UKCES

UK COMMISSION FOR EMPLOYMENT AND SKILLS

Review of Employer Collective Measures: Policy Review

Evidence Report 8

November 2009

Analysis › Understanding › Insight › Advice

Review of Employer Collective Measures: Policy Review

Annette Cox, Freddie Sumption, Jim Hillage

Institute for Employment Studies

James Sloan

Policy Analyst

UK Commission for Employment and Skills

November 2009

Foreword

Launched on 1st April 2008, the UK Commission for Employment and Skills is a key recommendation in Lord Leitch's 2006 review of skills Prosperity for All in the Global Economy: World Class Skills. The UK Commission aims to raise UK prosperity and opportunity by improving employment and skills. Its ambition is to benefit individuals, employers, government and society by providing independent advice to the highest levels of the UK Government and Devolved Administrations on how improved employment and skills systems can help the UK become a world class leader in productivity, in employment and in having a fair and inclusive society.

Research and policy analysis plays a fundamental role in the work of the UK Commission and is central to its advisory function. In fulfilling this role, the Research and Policy Directorate of the UK Commission is charged with delivering a number of the core activities of the UK Commission and has a crucial role to play in:

- assessing progress towards making the UK a world-class leader in employment and skills by 2020
- advising Ministers on the strategies and policies needed to increase employment, skills and productivity
- examining how employment and skills services can be improved to increase employment retention and progression, skills and productivities
- promoting employer investment in people and the better use of skills.

This report is one of a suite of outputs of the Review of Employer Collective Measures study. The study reviews the effectiveness of levers to increase employer investment in skills on a collective basis, such as levies and tax incentives, in order to provide advice to ministers on which collective levers might be most effective to introduce or expand.

In undertaking the study we have conducted extensive reviews of the relevant literature and reviewed relevant UK and international policies to inform our conclusions and advice. We have worked with a consortium of leading experts in the field and drawn on wider panels of experts, in the UK and internationally, to inform our analysis and advice. Almost 100 stakeholders attended a series of Prioritisation Events in spring 2009 and we also received good response to an initial Call for Evidence in summer 2008 and a further online consultation in July 2009. We are grateful to all those involved for their commitment to the study and to taking forward this complex agenda.

This report presents the review of existing collective measures policy, including their implementation and impact. It collates the three literature reviews to present 4 policy options which, according to the evidence reviewed, represents the most effective means to enhance employer investment in skills. All reports, including the final report that presents our final advice, are published as Evidence Reports in our series and are available in the publications pages of the website at www.ukces.org.uk.

Professor Mike Campbell

Director of Research and Policy

Lesley Giles

Deputy Director and Head of Research

Acknowledgements

The authors are grateful for the contributions of the wider project team including Nick Jagger, Linda Miller, Tom Usher, Joy Oakley, Malcolm McGuire and Ken Walsh at IES, Ewart Keep of the University of Cardiff, from external advice from Howard Gospel at King's College, University of London, Ian Stone at the University of Durham, and the support and guidance of Carol Stanfield, James Sloan and the wider team at the UK Commission.

Table of Contents

Figures and Tables

Executive Summary

Background

The UK Commission for Employment and Skills commissioned this policy review as part of the Collective Measures project, whose purpose is to identify and recommend policy levers which will stimulate employer investment in the skills of the workforce, to contribute to improved national economic performance and raising UK skill levels.

The Policy Review is the third of four linked projects which provide the basis for the final Collective Measures report. Projects 1 and 2 provide the theoretical and empirical findings that model and document employer motivations and behaviour with respect to training investment. Project 3 reviews evidence to seek to establish the outcomes and effectiveness of policy options deployed in the UK and elsewhere to influence employer investment in training. Project 4 involved stakeholders subjecting policies proposed in Project 3 to a prioritisation exercise.

The Policy Review was undertaken by reviewing the findings of a range of published and unpublished evaluations, reports and wider commentaries concerning the outcomes, strengths and weaknesses of different policy options. The review examined the following policy options in detail: levies, individual rights to training, Investors in People (IiP) and quality standards, occupational licensing, tax incentives, subsidised training, and inter-employer collaboration methods (including supply chains and public procurement policies). Loan guarantees for training and improved social dialogue between managers and employees were also considered.

The policy review identified that there was a shortage of high quality evaluative literature capable of assessing the impact of policy levers on employer investment in skills. The scope of literature for inclusion in the review was kept broad to ensure that key messages about strengths and weaknesses of different policies were found.

Training levies

Training levies were identified as a highly problematic policy lever, with numerous dysfunctional effects. There appear to be particular problems for small- and medium-sized enterprises (SMEs) in applying levies; the examples of the film and construction industries in the UK suggest that levies may be more appropriate for micro-firms or self-employed contractors in highly fragmented industries which are geographically dispersed.

Individual rights to training

Individual rights to training are a relatively uncommon policy measure internationally, and evidence suggests that take-up of training leave is generally low. Maximising employee participation is likely to require additional policy levers involving information, advice and guidance.

Investors in People and Quality Standards

There is little evidence to suggest that IiP has penetrated hard-to-reach target areas of the UK economy on a wide scale or that it has increased the quantity of employer investment in training. The review found that IiP is preferable to other quality standards as it is most closely linked to the skills agenda. There appears to be an opportunity for further specific targeting of IiP towards SMEs, organisations that do little training, or to the needs of different sectors.

Inter-employer collaboration in training design, delivery and funding

The review examined examples of inter-employer collaboration mechanisms to support training in seven countries. There is a huge diversity in the range of inter-employer collaborations taking place to organise training, including group training schemes, covering formal group training associations, networks facilitated by government intermediaries, employer-driven learning networks and the role of employer supply chains, including the effects of public procurement policies.

The evidence reviewed suggests that inter-employer networks help to alleviate some market failures by providing training that individual employers find too difficult to organise and by helping employers to identify and meet previously unrecognised training needs that will help solve broader business problems. A number of studies noted that networks had some success in generating employer engagement, even among hard-to-reach groups such as SMEs, although this often remained an ongoing challenge.

Occupational licensing

Studies reviewed found limited evidence of the impact of occupational licensing on employer investment in training, but the findings identified some pointers for future policy development. Licences are likely to be of value in a limited number of occupations that would need to involve close alignment of training with quality of service provision, the job containing mostly objectively testable and quantifiable skills; the end-user being in direct contact with, or at most one step removed from, the service provider and there being existing or potential consumer concern about the quality of the product or service being provided.

Tax incentives

In the absence of significant evidence which addressed the impact of tax breaks on employer investment in training, the review examined the impact of tax incentives on R&D investment by employers, due to its similarity to training as a discretionary investment decision. At best, tax incentives to train may lower some financial barriers to investment for employers who wish to train. However, it seems unlikely that tax breaks will provide an incentive for any employers who lack prior interest in training their staff.

General subsidies

The review briefly considered a number of subsidies from different parts of the UK. There is mixed evidence concerning the degree of additionality provided by the programmes assessed through commissioned policy evaluations. However, there is consistent evidence to suggest that without public subsidy, a proportion of employers would do less or no training and it would be of poorer quality. Particular value appears to be attached to subsidies and advice and guidance by SMEs.

Public Procurement Policies

There has been growing interest in the use of procurement policies to promote training, especially of lower skilled workers, and some evidence of its success in increasing skill levels. Evidence shows that much of the training accessed is publicly subsidised and careful consideration would need to be given to the best way of ensuring employer investment in training was raised through this measure.

Loan guarantees for training

The purpose of offering loan guarantees for training is to help overcome costs as a barrier to investment, particularly for small employers or for those where costs of training are particularly high. In practice, loan guarantee schemes are rarely used explicitly for training. The decision of whether or not to lend money rests with the financial institution rather than the government and there are current difficulties in the financial system which are leading to reluctance among investors to lend to organisations. This is partly connected to the current system of accounting standards and their treatment of human capital. This policy option could be considered in the future once these difficulties have been addressed.

Improved dialogue between managers and employees

Evidence from other nations illustrates the potentially powerful role that dialogue between employees and employers, facilitated through employee representatives, can have on stimulating investment in and take-up of training. This is especially notable when training is incorporated as a focus of institutionalised collective bargaining. However, in the UK, effects of such social partnership on training appear to be relatively limited due to the erosion of trade union representativeness, reflected in low membership levels and decline in collective bargaining. Further development is likely to depend on alterations being made to the existing framework for employment regulation.

Conclusions and policy options

The evidence suggests there is no ‘silver bullet’ to achieving change, so the policy options proposed incorporate both short- and long-term measures to address the issues. But it is also important to note how outcomes might be optimised through synergies achieved by deploying the proposed policy options in combination with each other, and with existing policies. The following policy recommendations were therefore put forward for further discussion with stakeholder in the prioritisation exercise and appraisal.

Policy Recommendation One – More and better inter-employer networks

The evidence suggests that the subject focus for employer networks should be a broad one, as engaging managers in solving wider business problems may hold greater appeal than an initial direct offer of training-related solutions. Networks could be organised on a sectoral, supply chain or geographical basis. The policy review recommends that an employer network fund be established with a remit to award grants to networks through a competitive bidding process, requiring employers to co-fund a minimum of 25 per cent of network costs and consist of at least 20 employer members. Further financial arrangements to underpin networks could include access to training subsidy and tax breaks for SMEs through network membership and levy-based arrangements for firms in a limited number of sectors consisting of organisations that are geographically dispersed and fragmented.

Policy Recommendation Two – more extensive occupational licensing

Licensing offers potential to increase skill levels directly and improve quality of training by focussing on standards achieved. Further investment in training could be assured through stipulating a minimum amount of continuing professional development for re-licensing. Occupational licensing may serve to increase quality and reassure or inform consumers about the competence of individuals, and is likely to be most feasible where there are existing concerns about professional competence, where consumer demand exists for a 'badge' of trust and where skills are sufficiently tangible and observable for competence to be verified. This policy review recommends that some limited state subsidy of up to 25 per cent of costs should be provided for individuals who are self-employed but responsibility for licensing costs of employees should largely fall to employers, with employees paying no more than 25 per cent of costs. The duration of licensing within different occupations would also need to be considered but is likely to vary from approximately one to three years.

Policy Recommendation Three – Modify Accounting Standards for Valuing Human Capital

This policy option is intended to make it easier for employers to invest in training by making it a less risky form of expenditure when judged from an accountancy perspective. Further work is required to determine the appropriate measures that would be required and the best way of applying new standards. This policy review suggests that further investigation should start by revisiting the recommendations and methods proposed in the final report of the Kingsmill Accounting for People Taskforce. This proposed that a standards board should convene to determine the most appropriate common indicators in valuing human capital. In a similar fashion, a working group representing accountancy experts, employers and policy makers should lead the development of this policy option.

Policy Recommendation 4 – Developing the Layered Recognition Framework for the Investors in People Standard

A new approach to the Investors in People Standard was launched in May 2009. The new approach to the Standard bears some similarities with the policy option developed through the Collective Measures study in terms of introducing a layered approach with additional recognition for additional achievement and a more flexible approach which may encourage engagement from SMEs. Further additional development of the standard could be considered by providing a tougher standard for larger employers which would require them to conduct audits of training volume along the same principles as gender pay gap audits and to attain equality in provision of training across all staff groups, and this could be tied into public procurement requirements.

The four options were discussed with stakeholders at the prioritisation events, reported in Devins *et al.*, 2009. The final report of the Collective Measures study details the conclusions of the study as a whole with regard to policy advice (Stanfield *et al.*, 2009).

1 Introduction

The remit of the Collective Measures project, of which this Policy Review is part, is to help fulfil the objective set for the UK Commission to provide a view to Government on the levers available to stimulate employer investment in skills and the cost/benefit options, including advice on whether there is a need to update and streamline the 1982 Industrial Training Board legislation for levies and whether there is a need for a new framework to support licence to practice schemes. In putting its advice together, the UK Commission will need to reach a view on the wider economic impact of these policies, particularly in stimulating economic growth and improved competitiveness and their effectiveness in raising skill levels.

While levies and licence to practice schemes are explicitly mentioned in the brief, the project has explicitly sought evidence on a broader range of policy levers in order to capture the principles and practice involved in implementing any other innovative and effective mechanisms.

The Policy Review is part of a series of linked projects, the 'collective measures' study. Projects 1 and 2 provide the theoretical and empirical findings that model and document employer motivations and behaviour with respect to skills investment. Project 3 seeks to establish the outcomes and effectiveness of policy options deployed in the UK and elsewhere to influence employer investment in skills. Project 4 involved stakeholders subjecting policies proposed in Project 3 to a prioritisation exercise, some of which were then subject to Initial Economic Appraisals before final reporting. This sequence is shown in Figure 1.1.

