1-5 ISSN 0378-6986, en *EUR-OP, L-2985 Luxembourg, or from its national sales offices* EN FR DE DA EL ES FI IT NL PT SV

This Council Resolution calls upon the Member States: firstly to enhance the employability of its workforce by addressing the problem of youth unemployment and forestalling long-term unemployment by switching from passive to active measures, encouraging a partnership approach and facilitating transition from school to work. Secondly to develop a spirit of enterprise by assisting with the start-up and management of firms, exploiting opportunities for new job creation, and rendering the tax system more favourable to employment. Thirdly to encourage the ability of firms and their employees to adapt to change by modernising work organisation. Fourthly to strengthen equal opportunity policies by combating sexual discrimination, helping to make work and family life more easily compatible, facilitating people's return to work and promoting the employment of the disabled.

### Continuing vocational training survey in enterprises: results 1994 (CVTS).

Statistical Office of the European Communities, Eurostat Luxembourg: EUR-OP, 1997, 147 p. (population and social conditions - accounts and surveys) ISBN 92-828-1498-X EN FR DE

This publication provides comprehensive information on continuing vocational training (CVT) in enterprises of the 12 Member States of the European Union early in 1994. It contains the results of a large-scale, representative survey conducted under the Community FORCE action programme for the development of continuing vocational training. The publication shows the providers and the nonproviders of CVT broken down by economic activity and size class. It includes information on the employees, the hours worked and the total labour costs, as well as on the participants in the different types of CVT and the hours and the costs of the CVT courses

### Youth for Europe: interim evaluation report.

European Commission Luxembourg: EUR-OP, 1998, 26 p. (Documents COM, (98) 52 final) ISSN 0254-1475, en ISBN 92-78-30754-8, en *EUR-OP, L-2985 Luxembourg, or from its national sales offices* EN FR DE DA ES EL FI IT NL PT SV

This report summarises the development of Community action with regard to youth and stresses that the prime objective of the Youth for Europe programme is the active involvement of young people and their integration into society. It reviews the development and the experience gained through the different types of action under the programme as well as the details of its implementation and the initial results. It also identifies the possibilities for synergy in policies for cooperation in the educational, vocational training and youth fields. An annex contains preliminary statistical data for centralised and decentralised projects, their subjectmatter and participants.

#### The young Europeans: Eurobarometer 47.2.

European Commission - DG XXII Bruxelles: DG XXII, 1998, 154 p. DG XXII Library, B7-0/31, Rue de la Loi 200, B -1049 Brussels, Fax.: 32-2-296.4259 EN FR DE







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This report examines young people's attitudes on matters which affect them directly and on the European Union. The population sample was aged between 15 and 24. There are two main chapters. The first illustrates the lifestyle of young Europeans, looking at their religious beliefs, participation in community life, views on employment and unemployment, education, travel, knowledge of languages, etc. The second focuses mainly on the way they perceive the European Union and what it has accomplished. The opinion survey analysed in this report was carried out between 20 April and 7 June 1997 as part of Eurobarometer 47. URL: http://europa.eu.int/en/comm/dg22/ youth/research/survey.html

### Young people on the threshold of the year 2000: a Eurobarometer survey.

European Commission - DG XXII Brussels: DG XXII, 1997, 12 p. ISBN 92-828-1375-4, en DG XXII Library, B7-0/31, Rue de la Loi 200, B -1049 Brussels, Fax.: 32-2-296.4259 EN FR DE

This is a summary of a survey which examines young people's attitudes on matters which affect them directly and on the European Union. The population sample was aged between 15 and 24. There are two main chapters. The first illustrates the lifestyle of young Europeans, looking at their religious beliefs, participation in community life, views on employment and unemployment, education, travel, knowledge of languages, etc. The second focuses mainly on the way they perceive the European Union and what it has accomplished. URL: http://europa.eu.int/en/ comm/dg22/youth/research/survey.html

### Learning modern languages at school in the European Union.

European Commission - DG XXII Luxembourg: EUR-OP, 1998, 147 p. (Studies, 6) ISBN 92-828-0081-4, en *EUR-OP, L-2985 Luxembourg, or from its national sales offices* EN FR DE

Today, having a command of two or more languages is increasingly seen as a neces-

sity. As a result, the most pressing question now being asked is how language learning in schools can be made as effective as possible. This report aims to present major research findings and extract from them the ideas most likely to foster a more complete and rapid acquisition of the desired skills, by distinguishing the advantages of various strategies and attempting to outline the conditions for their implementation. Chapter 1 attempts to define the parameters to be taken into consideration when defining the framework for language teaching. Chapter 2 deals with the importance of language exposure, in particular by means of immersion, as well as with the conditions under which such exposure encourages learning. Chapter 3 restores to centre stage the idea of learners being responsible for building their own skills. Three other possible types of didactic intervention, based in part on the knowledge acquired in the early stages of language learning, are then presented and discussed: reactions to errors (Chapter IV), the place to be given to the formalization of knowledge, the teaching of grammar and vocabulary (Chapter V) and the use of technological resources (Chapter VI). Chapter VII emphasizes the need for coherence among the various elements of the situation: the age of the pupils, the objectives pursued, the methodology employed and the types of assessments carried out.