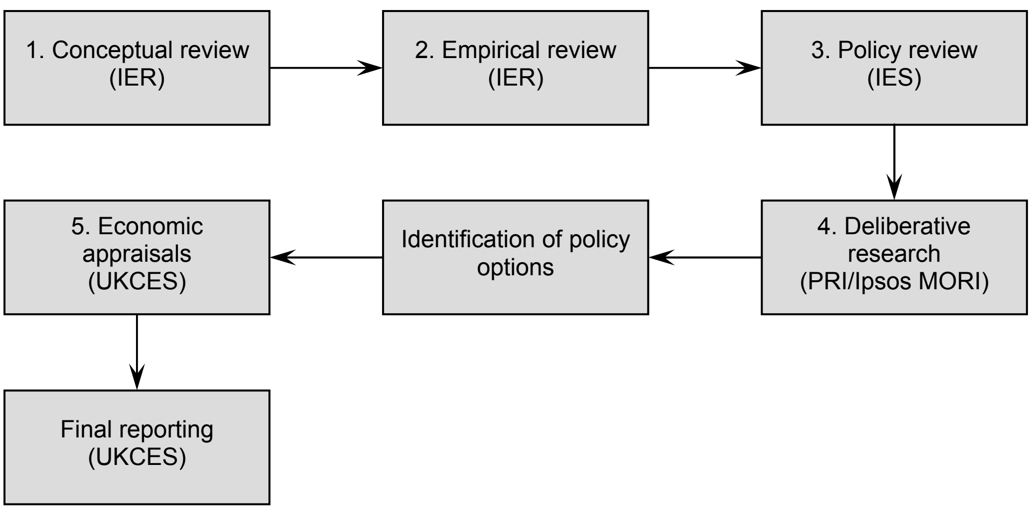


Figure 1.1: Collective Measures Study

The Policy Review has been conducted under the assumption that beyond any pre-existing commitments made by the government to regulatory change, the policy initiatives specified will be implemented within the existing regulatory context. It is not within the remit of the policy review to recommend broader labour policy interventions outside the scope of the collective measures under review.

1.1 Aims and objectives

The objectives of this policy review are to:

- Identify the policy levers with the most supporting empirical evidence of success in encouraging employer investment in training, in particular, noting those which address common blockages to employer action, which may result from capacity, capability or motivation.
- Draw on the evidence from Projects 1-3 and recommend collective measures that demonstrate sufficient merit to be subjected to further scrutiny as policy options through Projects 4 and 5, noting implications for tailoring according to sector, geography, size of employer or supply chain context.

1.2 Research questions

This report answers the following questions:

1. Which policy mechanisms are covered by the scope of the ‘collective measures’ project?
2. In which nations and sectors are they applied? Which agencies are involved in policy design and implementation? Which policies are used most/least commonly and why?
3. Have any policy levers been used in the UK or elsewhere previously and been discontinued? If so, why? What outcomes and impact did they have?
4. What are the factors that make these policies effective or ineffective? How does their impact vary according to socio-politico-economic context? Are these circumstances of relevance to any parts of the UK economy, based on geography, size or sector of employer?
5. What are the key findings from the evidence about the particular policy areas of interest to the UK Commission? In which contexts and locations are they used and why and to what effect?

1.3 Report structure

The rest of the policy review is structured as follows:

- Chapter 2 explains the criteria for selecting the policy instruments under discussion and outlines the framework used to classify policy levers, then describes the methodology used for the review and analysis of the literature.
- Chapter 3 reviews the series of policy levers for which at least a basic level of evidence was available: including (training) levies; rights for individuals to time off for training; Investors in People and quality standards; inter-employer collaboration including group training, state-led networks including those driven by private sector and public sector supply chain relationships; occupational licensing; tax breaks; and general subsidies.
- Chapter 4 compares the evidence for policy levers found in the policy, conceptual and empirical evidence reviews and proposes four policy options for detailed consideration in the next stage.
- Chapter 5 considers additional areas identified through the Policy Prioritisation Events and concludes.

2 Policy framework, approach and methods

2.1 Policy levers and definitions

There is a broad and overriding distinction between two forms of policy that needs to be taken into account in reviewing evidence on the effectiveness of policy instruments and advising on potentially appropriate policy levers. The first type is 'collective measures training policies'. The salient features of such policies are that they should:

- increase direct investment in training by large numbers of employers, which could be achieved through policy levers applied in a broad brush fashion to the entire economy, eg levies, tax breaks
- in optimal form encourage employers to act collectively, for example, through Chambers of Commerce, Sector Skills Councils or group training associations
- help to reduce passive employer reliance on government subsidy for training.

The second type of intervention is 'broader training policies', which primarily consist of government subsidies, many of which are aimed at increasing individual participation in training. Employer involvement may take the form of supporting employees who are the direct recipients of publicly subsidised training where employers' contributions to training are relatively passive and/or indirect. We therefore retain these policies for review, as there may be some indirect impact on employer engagement and investment in skills development.

2.2 Exclusions

Under this definition, work experience or work placements would be excluded from collective measures. Training schemes aimed at training educational providers to encourage closer engagement with employers are also excluded. Welfare to work type programmes are only included if they incorporate an element of training that is supported by the employer.

There are other influences that also yield market-wide changes in behaviour, such as labour market competition for staff through reputation for investing in training, and industry-wide innovation that requires training, but direct consideration of these influences lie outside the scope of this study. However, should any factors be identified that act as barriers or critical success factors to the application of training policies, these will be noted. For example, product market innovation might be identified as a factor that favourably influences employer demand for training and/or collaboration with other employers through supply chains.

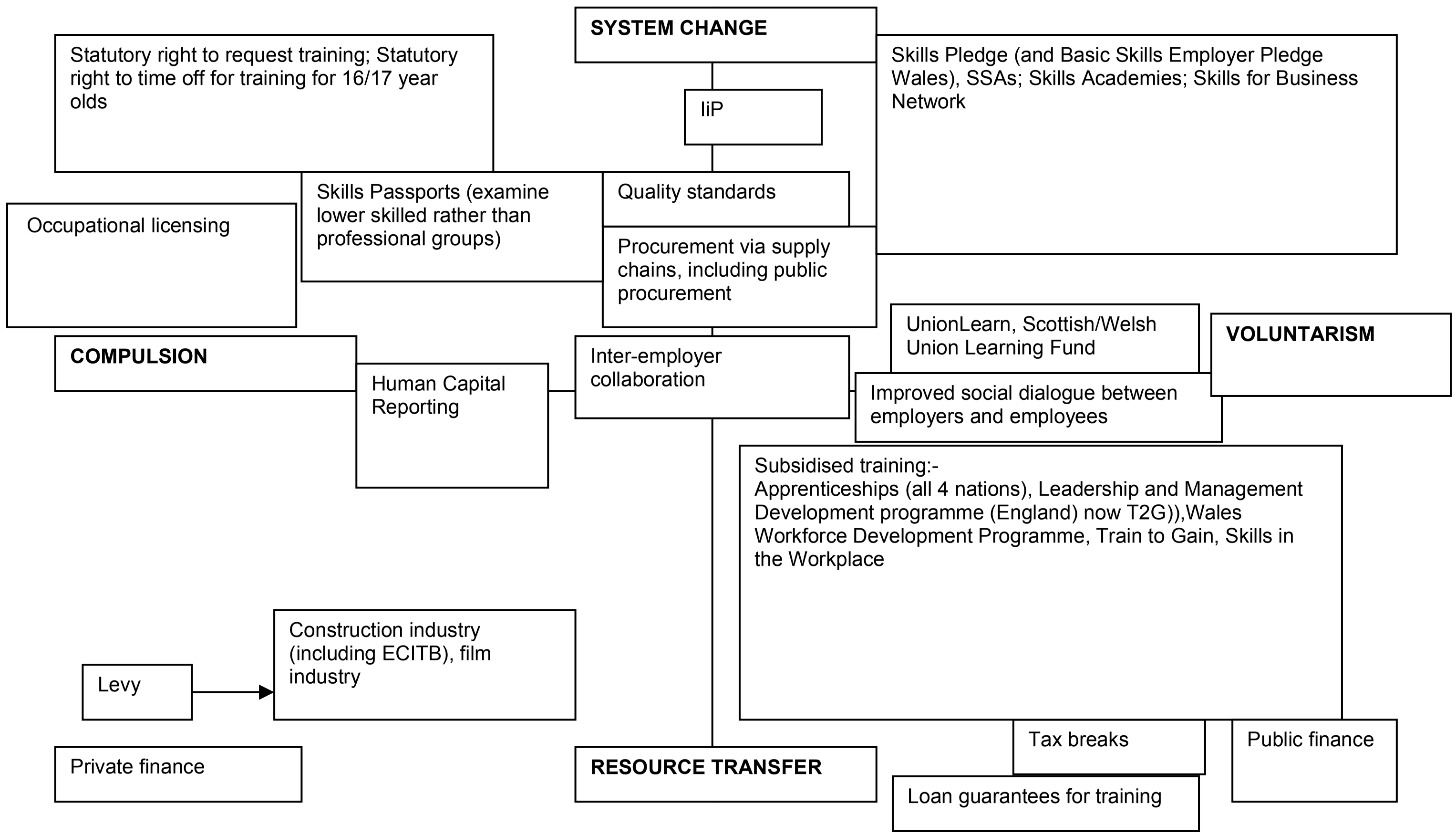
Policies to influence employer training can be classified into different types. Following discussion and consultation among the consortium partners, UK Commission staff and wider stakeholders, a list of potential policy levers that could serve to increase employer investment in skills was devised and mapped onto the original UK Commission framework. This is shown in Figure 2.1.

The discussion of the operation and impact of the various policy levers that follows in Chapter 3 is structured around this framework. Not all the mechanisms or institutions shown in the diagram are explicitly considered or discussed in the same level of detail in the Policy Review. In some case this relates to the weight of evaluation evidence available. Some such as National Skills Academies are relatively new and currently being evaluated, others such as the Skills Pledge and Sector Skills Agreements have not yet been subject to full formal evaluations. Evidence was not available on the direct impact of Human Capital Reporting (due to lack of implementation). Sector Skills Councils are institutions whose functioning is currently under separate consideration through the SSC relicensing programme. The procurement policy option is discussed within the literature on inter-employer networks through supply chain, as this where most of the evaluative evidence lies, and also includes a public procurement dimension. Loan guarantees for training and social dialogue between employers and employees emerged as policy options later in the project and are therefore considered as additional options in Chapter Three.

The discussion begins in the bottom left hand quadrant and moves in a clockwise direction around the chart, dealing in turn with each possible policy where evidence has been found of policy implementation. The policies discussed are:

- levies
- rights to time off for training
- occupational licensing
- Investors in People
- quality standards
- subsidised training
- tax breaks
- inter-employer collaboration.

Figure 2.1: Policies to influence employer training



Source: IES, 2009

2.3 Methodology

The policy review is based on analysis of commissioned evaluations and selected supplementary commentaries on a range of policy instruments identified using the framework described in Chapter 2 as a guide for including or excluding policies for review.

The principal aim of the search phase was to locate material that identifies and accounts for the relative impacts of different policy instruments upon employer investment in training, in both the UK and overseas. As the following sections will show, there is a shortage of evidence which addresses that question directly, so the review has also included materials that identify strengths and weaknesses of different policy options. The review aims to make clear the weight of evidence on which conclusions about the relative success or failure are drawn.

Materials for review were identified through searches conducted using academic databases, targeted Internet searches of websites of relevant organisations such as national governments, the OECD, ILO, CEDEFOP, and the European Commission, and consultation with a range of experts from the UK and abroad (search terms are illustrated in Appendix 1).

Each identified piece of evidence was then reviewed using an agreed proforma by a member of the project team. This is reproduced in Appendix 2 and covers issues such as nature and scope of policy, aspects of market failure it affected, any methodological problems affecting the study, and recommendations. Following compilation of an initial summary and overview of the main findings, comparisons were made with the findings of the conceptual review and the empirical evidence reviews and a map was produced of the policy options emerging from each review. Conclusions concerning the main findings of the studies and potential policy options were then discussed among the project team and through consultation with members of the wider project consortium, leading to the development of the proposed policy options.

In addition, responses to the call for evidence for the collective measures project issued by the UK Commission were reviewed and a search was made of Sector Skills Agreements for any policies being implemented with evidence of positive impacts on employer training. The key messages from these pieces of evidence are noted as appropriate in the main body of the report.

3 Range of policy instruments in use and availability of evidence on impact

3.1 Introduction

Before reviewing any evidence in detail, it is important to note the scarcity of available evidence that directly addresses the policy question posed, and the associated difficulties of measuring the benefits of investment in training. These are both discussed extensively in the empirical evidence review. Much of the international evidence base, in particular, is descriptive and some is concerned with policy mapping rather than policy evaluation. For example, Brummelkamp *et al.* (2005) consider lifelong learning policies in 15 members of the European Union. They identified 94 policy instruments that were being used by governments to foster lifelong learning, and 34 evaluations, of which only nine considered additionality and deadweight effects.

3.2 Levies

3.2.1 Description

Levies are systems through which all employers in a defined group are required to spend a defined amount on workforce skills development, through a variety of scheme designs (see discussion below). Levies are one of the most prevalent and widespread forms of policy lever to encourage employer investment in training. They are common across Europe and estimated to be established in at least 30 countries in the world (Dar *et al.*, 2003).

In the UK they are used in the construction sector and have been newly introduced in the film industry. The UK construction industry levy is run through the Construction Industry Training Board (CITB) and renewed through a statutory order of the government every three years, with annual consultation on the rate of the levy with the industry, which has to gain support from representatives covering 50 per cent of the industry. Employers whose payroll costs are under £80,000 per year are exempt from payment. There is a review conducted every five years (with a separate review in Northern Ireland) but the one covering the majority of the UK due in 2008 has been postponed until 2009. Estimated monies raised amount to £178 million in the year 2008.

The main message from the review of the levies literature is that they should be clear, transparent in infrastructure to employers, simple in administration and be devolved to the lowest possible level of the economy to gain employer commitment, rather than operating as a single blanket national policy. No evidence has been located to indicate whether precise variations in the level of a levy makes a difference to their effectiveness, and rigorous evaluation of their impact on employer investment in training is scarce. Their effects, impact and reception are variable, and much of their impact depends upon their design and administration.

Table 3.1: the main types of levy system

Type of scheme	Description	Country
Payroll tax exemption (levy based train or pay schemes)	Firms only obliged to pay training levies if their training expenditures fall short of the predetermined minimum level	Canada (Quebec), France, Korea (1976–94)
Grants based on payroll tax contributions (levy/grant and employment insurance based schemes)	Government and sectoral bodies collect training levies from firms that are then disbursed to eligible firms that have requested training grants	National: Belgium, Italy, Hungary, Japan, Korea, Spain Sectoral: Netherlands, Denmark, Belgium, France, USA, Korea
Sectoral funds agreed through collective bargaining	Training clauses in collective agreements specify minimum levels of investment, some funds may be supplemented by government and governments may set minimum investment amounts	Denmark, Netherlands

Source: based on OECD (2005) and Gasskov (1998)

The main difference in policy mechanism of the train or pay versus levy/grant systems is that the latter offer the possibility of directing firms' investment in particular types of training through setting eligibility criteria in the allocation of grants. However, train or pay systems give greater freedom to employers in selecting the type of training that best meets their needs. They also, however, assume that firms are fully aware of organisational skills needs and training gaps to make optimal investment decisions. Analysis in the empirical review indicates possible sub-optimal investment in training due to deficiencies in management understanding of the contribution that skills development can make. This is compounded by the problems of measuring the benefits of training investment and suggests that firms may not always be able to act in their own best interests.

Table 3.1 shows that there is significant variation in the way levies may be designed and administered. One example is that of France which has a levy with multiple elements (see Table 3.2).

Table 3.2: French levy systems

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.

Gasskov (1998) notes that this system gives employers some freedom and control over how they allocate some of their training funds if they wish to avoid taxation, but the individualistic mechanism does not foster collaborative employer action in, for example pooling of funds to address sectoral priorities.

Funding sectoral priorities for training may be easier when employer funding is stimulated through collective agreements organised at sectoral level. For example, the Netherlands, Denmark and Belgium, France and Sweden operate such systems, which focus on providing infrastructure to support employer training through design of qualifications and courses, and some direct funding of training. Denmark's covers about half the workforce and ranges across 15 sectors (Gasskov, 1998). The Netherlands' system of Industrial Social Funds are based on collective agreements to pay levies in a large number of sectors, and are not underpinned by any government legislation. They do, however, route and administer government subsidies for training to industry. Belgium's system is based on a pan-industry collective agreement to collect a levy from employers. A report by CEDEFOP (2008) on Sectoral Training Funds in Europe identifies that levies account for three-quarters of the funding they receive, and argues that formalising training through sectoral training funds can help avoid ad-hoc decisions on training investment, and create a longer-term approach, which is more likely to meet sectoral needs as well as those of individual organisations.

Similarly, the Spanish system of raising employer levies for training provision relies on a tripartite structure (Ok and Tergeist, 2003). The training system relies on involvement of social partners to administer funds gathered through levies. The levy is worth 0.7 per cent of payroll (0.6 per cent from the employer and 0.1 per cent from the employee) and monies from the European Social Fund augments this. Both organisations and individuals can then apply for grants from the collective pool of levy monies from the relevant government department. A key feature of the Spanish system is the requirement for SMEs with fewer than 100 employers to submit applications for funding for training in collaboration with other organisations in the same sector or geographical area. This enforced collaboration offers an interesting example of stimulating inter-employer networks, which are considered in more detail in Section 3.10.

Some schemes are specifically focused on redistributing training with the aim of achieving goals of social justice. Belgium's levy scheme is intended to support the skills development of vulnerable labour market groups. Another country that has explicitly used a levy system to tackle inequity in training access is Singapore, which developed a levy system to increase employer investment among low-skilled employees, and is broadly regarded as successful, with evidence of increased employer spending on training for these groups (Billett and Smith 2003; Senker, 1995).

3.2.2 Impact on training investment – how much, by whom and on what?

Dar *et al.* (2003:6) note that 'rigorous evaluations of the effectiveness of levy programs are extremely uncommon' and this policy review has found limited but very mixed evidence on the impact of levies on employer spending on training, or broader measures of organisational benefit. Smith and Billett (2003) and Greenhalgh (2002) argue access to training for French workers is restricted as in other European countries (and Australia) to higher-skilled managerial and professional groups, and that French firm spending on training is lower than the UK, despite the national levy systems (Giraud, 2002, cited in

Smith and Billett, 2003). In a later paper they also argue that there is limited evidence that the use of the French levy system had created a more highly skilled workforce (Billett and Smith, 2005). Reviewing the former Australian levy system, the Training Guarantee Scheme, that operated in the early 1990s, Senker (1995) notes that firms with between 20 and 99 employees recorded increases in their training expenditure from 1.9 per cent to 2.8 per cent of gross wages and salaries between 1990 and 1993. But average hours of training per employee decreased between those years, possibly because firms learned how to manipulate the system to count a wide range of activities as investment in training. In the UK, Abdel-Wahab *et al.* (2008) examined the relationship between use of the CITB training grant and firm profitability and found no direct relationship, but noted that in companies that were already highly profitable, it was much more difficult to establish that undertaking training had contributed positively to financial success. Dar *et al.* (2003) note some evidence that firms that spend heavily on training sometimes reduce this amount to the minimum needed to comply with the levy, so the system can have a 'levelling down' effect.

CEDEFOP (2008) and Stone and Braidford (2008) find that levies can spread the funding load between organisations and so reduce the concerns over poaching. Mechanisms can be applied to recoup training costs from employees. For example, in the Netherlands, employees leaving with just one or two years' service are required to repay some of their training costs. However, a detailed comparison of French and UK wage rates to determine the economic returns of training established that the French levy system does not fully eliminate poaching in France, as the limited data shows that economic returns to French firms from training are comparable to those gained in the UK (Greenhalgh, 2002).

In addition to the question of whether employer investment in training is increased, a number of common problems emerge in the literature concerning unevenness of distribution of monies from levy systems across different kinds of firm and employee. For example, Deloitte (2005) in their review of the construction sector CITB fund in Northern Ireland, found that grants of £1.4m were awarded in 2003/2004, but only 41 per cent of employers contributing to the levy funds had claimed a CITB grant (p.4) and only 37 per cent of levy income was paid to employers in grants against a target of 45 per cent (p.36). This report argues that overall 'the need for training within the construction sector is not matched by uptake of training within the construction sector' (p.4). Unless levy systems are designed to redistribute training funding with explicit attention to ensuring smaller organisations benefit, SMEs may not reap their share of the funds to which they have contributed. Several studies found that large firms tend to make use of training grants funded through levies more than small ones do (Dar *et al.*, 2003 cite the example of Singapore; Senker, 1995; Deloitte, 2005; Gasskov, 2001; Sung *et al.*, 2006; Stone and Braidford, 2008). For example, Deloitte (2005) found that disproportionately more Northern Irish firms in the largest and smallest size categories recouped their investment in the construction levy than the rest of the sector. Slightly different evidence is found in a study by Abdel-Wahab *et al.* (2008) of the sector across the UK. This found that larger companies with higher than average profit per employee claimed more training grants, but small and medium-sized firms that were similarly successful claimed lower levels of training grant when the size of firm was taken into account. The main reason identified for these inequities is that larger firms have more resources and may be more sophisticated in dealing with the application process. However, given the findings from the empirical evidence review that small firms are less likely to perceive a need for training, it is also possible that SMEs may be less motivated to seek funding for training. Small firms may also face practical obstacles in benefiting from training such as ‘backfill’ costs for employees undertaking training. For example, CEDEFOP (2008) stresses that not all sectorally-based funds cover the indirect costs of training, such as covering the work of employees released for training, and finds a particular need for time off for training to be covered in SMEs. Senker (1995) concludes that large-scale levy systems are unsuitable for sectors with large numbers of SMEs. However, there may be a limited number of exceptions to this principle. There is broad support for the construction levy in Northern Ireland (Deloitte, 2005), perhaps indicative of levies being acceptable in industries where employers recognise their absence would jeopardise the skills base.

There is a recurrent concern over how employers spend training grants in some levy systems. Using rational decision-making behaviour, employers should spend grants on training which most benefits their business, however, it seems that this does not always occur. Commentators argue that under national systems, especially, employers become more conscious of the amount they spend on training, and the cost rather than the purpose of investment can dominate decision-making. The amounts of money they need to spend to avoid paying the payroll tax are the focus of their attention rather than appropriate spending to meet the needs of the business. This point is endorsed by Billett and Smith (2005) who argue that national levy systems appear to generate ‘superficial compliance’ among employers, by Dar *et al.* (2003) who state that employers often regard levy schemes as a tax, and Senker (1995) in his reviews of the Australian as well as the French system. A possible way of counteracting this is by imposing quality or auditing requirements on firms to ensure that training satisfies policy objectives, but Dar *et al.*

(2003) point out that this adds additional cost and complexity to the system. It may also serve to undermine employer support for levies, as it may be perceived as undue government interference in managerial prerogative over how levy monies are spent.

3.2.3 Factors leading to success and failure of levies

The major feature of levy systems which have endured with some success is that they operate in nations where there is either an industrial relations system founded on culturally embedded tripartite decision-making structures between employers and employee representatives, strong institutional networks at sectoral level (see, eg Sung *et al.*, 2006; Ok and Tergeist, 2003) or a regulated and centrally controlled small economy, as in Singapore, where such public policy intervention is palatable to employers (Billett and Smith, 2003; Senker 1995). In the European countries, there are robust employee representation structures and mechanisms, and the coverage of collective bargaining is relatively high, as are both union membership and union density levels. Transplanting such systems into a UK context, where the industrial relations system is much more fragmented, and collective bargaining activity much less common, would require considerable strengthening of the coverage of employee representation mechanisms, which represents a considerable challenge. Indeed, there is some evidence of failures to transplant levies from elsewhere in the world. The Australian attempt to copy the French levy system was widely reported as a failure because employer commitment to training was not achieved by what was perceived as a punitive system, and Billett and Smith (2003) contend that a similar attempt made in Malaysia to copy the Singaporean system was unsuccessful for similar reasons.

Some authors also counsel caution in the degree of policy ambition placed in levies, with the suggestion that while they could be useful in tackling local or sectorally identified training needs, they will not necessarily achieve improved equity in distribution of training among workforce groups or achieve upskilling. This argument is founded on a lack of evidence that levies create ‘enterprise commitment to the further development of their employees’ skills’ (Billett and Smith, 2005). Both Leitch (2006) and Senker (1995) emphasise the need to win the support of employers, and Senker draws attention to sub-optimal performance in the Australian and French systems as a result of employer disenchantment with the systems. Dar *et al.* (2003) note that one of the conditions of success for levies appears to be a context of economic growth, which can contribute to the demand for training. This makes the timing of the launch of any levy system an important policy consideration.

Some commentators suggest that being explicit about the purpose of a levy targeting grants at particular types of training of most value to the employer (or what an agency thinks should be of most value to an employer) is important. For example, Abdel-Wahab *et al.* (2008) argue that training grants should be targeted at specific areas of training in order to improve profitability, with a focus on a specific business need. However, it is arguable that any restriction on the subject of spending by employers should be determined through an employer-led system, and choice of training should be devolved to the lowest possible level on a sectoral or regional basis. This would maximise employer co-operation and participation to ensure local needs are met (eg Billett and Smith, 2005; Leitch, 2006; Gasskov, 2001). Smith and Billett (2003) argue that notwithstanding its weaknesses, local and regional implementation partially account for the longevity and employer acceptance of the levy system in France. For policy design, this implies some differentiation in the design and application of any levy. CEDEFOP (2008) emphasises the need for variations in training, skills levels and training costs across sectors when deciding on levy rates, because high-skill industries may pay higher salaries, which will be reflected in levies based on payroll costs. A further criterion of the centrality of labour to the production process should also be added in determining levy rates, since not all high wage industries rely on labour to the same degree (Gasskov, 1998). Senker (2005) additionally notes design difficulties of developing a levy system appropriate for firms with products and services in multiple sectors. Greenhalgh (2002) concludes that despite its limitations, a training levy may be a useful option to encourage employer investment in training, but advises calculating the levy on profits rather than on payroll, to avoid excessive burden on SMEs.

3.2.4 Conclusions and implications

The literature on the impact of levies suggests that they are a highly problematic policy lever, with potentially dysfunctional consequences. They are most successful in socio-economic contexts that are dissimilar to the UK, characterised by stronger state co-ordination of economic and industrial policy, as opposed to the more liberal market economic policies of the UK. All of these findings suggest:

- The devil lies in the detail of levy design to make them effective.
- There is an extensive literature documenting a number of problems in their operation, such as uneven impacts across different sizes of organisation, and superficial compliance.

- Where levies are more successful, they appear to be implemented at sectoral levels in consultation with employers. They require significant tailoring and considerable investment to make sure the systems are efficient and transparent.
- There appear to be particular problems for SMEs in applying levies; the examples of the film and construction industries suggest that levies may be more appropriate for micro-firms or self-employed contractors in highly fragmented and geographically dispersed industries.
- Employer commitment to, and comprehension of, any system chosen is essential to its success.