#### Models of financing the continuing vocational training of employees and unemployed: [documentation of the Leonardo project with participation of Denmark, Germany, the Netherlands and Norway]

GRÜNEWALD U; MORAAL D Bundesinstitut für Berufsbildung, BIBB Bielefeld: Bertelsmann, 1998, 267 p. ISBN 3-7639-0835 DE EN

The documentation is the product of a LEONARDO project on issues of financing continuing vocational training. It offers insight into the debate on the reform of continuing vocational training in the studied countries and into the use of financing models in the context of these reform initiatives. The focus is on cooperation between social partners and government institutions the practical result of which are special collective agreements,



the regulation of work release for participation in training, financing regulations or other agreements. The documentation is available in German and English.

### **Promoting vocational education and training: European perspectives.** BROWN A ed.

European Commission - LEONARDO programme; EUROPROF Tampere: Tampereen yliopiston opettajankoulutuslaitos, 1997, 137 p. (Ammattikasvatussarja, 17) ISBN 951-44-4193-1 University of Tampere, P.O.Box 617, FIN-33 101 Tampere EN

This book is one outcome of a major European research and development project on "New forms of education of professionals for vocational education and training". The research project was sponsored as part of the European Commission's LEONARDO programme. The aim of the project was to conduct transnational research leading to the identification of new occupational profiles for vocational education and training professionals, for trainers, planners and managers of VET in Europe, and to the establishment of new curricula and education and training programmes for those professionals. The project design adopted an interdisciplinary approach with the intention of developing a close interaction between research questions and development tasks.

#### Validation and recognition of competences and qualifications: European discussion paper for the social partners.

HEIDEMANN W; KRUSE W Hans Böckler Stiftung Düsseldorf: Hans Böckler Stiftung, 1998, 69 p. Hans Böckler Stiftung, Bertha-v.-Suttner-Platz 1, D-40227 Düsseldorf, http://www.boeckler.de, Winfried-Heidemann@boeckler.de EN FR DE

In the context of the FORCE-programme, Hans-Böckler-Stiftung looks at the transferability of solutions for continuing vocational training negotiated by the social partners. That is, how far social partners - through social dialogue - contribute to the recognition of qualification and competencies and whether solutions found in one country would be transferable to another. The four countries participating in the project are Germany, France, Greece and the United Kingdom.

#### From pilot schools to reform strategy: outcomes of the Phare programme reform of vocational education and training.

GROOTINGS P; KALOUS J (eds.) National Training Fund, NTF Prague: Fragment, 1997, various pagination ISBN 80-7200-168-X *NTF,* Václavské nám. 43, 110 00 Praha 1, CR, Tel.: 420-2 242 14533, Fax: 420-2 242 14533, czechncu@leonardo.nvf.cz EN

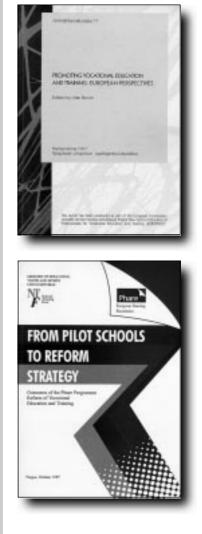
This study provides outcomes of the Phare VET Reform Programme which was implemented in the Czech Republic in the years 1995-1997. Nineteen pilot schools were selected and evaluation was carried out in the following areas: 1) curriculum development, assessment and certification; 2) educational management; 3) teacher training; 4) financing; 5) legislation; 6) quality control; 7) research and 8) the role of social partners.

#### **Standard formatori: Per un modello nazionale di competenze verso l'accreditamento professionale.** PENNER F et al. (coord.)

Istituto per lo sviluppo della formazione professionale dei lavoratori, ISFOL; Istituto superiore salesiano di ricerca educativa, ISRE; Sinergie per la formazione, SINFORM Rome: Isfol, 1998, 304 p. *Isfol, Via G. B. Morgagni 33, I-00161 Roma* 

This is a survey of the expertise of trainers: a national study and international comparisons (France, Germany, Belgium, Spain) are used to make a first approach

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to the widely structured scenario of the professional area of trainers. This path is the basis for proposing a dynamic model of professional standards for trainers so as to outline a frame of reference for a national system of initial and continuous training and possible accreditation of these teachers. The idea is closely connected with the problem of improving the use of human resources and increasing the quality of the supply of training services.