3.3 Individual rights to training and/or training leave

3.3.1 Description and Impact – international evidence

Individual rights to training, time off for training or paid educational leave, have been enacted in at least ten countries as shown in Table 3.3, including well-established to more recent entitlements to time off for training (Econ, 2008). However, paid training leave is one of the less well developed measures to encourage employee training; Gasskov (2001) notes that the 1974 ILO Paid Educational Leave Convention was not widely ratified because of perceived implementation difficulties. Time off work for training, and training costs, may be funded by the employer, the individual, the state or a mixture of all three and conform to one of three models:

1. at sectoral level through collective agreements between employers and employee representatives, which is common in parts of Europe
2. through rights to time away from work as a condition of membership of professional bodies to support continuing professional development. (This represents a potential link between the potential policy lever of occupational licensing (see Section 3.19).
3. through individual rights to request time off, legislated at national level, for example in France. The UK implemented an entitlement to time off from work to gain a first Level 2 qualification for all 16/17 year olds across the devolved national administrations and is currently intending to introduce a right to request time off for training, based on the right to request flexible working legislation.

Table 3.3: Education and training-leave schemes in selected OECD countries, 2005

	Eligibility	Type of financial support	Funding mechanism	Number of beneficiaries (% of total employment)
Austria	Three years with same employer. Employer agreement. For any training of more than 16 hours per week.	A daily allowance of EUR 14.5 for a period of 3-12 months	Austrian Employment Service.	2,263 in 2002 (0.1%)
Denmark	Employer agreement/self-employed: *General adult education:* >26 weeks in present job. Tertiary level: >three years work experience	Paid to employees or to employer if the latter pays full wages during training leave. Maximum unemployment benefit (9/2004): EUR 423 per week full-time attendance. Maximum duration of SVU: 80 weeks (full-time equivalent) at basic education level. 1-52 weeks (full-time study) within a five year period at tertiary level. Vocational (VEU): unlimited time.	State budget. Employers contribute towards VEU allowance via training levies (Employers' Reimbursement Scheme).	SVU: 14,000 or 0.61% of workforce aged 25-59 in 2002. VEU: 9% of workforce aged 20 to 70 (based on transactions, not beneficiaries as these may participate several times in a year).
	Job rotation programme to release staff for training; jobs must be filled with low skilled/ unemployed recruits.	Subsidy for employers to cover training/wages and continued entitlement to state benefits for replacement staff for up to 12 months.	State budget and local government funding for wage subsidies to trainees.	Up to 1.3% of workforce roles were covered by job rotation trainees in 1990s.
Finland	Employees with a work history of over ten years.	EUR 440 per month plus an earning-related amount covering 15-20% of the last monthly wage up to one year.	Education and training insurance.	5,236 in 2002 (0.2%)[1]
Germany	Specified in collected bargaining agreements and Länder legislation.	Full wage costs.		1% to 2% annually

	Eligibility	Type of financial support	Funding mechanism	Number of beneficiaries (% of total employment)
Netherlands	Specified in collective bargaining agreements.	Full wage costs.	Sectoral training funds determined in collective agreements paid for by employees and employers.	n.a.
Poland	Workers directed by the employer to a school or training.	At secondary level: coverage of wage costs up to five hours and six working days before the final examination. At tertiary level: coverage of wage costs up to 28 days of training leave; refund of travel costs, material and tuition fees.	Training fund: enterprises that establish the training fund have the right to receive financial aid for training from state budget resources.	n.a.
Spain	Workers who have been employed by the same firm for at least one year.	Full foregone wages up to 200 working hours.	Social partners' mandatory contribution to the Tripartite Foundation.	1,394 in 2002 (0.01%)[2]
Sweden	Workers who have been employed for at least six consecutive months or with a work history of over 12 months during the last two years.	Grants and loans of SEK 33,880 for 20 weeks full-time studies; a supplementary loan for the workers aged 25 or older if the income of the beneficiary during the 12 months immediately preceding the studies has been above a certain threshold.	Study allowance by the government.	0.7% in 2002
Belgium	Full-time workers.	Full wage costs (up to 80-120 hours for general education, 120-180 hours for vocational training, and 180 hours for those who take both general and vocational courses and direct costs).	State subsidies provided to employers from social security contributions.	60,270 during the 2000/2001 academic year (1.5%)

	Eligibility	Type of financial support	Funding mechanism	Number of beneficiaries (% of total employment)
Norway	Workers with a work history of over three years and with the current employer for the past two years.	NOK 80,000 per year, of which 60% loan, 40% converted from loan to grant upon passing examination. <50% of beneficiaries of education leave (formal education) received full pay, 20% received reduced pay.	State Education Loan Fund for basic educational attainment.	17,000-18,000 employees (0.8% of employed) exercised their right to take full education leave in 2003.
Japan	Employees covered by employment insurance.	1/4 of the wage costs and 1/4 of the direct costs (1/3 for SMEs).	Subsidy provided to employers from employment insurance.	3,265 in fiscal year 2002 (0.01%)
UK	Young people aged 16-17.	Employees not in full-time education and with NVQ level 2 or equivalent are entitled to reasonable time off for study or training for a qualification at that level.	Government subsidy.	n.a.

SVU: Statens voksenuddannelsesstøtte (National education support for adults).

VEU: voksen-og efteruddannelse (Vocationally oriented adult education).

1 The figure refers to the number of employees who have taken alternation leave, of whom only roughly 17% indicate studying was the major reason.

2 The figure refers to the number of individual training permits approved by the Tripartite Foundation.

Source: OECD (2005), Promoting Adult Learning, Paris, plus additional data from OECD (2002)

There is a some evidence on take-up of training leave, but no evidence has been located which quantifies the investment made by employers to support this, or to assess the additionality of the policy above the investments that employers would make without it. The main feature of the paid educational leave schemes shown in Table 3.3 is their generally low take up (eg Stone and Braidford, 2008). For training leave to be an effective policy tool, workers must be aware of it, motivated to use it and have the capacity to source and discriminate between training options that will benefit them most or access appropriate information, advice and guidance that will help them to do so. The policy review now discusses some of the main features and findings concerning a selection of the policy instruments to illustrate the broad pattern of findings identified.

Belgium has operated a system of paid educational leave of up to 120 hours for vocational courses or 80 hours for education for private sector workers, funded by employers, since 1995. Employee wages are paid by employers, whose costs are partly reimbursed by training levy funds and partly through direct government subsidy. Reduced government spending in the mid-1990s led to shortened leave and increased employer contributions to pay for it. Take-up is very low, with the ILO estimating that only around two per cent of workers eligible for the scheme have used it (www.ilo.org/public/english/employment/skills/hrdr/init/bel_10.htm). Gasskov (2001) cites survey data from the textile sector that showed just over one-third of workers knew of the right, while only 16 per cent of that sub-group use it, and lower participation rates among small firms compared to large ones. The system has attracted some criticism due to false claims from employers for training not received by employees (Gasskov, 2001). This illustrates a potential difficulty in the administration of individual entitlement-based policies, which require robust and potentially costly tracking systems of individual learners and auditing processes to ensure funding is spent appropriately.

A further regional experiment has taken place offering training vouchers to employees of SMEs in the Wallonia region of Belgium in 1998 (Newidiem, 2005). This is a hybrid policy because, while it is directed at employees as the beneficiaries, it is operated through employers and so straddles the policy divide between individual rights and subsidised training. Funding for the vouchers was split equally between employers and the state and the scheme requires that training is purchased from accredited sources. Employers rather than employees were responsible for purchasing the vouchers and the application system for the vouchers was found to be bureaucratic and deter SME involvement. Newidiem (2005) report that additional employer investment in training was likely as a result of the scheme because of the low levels of workforce participation in training prior to the implementation of the evaluation, but formal evaluation evidence is not available.

Finland operates an Education and Redundancy Payments Fund, run by employer associations and unions, and funded by employers. It pays training allowances to employees on unpaid educational leave or away from their work, enabling them to participate in professional training. This is supported by a job rotation scheme that fills the vacancy left by the employee with an unemployed person. It is available for employees aged from 30-60 with one year's continuous service. The allowance is paid for a maximum of 18 study months and it is paid in addition to adult education funding received from the state.

Swedish workers have the right to 180 days leave provided a satisfactory study plan is produced and they have six months continuous employment with their current employer. Employers can defer leave for up to six months if it is not convenient. Funding depends on relative skill levels; those lacking basic educational qualifications have access to some limited government support.

France has three separate training rights. Most recently (Droit Individuel de Formation or DIF, 2004), an intersectoral agreement was created giving an individual 'right' to training of 20 hours per year to every employee who has held a permanent contract for at least a year, with the possibility of banking these hours over a period of up to six years. The training may be taken partially or entirely outside working hours. There is limited evaluation of this policy, but Cereq (2008) note that its rates of participation have grown slightly in the first three years of its use, with 19 per cent of organisations using it in 2007 and about half a million employees receiving training as a result. This still means that only five per cent of eligible workers took part, and the authors argue that participation rates remain low. However, among firms that have activated the policy, it appears to be having more impact in terms of worker participation in training in the smallest firms, as opposed to larger ones, and more lower skilled workers are making use of the entitlement than higher skilled ones. Therefore, it may be contributing to reducing inequality in participation in training at both an organisational and individual level. Due to the 'banking' provision, it is possible that the effects of this law are yet to be seen in full. Early evaluation of responses to the scheme in SMEs has shown that the organisations responsible for collecting and distributing monies from the levy system, together with external sources of advice and information on training, have an important role to play in enabling SMEs to support employees' requests appropriately (Cereq, 2008).

France also has a more established right to time off for training of up to one year or 1,200 hours (Conge Individuel de Formation or CIF). Employees receive 80 per cent to 90 per cent of their pay for an initial period, but if the training lasts for more than a year or 1,200 hours, individuals receive 60 per cent of pay from that point on. A central training fund reimburses the employees' salary to their employer (Gasskov, 1998). The numbers of people participating in CIF remain low at around 30,000 each year and only around 350,000 in total during the 1990s (Gasskov, 2001). Most staff using it are senior managers or members of professional groups. Some commentators report that it is not regarded as a successful policy lever because employers feel that workers benefit more than organisations through increased labour market mobility, while employees are reluctant to take salary reductions to contribute to financing their own training (Gasskov, 2001).

The last element of the French system is a right to time off for a combined training needs assessment and career development discussion for every employee with more than five years in employment and 12 months service with the current employer. Only around 20 per cent of those seeking competence assessments are current employees as most are young people entering the labour market or unemployed job seekers (Gasskov, 2001). For this reason, it is not regarded as particularly successful and employee training is rarely an outcome as the results of the assessment are confidential, and those participating are often seeking a move from their current employer.

Italy has three forms of individual training rights:

- individual rights to attend training for up to 150 hours per year, agreed through collective bargaining (Gasskov, 2001). Cereq (1999) report that these rights are rarely used.
- individual training vouchers worth between approximately £500 and £1,300 have been available in five provinces since 1999 and approximately 33,000 people had used them by 2003. Under these provisions, employees can choose from a list of approved training interventions and may be required to fund up to 20 per cent of the training costs for training outside working hours. The remaining costs of the programmes are partly funded through sectoral funds and monies from individual organisations. Some regions have made funding conditional upon workers actually participating in the training.
- an educational leave programme of up to 11 months duration open to employees with five years continuous service, as well as those not in employment. This was launched

in 2000. There is no built-in right to the same salary while undertaking training but employees can access regional and professional funds provided by their employer.

Croce (2007) argues that evidence from Piedmont and Alto Adige provinces shows that training vouchers can help redistribute investment in training by raising participation in training among some groups including women, those on atypical employment contracts, and workers in SMEs. However, individual self-selection can be a problem because other disadvantaged groups are disproportionately less likely to make use of the vouchers including workers aged over 40, those with no secondary school qualifications, and employees in low-skilled manual jobs[1]. Croce and Mantanino (2007) recommend that incentives are needed to encourage workers to make use of the rights and avoid accumulation of large amounts of leave; for example, any unused leave accumulated could be forfeited after three years. There is no direct evidence of the impact of these schemes on employer investment in training.

There was also an educational leave programme in Denmark, which operated from 1992-2000 and relied on employers to pay employees for the duration of any leave (Westergaard-Nielsen, 2001). According to a review based on interviews with policy makers (Wurzburg, 1999), this was much less appealing to private as opposed to public sector employers, private sector organisations being half as likely to use training leave for employees. Satisfying intrinsic interest appears to be one of the major outcomes of the leave programme, since, while participants were enthusiastic about it (with 90 per cent keen to repeat the experience, and at least 75 per cent satisfied with the resulting personal and professional development), less than one-third expected higher wages or career progression as a result. At least 60 per cent of organisations felt that training leave given to staff would benefit their organisation, with greater enthusiasm in the public sector, and at least 70 per cent stated that they would support employees to use it in the future.

Elsewhere, attempts to introduce paid educational leave have been unsuccessful. Bowman (2005) outlines the case of Norway, where paid educational leave was subject to repeated debate among industry and government throughout the 1990s. While employers eventually conceded on the principle of offering training leave, they refused to fund employees' salaries while they were undertaking training. Employees represented through

1 CEDEFOP (2003) also reports that the Austrian voucher scheme is mainly used by employees with previous experience of learning.

the unions were reluctant to share costs of training by accepting reduced wages so no agreement was reached.