### **From the Member States**

**D** Qualität und Finanzierung der beruflichen Ausbildung in der Mitte der 90er Jahre: ein Beitrag zur aktuellen Diskussion. Kruse W et al. Hans-Böckler-Stiftung Düsseldorf: Hans-Böckler-Stiftung, 1996,

54 p. + bibl. (Manuskripte / Hans-Böckler-Stiftung, 212)

Hans-Böckler-Stiftung, Bertha-von-Suttner-Platz 3, D-40227 Düsseldorf DE

The report evaluates the dual system of vocational training from the perspective of the future organisation of vocational training. Formulated as nine theses, the publication provides a stimulus for the debate on quality concepts in the dual system, addresses the limitations of training in individual enterprises, emphasises the importance of vocational training as a central element of personal development and the importance of the enterprise as a place of learning, and finally considers the current discussion of the reorganisation of vocational-training financing.

### Initial vocational training in Germany.

SCHMIDT H et al. Federal Institute for Vocational Training, BIBB Berlin: BIBB, 1997, 63 p. + bibl. (Results, publications and material from BIBB) *BIBB, Fehrbelliner Platz 3, D-10707 Berlin* EN

The anthology contains four contributions on the current status and development of the dual system of vocational training in the Federal Republic of Germany. The topics are: structure and features of the German system of vocational training; the principle of the regulated occupation as a model for managing training contents and skills standards; the examination and certification system; financing vocational training within the context of the dual system.

### Your knowledge can you book it?

Danish Confederation of Trade Unions, LO

Copenhagen: LO, 1998, 19 p. (The developing workplace) (Training and development) ISBN 87-7735-189-4 LO, Rosenørns Allé 12, DK-1634 Copenhagen V EN

Knowledge accounting has become one of the buzzwords of the late 1990s. It is unquestionable that training and development mean added value both for the employees and for the workplaces; but how is knowledge to be measured? This is just one of the many questions which arise in relation to knowledge accounts. In this debate paper the Danish Confederation of Trade Unions (LO) discusses the various perspectives of knowledge accounting, its advantages and disadvantages. The aim of LO is to start a debate on knowledge accounting. One of the major questions that LO puts forward about knowledge accounting is whether a knowledge account has to be combined with a social and ethical account in order to ensure a sound development.



### **E** Nuevo Programa Nacional de Formación Profesional

Ministerio de Trabajo y Asuntos Sociales - Consejo General de Formación Profesional

Madrid: Ministerio de Trabajo y Asuntos Sociales, 1998, 85 p.

ISBN 84-7434-981-8

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This publication contains the second National Vocational Training Programme which will run until the year 2002. It provides for the creation of a National System of Vocational Qualifications with a view to optimum coordination and consistency in dealing with the problems of qualification and vocational training of the various groups, organisations and firms and encouraging greater transparency in the labour-market with more job opportunities. The programme sets a timetable for approval of the law regulating the National System of Qualifications. It also provides for the creation of a National Institute of Vocational Qualifications which will establish the requirements for and characteristics of vocational qualifications. The Institute will incorporate an occupational monitoring system with a database designed actively to promote cooperation between other sectoral and regional employment monitoring systems. The new programme provides for the consolidation of an integrated system of vocational training with three subsystems: regulated or initial training, occupational training and continuing training. To this end the programme refers to regulation of the system of corresponding, equivalent and accepted qualifications between the three vocational training subsystems, including work experience. The programme also considers the development of an integrated vocational information and counselling system, the quality, assessment and follow-up of vocational training, as well as the training of teachers and trainers, and the quality of teaching methods, apprenticeship and training.



### Ireland: vocational ducation and training,

STOKES D; WATTERS E Dublin: Leargas, 1997, 40 p. Leonardo da Vinci National Co-ordination Unit, c/o Leargas, Avoca House, 189-193 Parnell Street, IRL-Dublin 1 EN

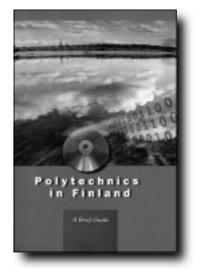
This publication is aimed mainly at policymakers and providers in other European countries who are, or intend to be, involved in transnational activities with Irish partners. The format and approach of this guide derive from an earlier publication "Ireland: initial vocational education and training 1992, a brief guide". This comprehensive guide which describes the main features of Irish VET, taking in the developing areas of certification, continuing education and training, distance education and information and communications technology, also considers the European dimension in education and training.

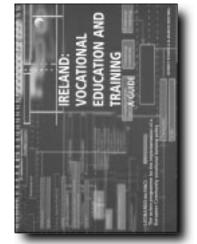
### FIN Polytechnics in Finland: a brief guide.

Centre for International Mobility, CIMO Helsinki: CIMO, 1997, 55 p. ISBN 951-53-1366-X *CIMO, POB 343 (Hakaniemenkatu 2), FIN-00531 Helsinki, Finland* EN

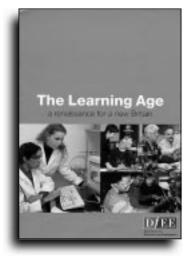
The objective of the Finnish educational policy in the 1990s has been to raise the general level of education, to improve the quality of education and training, to increase flexibility, and to promote internationalization. The expansion of higher education in the 1990s has been directed into building a new system of ammattikorkeakoulut (polytechnics) parallel to the universities. The existing broad and high-quality higher vocational education system was a good basis for this solution, and by raising its level and by combining existing colleges, it has been possible to create an effective network of ammattikorkeakoulut. The present guide describes 30 Finnish ammattikorkeakoulu and their curricula.

**FR** La mesure du capital humain: limites et perspectives d'action, synthèse à partir d'une analyse des bases de recherche et de données concernant l'investis-









sement dans le capital humain: rapport pour le secrétariat de l'OCDE.

BOURDON J IREDU Dijon: IREDU, 1997, 52 p. *IREDU, Université de Dijon, Faculté des Sciences Mirande, BP 138, F-21004 Dijon cedex* FR

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After referring to the constant problem of measuring human capital in economic thinking this report seeks to identify any links existing between the measuring of physical and human capital. It looks at the different methods of measurement and points to their diversity. They depend on two largely differing approaches - estimating the educational level of the population as a whole and the cumulative flow of years of schooling. On this basis the author compares the various approaches found in the literature on human capital, giving particular attention to recent comparative tests conducted on the databases of various countries. It also suggests a value-based approach to measurement which weighs the relative value of teachers' salaries in the long term. It then attempts a qualitative approach.

**PT** Forum euroformação/ eurotraining 98: aprender, competir e viver na era global. Associação Industrial Portuguesa, AIP Lisbon: AIP, 1998, Centro de Informação Científica e Técnica, CICT, Praça de Londres 2-2°, P-1901 Lisbon Codex PT

This document contains the programme and the papers presented to a European conference on education, training and employment held within the framework of the seventh Eurotraining Forum under the title "Learning, competing and living in the global era". Among the problems touched on during the conference were the political options for employment and Agenda 2000, new qualifications and competences, mobility in training, new forms of work organisation, information technology, organisational innovation and strategies for youth employment. **UK** The learning age: a renaissance for a new Britain

Department for Education and Employment, DfEE London: The Stationery Office, 1998, 82 p. ISBN 0-10-137902-1 FN

The UK government's green paper sets out for consultation how learning throughout life will build human capital by encouraging the acquisition of knowledge and skills and emphasising creativity and imagination. It encourages adults to enter and re-enter learning at every point in their lives, whatever their experience at school. Two initiatives are proposed. Firstly, individual learning accounts which will enable people to take responsibility for their own learning with support form both Government and employers. Secondly, the University for Industry which will offer access to a learning network to help people deepen their knowledge, update their skills and learn new ones. The Learning Age will be build on a renewed commitment to self-improvement and on a recognition of the enormous contribution learning makes to society.

### Higher education for the 21st century: responses to the Dearing Report.

Department for Education and Employment, DfEE Sheffield: DfEE, 1998, 64 p *DfEE Publications Centre, PO Box 5050, Sudbury, Suffolk, CO10 6XQ* EN

The Report of the National Committee of Inquiry into Higher Education in the Learning Society set a wide-ranging agenda for the development of higher education into the 21st century. The comments from the many interested organisations and people who submitted their views on the Report reflect a general consensus on the need to work through this agenda. This document is intended to bring together in a comprehensive statement the Government's response to those recommendations addressed to it and a position report on those recommendations addressed to other bodies.

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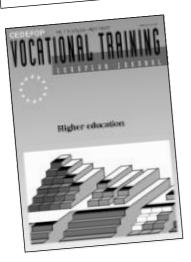
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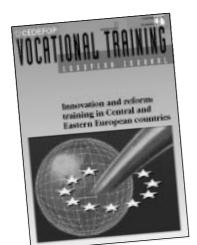
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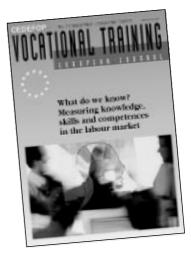
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