One variant of educational leave programmes is job rotation initiatives, of which the best known originated in Denmark. These are based on offering training sabbaticals to employees and replacing them with a long-term unemployed or unskilled person. Both hold an employment contract, the new entrant retains their rights to any state benefits and the state contributes towards the training costs of the employee being replaced. If the employer chooses to pay the replacement employee, they receive a wage subsidy from national and local governments which is usually equivalent to salaries for entry level jobs. Although popular in the 1990s, Danish assessments are that the programme did not run on a large scale (Westergard-Nielsen, 2008). In Denmark, the schemes have been evaluated as successful in placing unemployed people in placements that subsequently helped around 75 per cent of them into jobs. The initiatives are usually aimed at low skilled rather than higher skilled jobs due to the length of training required by the latter. The economic context is important in terms of the dynamics of implementing these schemes. In slack labour markets, there is a ready supply of labour to participate in such schemes but there may be reduced demand from employers due to reduced business demands and ease of recruiting skilled workers. In tight labour markets, employer demand may be higher, but those workers still unemployed may be among the hardest to help groups and require more intensive training and support. In Denmark the scheme drew on some notable examples in local government, embedding it in the public sector at a time of increasing demands on service delivery against a backdrop of tightening public sector spending (as a policy lever, this may be worth investigating).

Job rotation is perhaps best understood as a potentially valuable unemployment containment strategy and/or a worker supply strategy with increased skill levels and employer investment as a subsidiary outcome. In its most developed forms, there has been relatively less emphasis on it being a policy lever with which to stimulate employer funding of training. It may nevertheless be worth investigating by policy makers as having potential to serve a broader purpose in the current economic climate and in connection with the incoming right to time to learn.

3.3.2 Application in UK

In the UK, Economic Research Services Limited (2002) undertook a survey of 501 employers of 16 and 17 year olds to investigate the impact of the right to time off for study and training leading to an NVQ2 or equivalent, introduced for this age group in 1999. Only two per cent of employers stated that the legislation had influenced their attitude to training their young workers, as many reported themselves being already receptive to, and supportive of, training for this group. However, the actual impact on training undertaken was not assessed by this study so it may under- or over-estimate the effects on employers. Identifying and sourcing appropriate training to meet identified needs was problematic for some organisations: ten per cent of employers stated they were not aware of training provision available locally and a further 15 per cent felt that they did not have access to appropriate training for these staff. Further detail on the type of training that employers found hard to source is not available.

The recent consultation exercise by the Department for Innovation, Universities and Skills (DIUS, 2008a) found broad employer support for a right for employees to request time off for training. Around one-third of employer respondents reported it would change their behaviour, whilst other employers believed they already supported employee development.

A partly analogous piece of legislation is the right to request flexible working by parents of young children which was introduced in 2003. Evaluation material suggests that it has been difficult to ascertain the unique impact of the law on flexible working practices/attitudes, because the majority of organisations are increasingly offering this to all employees anyway. Most data report that when requests for flexible working are made, employers respond positively (Hooker *et al.*, 2007; Hegewisch, 2009). The DELNI report (2006-7) compares employer and employee surveys undertaken in Northern Ireland in 2003 (before new law) and 2006, and finds little change in attitudes/practices, concluding that there has been little discernable impact as a result of the new law.

The major issue concerning flexible working appears to relate to employee demand. Evaluation evidence on the current right to request flexible working also suggests that employee take-up is limited. Hooker *et al.* (2007) found that 56 per cent of employees surveyed were aware of the right but only 17 per cent had made such a request over the past two years. Moreover, Hegewisch (2009) observes that rights to request flexible working do not appear to have caused employees to activate those rights. The proportions of employees requesting flexibility in work patterns remained constant at 17 per cent in the two years before the introduction of the right and in the three years afterwards (Hooker *et al.*, 2007).

It is possible therefore that these findings may reflect limited employee demand for such a right or, alternatively, the presence of other barriers or disincentives which inhibit workers from making use of it. Certainly, there is evidence to suggest that there is some unmet demand for particular forms of flexible working; for example a much larger proportion of workers would like to have flexitime, than those who actually work on this pattern (Hooker *et al.*, 2007). Hegewisch (2005) claims that workers only request flexible working when they feel their request will be granted and also note that the financial implications of reduced working hours may deter people from requesting them.

There may be important implications for rights to request time off for training. While workers may support the idea in principle, the costs of training and of any income lost while undertaking training may deter take up. Secondly, the Employee Demand study conducted for the UK Commission (Johnson *et al.*, 2009) has some interesting findings on barriers to training encountered by individuals. Obtaining time to learn was a repeated concern and flexible working was proposed as a solution, but it is clear that this would need to include adjustments in work volumes as well as working time. More fundamentally, the literature reviewed for the Employee Demand project found that the major barriers to individual participation in learning were lack of interest and preference to spend time in other ways. There is therefore likely to be a need for significant information, advice and guidance to shift some employee attitudes to training.

The UK Commission call for evidence for the Collective Measures project produced only two responses commenting on individual training leave, one of which supported the right to request training leave and one which supported a statutory right to leave for all workers.

3.3.3 Implications and conclusions

- Individual training leave is one of the least used policy levers, and take up on the part of employees appears to be low. Maximising employee participation is likely to require additional policy levers involving information, advice and guidance as there is likely to be a need for a significant change in motivation and dispositional attitudes among potential users.
- There is limited evidence on how participation is distributed among different groups in the labour force, which makes it extremely difficult to assess whether any underpinning policy goal of equality of opportunity to participate in training is being met.

- As a policy lever designed to encourage employer investment in skills, there are some inherent tensions if a leave entitlement and choice of training is given to individuals while requiring funding from the employer. This may reduce the likelihood of employer support for this policy option.

3.4 Investors in People (IiP)

3.4.1 Description and discussion

The review included seven articles examining aspects of Investors in People (Grugulis and Bevitt, 2002; Ram, 2000; Smith *et al.*, 2002; Bell *et al.*, 2004; Hoque *et al.*, 2005; Hoque, 2008; Rayton, 2007; as well as some findings from Hoque and Bacon, 2006), including the impact of the policy on training levels and distribution in the workplace.

Hoque *et al.* 2005 reviews the evaluation and research literature and finds little evidence that accreditation to the Investors standard is associated with an increase in the volume of training. IiP appears to produce little additionality and suffer from 'deadweight' problems, because firms that have higher levels of training are more likely to opt for IiP recognition. Hoque 2008, using Workplace Employee Relations Survey (WERS) data, also shows that training activity in workplaces accredited to the IiP standard is no more equally distributed among, for example, lower-skilled or lower-qualified employees than in non-IiP firms – indeed, some employees who tend to be less likely to receive training (eg part-time or older employees) are even more disadvantaged in that respect in IiP-recognised firms. This suggests that the revisions to the standard in 2000 to include a requirement that firms commit to equality of opportunity in training and development are not having the desired effect.

However, Rayton (2007) also using the WERS data set, found a tendency for firms with low levels of training to be drawn towards the standard and, by using the panel dataset from the 1998 and 2004 WERS surveys, was able to demonstrate that as a result of achieving recognition training became more widespread (at least among the main occupational group in the workplace).

A number of studies considered the applicability of and reception for IiP in SMEs. In a specific analysis of SMEs using WERS 98 data, Hoque and Bacon found that Investors in People recognition had no connections with greater training activity (2006). Penetration of IiP among SMEs is also relatively low, with only seven per cent of SMEs holding accreditation. Ram (2000) undertook three case studies of SMEs to investigate their views on IiP and the processes used to meet the Standard. The results were very mixed and while customer pressures were an important incentive for some, there was evidence that IiP improved associated HRM processes such as appraisals, rather than the quantity or quality of training per se. The tendency for IiP not to increase training or skill levels was also noted by Grugulis and Bevitt in a case study of a hospital (2002). Smith *et al.* (2002) conducted a survey of nearly 600 SMEs in England, of which 167 were involved with the standard. Over three-quarters of organisations believed that tying training more closely to an organisation's business plan was a benefit of IiP, but unfortunately the survey does not distinguish between organisations with/without accreditation or address the question of whether training had improved in quantity or quality.

Furthermore, evidence noted by Bell *et al.* (2004) reveals some concern about potential dilution to the standard from larger employers with good reputations for training should less prestigious organisations obtain the award. This concern for exclusivity leads Bell *et al.* (2004) to suggest that the standard could be refined using a system of layers or tiers, so that employers with an outstanding commitment to workforce development can retain their elite status and the IiP standard suffers no loss of perceived merit. The potential effects of any changes which result in a more complicated system on brand transparency would, of course, need careful consideration.

There are also questions concerning the use of blanket targets or goals for IiP penetration. Bell *et al.* (2004) note different levels of accreditation by sector, with public sector, energy/utility, retail/wholesale, some financial services, and hotel/hospitality organisations being disproportionately likely to meet the standard. They suggest that it may be more appropriate to develop sector specific standards and draw attention to the customisation of ISO quality standards as a model that could be followed.

A number of responses to the UK Commission call for evidence for the Collective Measures project commented favourably on Investors in People as an effective collective measure. It may be a useful framework for employers who are committed either to using training to support their business strategy or who wish to access a tool to enable them to do this.

3.4.2 Conclusion

- Whilst there is evidence to support the principles behind IiP in the Conceptual and Empirical Evidence Reviews, there is little evaluation evidence to suggest that IiP has penetrated hard-to-reach target areas of the UK economy on a wide scale or that it has increased the quantity of employer investment in training.

- There appears to be an opportunity for further specific targeting of IiP towards SMEs, organisations that do little training, or to the needs of different sectors. Since evidence of its likely impact is somewhat equivocal, and there is a possibility that organisations may do less business-focussed training as a result of IiP accreditation, this will therefore not necessarily raise employer investment in skills.
- Expanding take-up of IiP poses some risks to its status among elite accredited organisations. A layered recognition system may alleviate this but would need careful communication to ensure transparency of the standard is maintained.

3.5 Quality standards

3.5.1 Definition and discussion

Broader quality initiatives could have an impact on employer investment on training through emphasising (high) common standards to be adopted in work processes. A number of organisations promote quality standards throughout the world, and in addition to searching academic databases, a search was conducted of their websites for any evidence of the impact of these policies on employer training, but no evaluations concerning the impact of their activities on employer training investment were found. Most organisations were promoting the ISO 9000 standard. This was first introduced in 1987 (formulated by the International Organisation for Standardisation) with reviews in 1994 and 2000. It contains a clause on training requiring organisations to set out the training and experience requirements for new employees and all staff whose work affects quality to be trained. This focuses on the identification of needs and setting out the means to meet them. Very little evidence was located on its impact on training but Quazi and Jacobs (2004) analysed the impact of ISO 9001 on training in organisations in Singapore, commenting on the dearth of international evidence. The achieved response rate was only 19 per cent with data from only 19 manufacturing firms found suitable for before and after analysis of training practices. This found that as a result of the process of gaining accreditation, 61 per cent of employers claimed improvement in they way they undertook training needs analysis, training design, training delivery, training evaluation, and the overall development of their staff, but the type of training undertaken is not stated. Overall, the number of training hours per employee increased by one-third and training time per manager doubled. Firms also reported, however, that the bureaucracy involved in attaining and maintaining the standard was time-consuming, and therefore expensive and off-putting.

3.5.2 Implications and conclusion

It is very difficult and inadvisable to draw any conclusions for formulating policies to stimulate employer investment in skills from such limited data where definitive impact of policies is also not discernible due to methodological limitations. However, quality standards are voluntary which raises questions about the likelihood of employer participation on a sufficiently large scale, and issues of additionality due to problems of deadweight. As the case of Investors in People shows, even when quality standards are aimed at improving training, this will not necessarily lead to an increase in training. It is uncertain whether quality standards aimed at other business processes would yield better results.

3.6 Inter-employer collaboration

3.6.1 Definition and rationale

Inter-employer collaboration for training can take a number of forms such as group training associations, Chambers of Commerce, Sector Skills Councils, trade associations, business clubs and supply chain relationships. Gospel and Foreman define the activity as: 'any situation where two or more firms co-operate in the organization of training. This may cover various stages of training — setting of standards, sourcing of trainees, delivery of training, monitoring of progress, and assessment and certification.' (2006:191)

Inter-employer collaboration finds support in the theory and literature considered by the conceptual review because it can contribute to the social and network capital of firms (Nahapiet and Ghoshal, 1998). This can benefit organisations by increasing the range of ideas available to solve business-related problems, provide evidence of their impact direct from organisations benefiting which is likely to be of higher credibility to organisations than information received from a third party, and has wider spillover effects through the possibility of providing links to new suppliers and customers. There is also an argument that viewing training as 'collective goods' can help to overcome market failure problems that concern training (such as asymmetry of information on provider quality), and educate managers about the benefits of training to overcome bounded rationality and poaching fears (Streeck, 1987; Johansen, 2002). By acting collectively, it may be possible to change the approach of groups of employers to training, but enabling this requires institutional support and co-ordination. While other policy levers such as tax breaks and levies tackle the problem of employer motivation to invest in skills, inter-employer collaboration mechanisms appear to tackle the other challenges of capacity and capability, and may also address motivation. They also have the additional merit of being able to stimulate training through institutional isomorphism. Put simply, this refers to the notion that management practices are often diffused through employers copying each other's behaviour. Employer networks are a powerful tool for the adoption of management practices because they encourage this from mimicry or 'herd behaviour' between employers.

3.6.2 General evidence of impact on employer investment

In the literature on inter-employer collaborations there is very little evidence directly addressing the question of whether they increase employer investment in skills. This is partly due to the methodologies used in studies in this area that tend to be narrative descriptions of how particular networks function with a qualitative assessment of their benefits. It is possible that employer networks concerned with training may divert investment from other training priorities, but equally, a number of pieces of evidence suggest that one of the main outcomes is enabling employers to undertake training that they did not carry out before the network or would find it very difficult to undertake without network support. The question is then whether the network would have developed without any policy intervention; a number of commentators suggest that employers find it difficult to collaborate voluntarily and spontaneously (eg Gospel and Foreman, 2006). However, some evidence exists which shows that employer network collaboration for SMEs is beneficial. Hoque and Bacon (2006) undertook analysis of data from the 1998 Workplace Employment Relations Survey (WERS 98) to identify the extent of training activity in SMEs with fewer than 250 employees, compared to larger firms, and what factors influence it. They found that the embedding of organisations in wider networks positively influenced the number of days training which SMEs undertook over the past year, with SMEs that are part of a group or a franchise undertaking more training that those were independently owned or owner-managed. Training activity was highest when the SME belonged to a multiple of business advisory networks such as employer associations and chambers of commerce. Where the organisation belonged to only one network, training volumes rose, but only for the management/professional occupations in the firm. These findings are also endorsed by Stone and Braidford (2008) who note the particular benefits of pooling training resources for SMEs. However, Hoque and Bacon's study is not able to identify whether the additional training is funded by employers or the state and whether the element of additionality involves direct financial expenditure or indirect expenditure of time.

3.6.3 Variants of inter-employer collaboration: group training, state/employer-initiated networks and supply chains

Sixteen pieces of evidence dealing with inter-employer collaboration were reviewed, some of which were employer-initiated and some of which were set up by state authorities. Five dealt with group training schemes, covering formal group training associations in the UK (Burge *et al.*, 2002), Australia (Gospel and Foreman, 2006; Cooney and Gospel, 2006), Norway (Bowman, 2005), France and East Germany (Culpepper, 1999). Three dealt with networks facilitated by government intermediaries: the Irish experience of training networks (Skillnets, 2008); the Canadian Workforce Skills Initiative (Stone, 2009); the experience of TEC sector groups (Huggins, 1997); the Employer Learning Networks in England (Rhodes and Graver, 2002). Two dealt with employer-driven networks which were the Wisconsin Regional Training Partnership in the US (Parker and Rogers, 1999), and Keep, Ram and Edwards' (2008) example of a business club in a UK region. Lastly, a number of pieces assessed the role of employer supply chains, including Binks' (2006) case studies of the effects of public procurement policies on skills, Beaumont *et al.*'s (1996) and Scarbrough's (1999) case studies of manufacturing firms in England; Gospel and Foreman's (2006) case studies of supply chain training, and Brown's study of supply chain learning in automotive equipment and aerospace manufacturing (2004).

3.6.4 Group training

One form of inter-employer collaboration identified in the literature is that of shared or group training. This is usually run through not-for-profit group training associations (GTAs) with a number of member employers and a board made up of employer and sometimes employee representatives. They usually focus on providing apprenticeship training but may offer non-accredited training or NVQs and are usually organised on a local, geographical basis or sectoral basis. The potential advantages of GTAs centre around providing economies of scale, offering specialist training expertise that is not available within companies, and reducing transaction costs for employers by handling public subsidy arrangements. For example, it may be possible to pool trainees from different organisations to be able to maximise purchasing power, make it viable for an external provider to run a training course and persuade those providers to tailor courses more directly to the needs of the particular employer group. Conversely, employers might decide to share a single trainee among a group of organisations because they are unable to provide sufficient breadth of job tasks to meet qualifications requirements.

Burge *et al.* (2002) discuss Group Training Associations (GTAs) operating in the UK and identify approximately 150 such organisations. The sectors in which they are most prevalent are engineering and agriculture/fishing/forestry, although a large proportion also operate cross-sectorally. There appear to be more in Scotland and the North of England than other parts of the UK. An average fee of £100 per year is charged for membership, but government subsidy for certain forms of training, notably apprenticeship, is a more important source of funding than employer monies. Burge *et al.* (2002) argue that GTAs work best where there are specific common skills requirements among a group of employers, and for some SMEs they effectively serve as an out-sourced training manager and function. Their appeal lies in the close tailoring of training to employer needs and employer evidence cited suggests some preference for GTA training to that provided by colleges for this reason. There were very few examples of GTAs which acted as hosts for trainees that could be shared between organisations and the report suggests that this model could be explored, borrowing from the Australian version. The authors conclude that there is a case for expanding GTAs where certain criteria are met, such as: the absence of both providers to meet employer training needs and an existing suitable ‘foster’ organisation, due to geographical location; specialist expertise required; or poor quality existing provision. They are not able to provide evidence on whether employer training increases as a result of GTAs but do state that: *‘without GTAs it would appear that some employers would be forced to train fewer people, to a lower standard, through poorer quality providers or not train at all.’* (Burge *et al.*, 2002: 72)

This finding is echoed by Gospel and Foreman (2006) who provide case studies of a number of group training arrangements including industry- and geographically-based models and find that the economies of scale offered and training facilities provided enable firms to offer apprenticeship and trainee positions that they might not do otherwise. They give a number of recommendations for the establishment of GTAs. The authors advise that they should undertake training where employers face difficulties in providing their own training, college courses are unsuitable and there are no private providers, and that financing should provide targeted support to help GTAs advise new businesses. Lastly, the authors recommend that financial rewards should be provided to employers whose apprentices complete their training, as a means of encouraging membership. However, costs to the state would have to be offset against the wider social benefits and quality standards would have to be policed tightly to ensure a target-driven culture did not emerge.

Group training organisations (GTOs) in Australia have been noted as a model that could be introduced in the UK. While their functions are similar to UK GTAs, they do not operate on a membership basis and offer support to any firm, relying heavily, like the UK model, on government subsidies (Cooney and Gospel, 2006). They offer less training directly than UK GTAs and are more focussed on the administration of apprenticeship arrangements including the direct employment of apprentices. Consequently, they are argued to be able to maintain quality standards, select firms which provide of sufficient quality for trainee placements and offer more support to trainees (Cooney and Gospel, 2006). Buchanan and Evesson (2004) give cautions over the direction of policy development affecting GTOs. They express concern that GTOs may become merely employment agencies driven by policy emphasis to a ‘market-led’ focus on outcomes. They point out that less state support is needed to assist GTOs that serve employers competing on quality and seeking high levels of skills. However, they stress the need for continued public funding in other areas of the economy to assure the role that GTOs have in maintaining quality and service standards which contribute to driving employer demand for skills.

Bowman (2005) discusses the reform of training policy in Norway during the 1990s and finds examples of apprentice-sharing, where one business hosts an apprentice, but other firms provide some of the training. The example is given of the hospitality sector, where different kinds of restaurant enable apprentices to gain experience of different settings. A second development was the creation of government-funded training offices. These may be owned by training firms within an industry, run by employers’ associations, or operate as private businesses, with the function of placing apprentices in firms, training instructors, offering additional training courses, and monitoring standards. The benefits identified of the training offices are reduced transaction costs for organisations due to reduced costs of training administration, building employer commitment to development of industry skills with a long-term perspective, and persuading employers to offer apprenticeship places, as well as promoting these opportunities to prospective employees.

Culpepper (1999) compares reforms of training policies in East Germany and France, that also shed light on the role of group training. Within both the French and German systems, the creation of group training mechanisms (through larger firms in Germany and a centralised training facility in one French region) enabled smaller firms to undertake more generalised skills-based training.

In East Germany, subsidies were made available in 1993 for large German firms to refurbish their training facilities and these greatly increased their attractiveness as training partners for small firms. A programme of state subsidy sponsored medium-sized firms' access to training equipment and trainers of larger firms and gained participation by organisations, whereas direct individual subsidies from regional bodies were not always taken up. Culpepper concludes that barriers other than finance per se are more important to participation of small firms such as time, ready supply of trained labour (due to a high unemployment rates), and the breadth of skill demanded by qualifications that could not be provided easily within the work organisation arrangements of small companies.

Culpepper's other example concerns the introduction of a flexible training qualification contract in France in the 1980s. Because there is no minimum time limit on the length of the training and union agreement on content can be sought a long while after the development of the syllabus (in contrast to Germany), it functions for some employers as a way of opting out of the conventional apprenticeship. This may be preferable for employers as the content of the apprenticeship curriculum is heavily influenced by the education ministry which may not represent the interests of employers. In general, smaller employers lack resources to design custom-made training programmes so are more likely to use apprenticeships as they have no other choices. A group of manufacturing organisations in the Arve valley provide an example of employer collaboration among smaller companies that used the qualification. The presence of many small firms means that the new qualification was designed through the trade association, as no one firm has overall power. The trade association in turn encourages firms to use national subsidies to invest in skills. The main attraction for the smaller companies is the professional/ vocational focus of the qualification, the good training equipment available at the local training centre, and the benefit of high staff retention rates.

Culpepper concludes that French reforms have been unsuccessful because choice about curriculum content is solely in the hands of employers and does not carry any of the German social partnership representation at all levels of qualification design, thus leading large firms to train to the minimum firm-specific technical skills required. However, persuading firms to invest in training is heavily dependent on them influencing the training curriculum which is best done through inter-employer co-ordination and the availability of public subsidy shared through employers' associations.

3.6.5 State-initiated networks

Rhodes and Graver (2002) evaluated the Employer Learning Networks project which covered all of the UK except Northern Ireland. This was funded by the then Department for Education and Skills which invested £2.5m to pump-prime 18 projects in England with sums from £10,000 up to £250,000 between November 2000 and July 2001. The 18 projects were mostly set up by National Training Organisations (NTOs) and created 90 networks involving 2,361 employers. Some of the networks were virtual while some met face-to-face and the average number of employers participating was around 15. An initial panel of 312 employers who participated in ELNs from a database of 2,144 was set up and views were gathered from employers in the sample on three occasions. Sixty per cent of employers felt that participating in the network was useful, 42 per cent of employers participating made use of a product or service delivered by the network, and 16 out of 18 networks continued their activities beyond the conclusion of the original funding. One hundred and sixty-one employers were interviewed in a later survey, of which 31 (19 per cent) reported staff had started training leading to a qualification, and of which 24 employers (15 per cent) stated that some staff had already completed a qualification as a result of network involvement. In qualitative interviews with employers, 36 (15 per cent) of 239 employers said they had adopted new training programmes for staff as a result of network involvement.

The minimum critical mass of employers to make a network successful was felt to be 10-15 so the optimal number of members needed to allow for drop out was 20. Pump-priming funding was found to be needed for longer than six months to help sustainability. Personal face-to-face contact was found to be the most effective way of engaging employers, as opposed to marketing through mechanisms such as mailshots. Employer involvement in the development of training products and services was critical to developing credibility and boosting employer commitment to the network. In some cases, network leaders found that the 'hook' to attract employer interest may not be training, but solving business problems. This implies that the benefits of inter-employer collaboration may lie beyond simple increased investments and benefits of training per se, to include sharing ideas and insights about broader issues. There may also be additional benefits such as development of a network of social capital and new business between members and this was reflected in the 12 per cent of employers who did business with each other for the first time.

However, only 36 of 161 employers (22 per cent) had paid for network membership and even fewer had paid for training, despite 69 (43 per cent) having accessed training. This suggests that subsidy was important to maintain employer involvement, since no network ultimately became employer-funded. Similar evidence exists for Sector Skills Councils (SSCs) where one aspiration was that they should become self-financing. Payne (2008) analysed evidence from seven SSCs and found that only those representing the construction sector and Skills for Justice had been relatively successful in gaining employer funding. The construction industry relies on the statutory levy while a Skills for Justice interviewee pointed to public sector commitment to model employer behaviour as the critical success factor.

Huggins (1997) analysed the role of TEC sector groups based on a survey of 53 Technology and Enterprise Councils (TECs). The groups were set up to develop knowledge exchange about sectoral priorities including training. The research found that clubs focussing on shared training around IiP or apprenticeships were beneficial, as were joint training centres for manufacturing, but overall, the groups were not successful. This was due to employer reluctance to share information among potential rivals and competitors. The implications of this research concern the importance of developing trust between network partners, which may take considerable time and effort, and the importance of careful group composition to maximise the likelihood of committed employer participation.

Stone (2009) has conducted some research into the ongoing development of the Canadian Workforce Skills Initiative (WSI). Running since 2005, this programme seeks to provide funding to stimulate employers to address their needs relating to HR and skills issues. The WSI essentially consists of a pot of money (C$78m overall) covering a five year period which organisations outside government can apply for to support specific projects relating to Canadian workplaces. Proposals must be made by organisations operating in collaboration with others and they must cover 25 per cent of the costs. To win funding projects must incorporate one or more of the government's chosen themes including: workforce development for SMEs; SME workforce integration; new sectoral up-skilling models; improved HR practices; income support for up-skilling. Eighteen projects have now been funded, involving around 230 organisations (Stone, 2009). There is limited formal evaluation of the projects to date. However, a survey of participants indicates that some believe upskilling has taken place as a result, with other benefits including improved employment relations, improved diagnosis of skills and training needs, and career development opportunities for employees.

Skillnets is a publicly funded body running in the Republic of Ireland since 1999, with the purpose of supporting workplace learning to improve organisational competitiveness. It is funded through the National Training Fund (NTF), which is supported by a training levy on employers of 0.7 per cent of the payroll for eligible groups (covering about 75 per cent of employees). It supports training networks that are mostly established by employers and organised on geographical, sectoral or cross-sectoral bases. The governance structure for each network usually involves a steering team or board of representatives made up of network members, a network manager who is the key co-ordinator, and a promoter who signs contracts on behalf of the network, eg with training providers. Specialist support is provided for network managers in the form of a professional development programme that brings these managers together to share learning from the experience of managing networks and to help them meet the challenges of network co-ordination. Interestingly, the quality of network facilitation is mentioned as a critical success factor for skills ecosystem projects reported in the country review of Australia conducted as part of the 'collective measures' study (Stanwick, 2009). The networks may invite sources of external advice and support, such as government agencies, training providers, accreditation bodies and colleges to participate as partners. Networks are partly funded through subsidies from the Irish government, which are distributed in response to bids received from networks for proposed projects. There is some influence over the type of focus networks are expected to adopt through Skillnets' nomination of four key themes, eg growing the skills base, to which networks are required to link their activities.

A recent report from Skillnets largely confirms previous evidence from Newidiem (2005) and gives an account of current activity and some evidence on impact (2008). There are currently 54 training networks, involving 7,000 companies and since their initial introduction 200 networks have been funded that have supported around 18,000 employers, and reached around 150,000 employees by 2006. Ninety-four per cent of companies involved in the training networks are SMEs, and 54 per cent are micro-businesses employing a maximum of nine people. Training networks most commonly operate in the retail, services, agriculture and manufacturing sectors. The type of training undertaken is varied with basic skills, management development, IT, technical skills/product knowledge accounting for a majority of it. Purchasing power from the networks appears to have a positive influence on customising training to suit the needs of employers: 67 per cent of courses run were adapted to the needs of networks. It is also claimed that employer investment in training increased by 44 per cent in 2006/2007 compared to levels from 2002-2005, and that 38 per cent of network costs are now funded by employers (Skillnets, 2008). Further evidence suggests that the networks are contributing to innovation in training provision as 25 per cent of training courses delivered were entirely new programmes.

Research commissioned for this policy review on the German system (BIBB, 2009) reports on the operation of the German Chambers of Commerce (IHKs) and inter-company vocational training partnerships in acting as a focal source of training provision. This is enabled, in part, by legislation that requires almost all German companies to be members of IHKs and to fund their operation through graduated fee structures. IHKs run training centres to deliver significant volumes of vocational training courses across a wide range of subject areas in which around 350,000 people participate every year. This is supplemented by training hubs provided by individual employers. In one model, a lead employer organises the training, some of which is delivered in partner organisations, while in others, organisations specifically commission training from other firms which they are not able to deliver themselves. In 2005, there were around 955 training centres in Germany.

3.6.6 Employer-initiated training networks

A number of examples of employer-led training networks were identified and some detailed evidence was located for two projects. One is a regional training partnership in Wisconsin, USA; and the second is a business club in the West Midlands, UK.

Parker and Rogers (1999) review a number of local employer collaborations in the USA, one of which is the Wisconsin Regional Training Partnership (WRTP). Founded in 1992 to develop high performance working in manufacturing firms in Milwaukee, it grew out of an outplacement service established at the end of the 1980s to help workers affected by the recession in the manufacturing sector.[1] Its goal was to map skills and career paths across sector, and then secure funding for training and to work across local community organisations to deliver training services to current and future workforces. It also supports around 40 firms to benchmark training, use common competences and administer investment in training through joint employee/management committees.

---

[1] A similar outplacement service was developed by Rolls Royce together with local manufacturers in the automotive and related supply chains in the Midlands in the UK in the early 2000s. This then developed into a shared recruitment facility among the participating organisations.

The partnership consists of a series of working groups that set the strategies for achieving the overall goals of the consortium – on skills standards, future workforce needs and modernisation. They share good practice, develop tools and pilot projects for employers to test out. Joint committees in each firm in membership then implement the general policies. Results of pilot projects are reported to the board, members host site visits and workshops and present findings at annual conference to current and potential members. All members have to develop site-based learning centres and additional training is often provided by local technical colleges.

Examples of internal changes to firm training are: the development of peer training adviser manuals; upgraded induction processes; the employment of training co-ordinators. Three-quarters of members have also revived apprenticeship programmes under the new standards. Demographic change means that future workforce planning is also undertaken. The WRTP has also piloted the state’s apprenticeship programme and developed models of jobs for pre-employment graduates. Pilot projects on supplier network development are being prepared, the purpose of which is to demonstrate the need to upgrade skill levels and form new policy guidelines. The authors also stress the benefits of reducing poaching through employer collaboration and the benefits of information sharing through the network to improve management practice and solve problems.

Critical success factors identified were: firm experience in negotiation of change, union recognition, having some key large firms involved to gave a critical mass in region/sector, previous experience, as well as being prepared to confront challenges of the market situation. Social capital in leveraging local networks to advise firms and the political clout of key actors in persuading people to take part were also important. The authors suggest that the partnership could be promoted through offering discounts on public training and modernisation support on condition of membership/participation.

Keep, Ram and Edwards (2008) in their submission to the UK Commission call for evidence, note a favourable example of inter-employer collaboration in the form of the ‘12/8’ network which consists of six expanding businesses owned by Black/Afro-Caribbean entrepreneurs in the West Midlands. Specialist consultants, intermediaries and other advisers are invited to attend and the scheme has received support from BusinessLink West Midlands. The scheme is reported to have realised benefits such as organisational expansion for participants and to act as a challenge function in the way that a board of non-executive directors might do.

3.6.7 Supply chain relationships

In addition to the benefits generated by economies of scale from decreasing unit costs and training administration costs, supply chain relationships introduce a power dynamic into inter-employer collaboration. This may lead to stronger coercive pressures, for better or worse, which can affect training undertaken by employers. The government, as an especially powerful contractor, may have a particular role to play here. Supply chain relationships may also be helpful in encouraging employer investment in training by overcoming the barrier of short-termism in management attitudes to training. This is possible because employers may be reassured about the returns they will make on training investments through gaining long-term contracts with customers.

No evaluations of specific policies to encourage training through supply chains were located, but some empirical research assessed the influence of customer-supplier relationships; one study reported on the operation of a supply chain consortium focussed on training and one report discussed a set of case studies on the effects of public procurement policies on skills development. The first four studies reviewed found mixed results. Hoque and Bacon's analysis of WERS 98 data (which included over 16,000 firms) found no evidence of supply chain pressure affecting the amount of training undertaken in SMEs, for example. Scarbrough (1999) reports on three case studies of manufacturing firms in England that had very diverse experiences of customer influence on their HR and training practices. In some cases this led to requirements for suppliers to invest in training, for example, to release staff to train overseas if necessary, but in others, cost pressures could lead managers to reduce training and organise production in ways that deskilled the workforce. Broader analyses of influences on pay and training opportunities for less skilled, lower wage workers also indicate that supply chain pressures on costs can serve to lower investments in training (Lloyd and Mason, 2008). There are not necessarily any clear patterns or predictors of whether supply chain pressures increase or decrease employer training, as so much can depend on the interactions between product market, customer and supplier relationship, and management interpretation of customer requirements.

Positive supply chain pressures in the private sector appear mostly confined to particular (sub-) sectors such as parts of the automotive industry in manufacturing. Gospel and Foreman (2006) report on two supply chain training organisations. The first was set up by Nissan in 1996 in the North East of England that sought to ensure a skilled labour pool of sufficient quality was available both to it and its suppliers, and to improve training in suppliers to meet its own quality requirements. Fifty-seven companies are members and the organisation has 27 staff but sub-contracts much of the training done (eg for apprenticeship to local suppliers), retaining a co-ordinating role. Members pay a small joining fee and a fee per trainee which is offset by reduced training costs. Large firms reported cost savings as a result of outsourcing training provision and the authors conclude that smaller firms would have found training very difficult without the support of the larger organisation. The major difference between training associations driven by a powerful organisation through a supply chain and other formats appears to be that there is less attention given to transferable training and key skills in the latter.

The second example is Technical Training Enterprises founded in 1990 by Shell, ICI and Associated Octel. It recruits and trains apprentices for the petrochemical industry with 11 full-time staff and was established to reduce costs of training infrastructure for individual organisations, supplying its services to over 30 companies. Trainees are initially based within the training facilities but undertake progressively more learning in the workplace during their four year course. Completion rates and standards are generally high. It seems that this organisation has taken over the function of providing a supply of skilled labour that was previously undertaken by individual firms, who were facing constraints on training viability due to downsizing in the 1980s. Given the current economic circumstances in which this policy review is being undertaken, it provides a useful example of how inter-employer collaboration may be helpful during less buoyant periods of a business cycle.

Brown *et al.* (2004) investigated a project to support supplier learning among SMEs in the automotive and aerospace supply chains. It was funded by the DTI and the European Union, managed through the Open University, and involved trade associations and industry forums, together with training providers and educational institutions as partners. Two types of learning networks were set up:

The first linked workplace production teams from up to eight suppliers to a major customer with a focus on performance improvement. Nominated champions from each supplier attended an OU course on supply chain improvement that was run in the customer's premises. The champions then implemented ideas in the workplace with network support. Major outcomes identified were improvements and efficiencies in supplier performance that benefited both the suppliers and their customers.

The second offered workshops to senior SME managers to identify and match organisational skills needs, supported by IT for distance learning methods to continue learning after face-to-face events. This resulted in the development of shared learning centres and information exchange across the supply chains, with consequent improvement in efficiency of processes.

As a result of the development of learner and peer support capacity across the networks, Brown commented that the companies increased their capacity for other types of training (2004). The second type of learning network linked senior managers in SMEs to help measure quality and performance and develop tools to meet increasing customer standards. Formal learning input was provided through web-based resources and a team of experts including trainers and experienced technical practitioners from the industry. A number of factors were identified as important to the success of the projects. These included efforts taken by project partners in relationship building over time, tailoring of learning inputs to the actual problems of the participant organisations, endorsement of the networks by major customers and the availability of a wide range of learning interventions including expert advisers.

For large firms, Beaumont *et al.* (1996) conducted 20 case studies to analyse supply chain pressures on employment practices including training. This involved interviews with each purchasing organisation and a postal survey of over 150 suppliers. The research found that customer pressures can affect all types of training and the determinants of training need. Examples were given of influencing suppliers to introduce performance appraisal (also covering training needs analysis) and signing up to Investors in People. One supplier case study in the auto industry had a direct (audited) relationship with the customer company and was encouraged to set up a works council and performance appraisal process that emphasised the identification of training and development needs. In another indirect case (without an auditing arrangement) the supplier had taken its own decision to upgrade the skills and flexibility of its staff but was influenced by the quality requirements of its customer. While there is evidence that supply chain pressures can focus employer attention on training, that influence is not always direct, and may result in training that yields employee compliance with quality standards rather than increasing the skills level of the workforce. There was no evidence of the actual impact on employer investment in training. It seems evident from the supply chain literature that positive influences on training are heavily determined by the nature of the product market and the degree to which organisations compete on a quality-conscious business strategy. This is consistent with the findings of the conceptual review which identified that there are likely to be lower optimal levels of training in price competitive, as opposed to quality-focussed, markets.

Any policy levers devised to operate through private sector supply chains are therefore likely to be more easily accepted in quality-sensitive sectors and sub-sectors. This raises questions about the feasibility of using quality standards as a blanket policy and whether they are a suitable policy lever in sectors which compete on cost for low specification products or services. Beaumont *et al.* suggest that the approach should be encouraged through the mechanism of RDAs who can form clubs and promote linkages between local firms and help ensure some consistency in organisational processes. This may lead to consistency in (higher) skill demands and therefore encourage investment.

For the public sector, Binks (2006) was commissioned by the DTI to undertake a series of 15 case studies investigating how public sector procurement policies might influence skills development in supplier organisations. Although not quantified, a number of case studies identified increased skill levels being sought in the supplier organisations, with nine experiencing an increased demand for skills up to Level 2 and seven organisations experiencing an increased demand for skills at Level 3 and above. However, this does not necessarily mean that employer investment in training increased as a result, since some basic skills requirements up to Level 2 attract public subsidies. They also noted that quality standards and product or service innovation sometimes drove the demand for skills as a secondary outcome of procurement policy, rather than a primary one. The review found that public procurement policy was highly decentralised, which suggests that there is potential for stronger centralised co-ordination and guidance for public sector organisations wishing to drive up skill levels. The report makes a number of recommendations suggesting that the use of procurement to increase skill levels is more widely considered across government, including training for parts of the public sector into how to use procurement policies to support goals concerning skills; reviewing quality standards in use in procurement; and using SSCs to promote partnerships between customers and suppliers to support skills development. This has been pursued through the joint statement issued by the Cabinet Office in July 2008, which set out government expectations that employees working on central government contracts to deliver public services will have access to training in basic skills. Employers gaining government construction contracts will also be required to have apprentices constituting a proportion of their workforce.

The UK Commission call for evidence for the Collective Measures project produced a significant number of responses which were in favour of greater inter-employer collaboration and partnerships to meet employers' training needs. There is already a small amount of evidence that SSCs are supporting these kinds of activities. Skillfast, the SSC for textiles and apparel, has facilitated the creation of a 'Skills HQ' centre using Mulberry's training centre, which will make training available to smaller companies from the sector that are based in the area. There has also been policy interest in the role of inter-employer training collaboration, most recently expressed in the recent Cabinet Office (2009) publication *New Opportunities, Fair Chances for the Future*. This expresses a policy commitment to expanding group training associations and the Australian model of shared apprenticeships.

3.6.8 Conclusions and implications

There is a huge diversity in the range of inter-employer collaborations that take place to organise training, and the range of schemes reviewed suggest that there is no one best approach, since meeting employer needs within sectoral or geographical contexts is paramount in making the collaborations successful.

- The evidence reviewed suggests that inter-employer networks help to alleviate some market failures by providing training that individual employers find too difficult to organise.
- However, leaving the content of training solely within the hands of employers in some of the employer-led models through supply chains can lead to less acquisition of transferable, generic skills.
- There is some evidence of inter-firm collaborations expanding their training provision outside core areas to augment training supply and that it is of relatively high quality thus attracting employer purchasers.
- Common to all the inter-employer collaborations is a heavy reliance on state subsidy to support training provision, and even when supply chain models are involved, their primary focus is on apprenticeship training which attracts state support.
- The question of funding connects to issues of sustainability. While the mechanisms of inter-employer collaboration appear promising, consideration needs to be given to the most effective balance between exhortation and compulsion to ensure that networks engage hard-to-reach organisations.
- Employer interest in tailored training and bite-sized elements of courses is already recognised as a need within the skills policy context. For example, the revised Qualifications Curriculum Framework is designed to achieve this and the UK Commission itself is undertaking a project on system simplification to inform skills development delivery in a way which will encourage employer engagement.

- Much of the evidence concerning employer networks does not address deadweight and additionality issues. In part this is due to the methodologies used which tend towards narrative accounts of establishment, implementation and outcomes (as far as these are directly attributable to the networks).
- The quality of network facilitation appears to be a major critical success factor in influencing employer engagement with network activity.

3.7 Occupational licensing

3.7.1 Definition and discussion

Occupational licensing can be defined as a process whereby practitioners must demonstrate a minimum degree of competence or suitability for an occupation, in order to be granted permission to practice. Occupational licensing is concentrated mainly among professional groups such as lawyers or accountants or occupations where there is some degree of safety risk, such as healthcare. As such, it currently affects a limited proportion of the workforce, estimated for example as 18 per cent of US workers (Kleiner, 2000). However, there are some examples of licensing for lower-skilled occupations, such as gas-installers, and security personnel. They can vary on several dimensions such as form of testing required, and carry different costs, renewal requirements and levels of penalty for non-compliance (Frontier Economics, 2003).

By setting minimum skills requirements for an occupation, licences address skills gaps directly, rather than targeting the market failures which have caused the skills to be suboptimal. The increase in demand for skills may increase employer investment in their workforce – although in many cases the cost of training and registration are borne by the employee – resulting in increased productivity and higher salaries for employees.

Other forms of more general product market regulation and licensing also affect training in some sectors, again typically where there is health risk or financial risk involved to workers and/or consumers. The regulated industries affected include energy and telecom sectors where compliance training is concerned with the industry regulations as developed and enforced by Ofgem and Ofcom respectively, as well as pharmaceuticals, transport, environmental services as well a number of public services. In particular as a result of the pensions and endowment mortgages misselling scandals at the beginning of the 1990s, the Personal Investment Authority and more recently the Financial Services Authority strengthened the regulatory regime and professional standards. This now means that all financial intermediaries who offer advice on pensions and other investments must be properly qualified (Kempson and Collard, 2005), ie having obtained one or more qualifications approved by the Financial Services Skills Council. Recent research argues that the extent and quality of training and competence development in the UK pensions industry has improved markedly since this regulation was introduced (Sadler, 2008).

In the oil sector, following the Piper Alpha disaster in 1988, the HSE's Offshore Division was established as a result of the subsequent enquiry, which appears to have improved safety. There is also ongoing general regulatory work in other industries to promote training. For example, the latest Ofcom annual report states that this regulator has a duty to promote opportunities for training of people working in the broadcasting sector and in 2005, a co-regulatory body – the Broadcast Training and Skills Regulator (BTSR) – was set up to pursue this objective with broadcasters.

The existence of product market regulations tend to favour particular types of training. Specifically, the types of training most commonly connected to regulations include pre-entry training (in certain professions and occupations, eg solicitors, doctors, drivers, etc.); induction training (eg retail sector); and technical training once in employment (Rogers *et al.*, 2002). This suggests that even where product market regulation has a broad focus, training beyond induction or health and safety training is targeted at particular occupations where the element of risk is contained.

The review of occupational licensing included nine articles, four focusing on specific occupational licences: aircraft technicians (Haas, 2008), bouncers (Lister *et al.*, 2001; Pratten, 2007), fitness instructors (Lloyd, 2005) and three examining the effects and possibilities for licensing in general (Kleiner and Krueger, 2008; Kleiner and Shapiro, 1986; Frontier Economics, 2003). There is a dearth of information on the impact of occupational licensing on subsequent investment in skills, either funded by the employer or the employee. Kleiner (2000) writes:

> 'To my knowledge, there have been no empirical studies to document whether there are greater occupation-specific investments in licensed occupations relative to non-regulated ones.' (p.200)

Following a survey of 2,037 workers conducted in the United States, Kleiner and Krueger (2008) used multivariate analysis to show that licensing has a positive effect on wage levels – licensed workers earn about 15 per cent more – but there is no effect on wage dispersion. Although the authors claim that licences are associated with higher educational levels, it is not clear whether skills are raised as a result of the licence being introduced, nor whether employers themselves bear the costs of training. Further, the study's low response rate of 37 per cent raises questions as to the representativeness of the study and the possibility of non-response bias, since licensed workers may be more likely to participate.

A further advantage of occupational licensing proposed by Shapiro (1986) in an economic model of human capital and service quality, is that it drives up standards by increasing the market share of higher quality services at employers' expense. However, occupations are likely to vary in the extent to which training improves quality; in the case of low-skilled occupations in particular, the over-development of skills is likely to reflect in increased costs without discernable improvements. Since costs are invariably passed on to the consumer, those who value quality are likely to benefit at the expense of those who do not. In some cases, therefore, where training is closely aligned with quality, the author suggests that certification – a system whereby a practitioner's qualification level is made clear to the customer – may be preferable since it allows consumers to decide what level of qualification is appropriate.

Similar concerns about the risks of increased costs without any accompanying quality improvement are raised in other analyses. Billett and Smith (1995) caution that occupational licensing runs the risk of creating superficial training and licensing, and potentially devaluing licensing arrangements pursued for genuine reasons. Therefore, such a strategy needs to be used carefully in order to protect important health, safety and regulatory practices. Elsewhere Kleiner (2006) has argued that occupational licensing is expensive, through leading to higher prices and through the costs of operating the process, with few benefits in return.

As the above studies suggest, the effectiveness of a licensing policy is heavily dependent on the occupation and the details of the licence and its implementation. This is clear in Lister's examination of the scope, structure and impact of occupational licensing in the regulation of door supervisors (bouncers) at premises licensed to sell alcohol (Lister *et al.*, 2001). Based on a combination of ethnography, in-depth interviews and a telephone survey, the study found that the associated training was 'too often' symbolic, its primary purpose to increase public confidence in what has traditionally been considered a violent profession. Whether or not it has succeeded in this aim – this is outside the remit of the study – the authors conclude that training provided is of little relevance to the job and is seen as a chore rather than an investment, particularly since the cost of gaining a licence is borne by employees. They suggest that in order to address the inadequacies of training provision, requirements for registration should be set higher, and more emphasis placed on the physical demands of the job. These conclusions are supported by Pratten's (2007) much smaller study – interviews and a focus group with a small group of stakeholders in Nantwich, Cheshire – which suggests a larger element of practical work such as first aid and self-defence.

Investigating the licences for aircraft technicians, introduced in 2006, Haas (2008) draws on semi-structured interviews with 20 stakeholders. Conceding that participants tend to give 'politically correct' answers, he nevertheless concludes that a licensing system brings 'wage benefits', generates trust among customers, and makes the occupation resistant to market pressures or opportunism. The paper does not address the question of whether employer investment is increased as a result.

Lloyd (2005) concludes, on the basis of interviews with nine employers in the fitness sector, that occupational licensing tends to focus on the acquisition of technical skills. These are relatively easily taught, rather than appropriate 'customer service' and social skills, which tend to characterise many of the occupations that are targeted for occupational licensing. According to evidence from managers, the licence to practice was having little impact, in terms of levels of training and the use of skills, among larger companies, because they were already providing appropriate training but it did, however, have a positive impact among smaller firms. Lloyd argues that the positive effect of the licence to practice on skills investment could be significantly greater if the level required was at Level 3 instead of Level 2, but employers would be likely to resist this development due to costs of training provision and time off for training.

Frontier Economics (2003) consider the potential for occupational licensing and conclude that it would be of benefit in a limited number of occupations using a number of criteria related to the measurability of skill, significance of service quality, and the importance of perceptions of competence to the consumer of the product or service provided.

Responses to the UK Commission consultation exercise for the collective measures project produced broad support from respondents, a number of whom stressed their limited applicability on a sectoral basis.

3.7.2 Conclusions and implications

While the scope of studies on occupational licensing is relatively limited, the findings identify some pointers for future policy development:

Licences are likely to be of value in a limited number of occupations and even where product market regulation has a broad focus, training is often directed at those responsible for specific tasks which carry an element of risk.

Criteria to decide these might include: close alignment of training with quality of service provision; the nature of the occupation involving mostly objectively testable and quantifiable skills; the end-user being in direct contact with, or at most one step removed from, the service-provider.

Setting a higher benchmark for licence acquisition may ensure that training is valuable to both the employer and consumers, while the increased cost may force employers to increase their contribution.

3.8 Tax breaks

3.8.1 Description and discussion

There has been increasing policy experimentation with the use of tax breaks to stimulate employer investment in training as well as other areas of business expenditure. Tax credits for R&D were introduced for SMEs in the UK in 2000 and subsequently extended across all firm sizes in 2002. The review considered seven pieces of literature that directly assessed tax breaks in single or multiple nations, plus commentary from a further three pieces not directly concerned with tax policy evaluation. An OECD report (Warda, 2005) notes that 19 OECD countries had specific R&D tax incentives in place in 2005, as opposed to 12 in 1996, and six offered tax incentives for corporate training. The following countries offered tax credits for training, calculated according to the volume of training undertaken on an incremental basis: Austria, France, Japan, Korea, the Netherlands (until 2004), Spain and the US (at state level). The total cost of training expenses in each year incurred is tax deductible in 17 out of the 18 countries, except Ireland where training spend is calculated over three years. Schemes in France, Japan and the Netherlands are designed to reward expenditure by SMEs in particular. Most of the schemes are capped in some way; only Austria and Korea's schemes have no maximum limit on the amount of tax that can be deducted. Training expenditure that is eligible for tax credits is usually confined to formal courses which are externally provided. Table 3.5 gives detail of the mechanics of different schemes in more detail.

Table 3.5: Corporate tax treatment of training: major parameters selected countries (2004-2005)

	Tax Treatment of Corporate Training				
Country	Current deduction	Depreciation	Tax incentive	CT B-index	Tax subsidiary/burden (1-B index)
Australia	100%			1.0	0
Austria	100%	–	(a) 20% additional allowance or (b) 6% tax credit	(a) 0.93 (b) 0.92	(a)0.07 (b) 0.08
Belgium	100%	–	–	1.0	0
Canada	(a) 100% if short-term benefit	(b) if long-term benefit		(a) 1.0 (b)	(a) 0 (b)
Czech Republic	100%			1.0	0
Finland	(a) 100% if short-term benefit	(b) 10 years if long-term		(a) 1.0 (b) 1.11	(a) 0 (b) 1.11
France					
● large	100%			1.0	0
● small	100%		35% increment tax credit	0.95	0.05
Italy	100%			1.0	0
Ireland	–	3 years		1.01	–0.01
Japan					
● large	100%		25% increment tax credit	0.94	0.06
● small	100%		Hybrid level and increment tax credit	0.70	0.30
Korea					
● large	100%	–	15% level tax credit	0.79	0.21
● small	100%			0.82	0.18
Mexico	100%		Can qualify for R&D tax incentives	1.0	0

	Tax Treatment of Corporate Training				
Country	Current deduction	Depreciation	Tax incentive	CT B-index	Tax subsidiary/burden (1-B index)
Netherlands					
• small	100%		40% additional allowance	0.85	0.15
• large	100%		20% additional allowance	0.93	0.07
Norway	100%			1.0	0
Spain	100%		Hybrid 5% level and 10% increment tax credit	0.91	0.09
Sweden	100%			1.0	0
United Kingdom	100%			1.0	0
United States					
• federal	100%			1.0	0
• state			state tax credits available		

Source: JPW Innovation Associates Inc., compiled from various international sources such as International Bureau of Fiscal Documentation and Tax Management Inc. in Warda et al. (2005)

No evidence has been located on the impact of these incentives on employer investment in training, although Stone and Braidford (2008) make a number of points about the strengths and weaknesses of scheme design. They contend that while schemes are easy to apply and give employers considerable discretion in targeting training, applying different tax rates to target particular groups of organisations can make schemes costly to administer and confusing to employers, particularly SMEs, who are often the target beneficiaries of such policies.

Literature assessing the impact of tax incentives on employer R&D expenditure is mostly positive. Bloom *et al.* (2002) estimated R&D investment using panel data on tax changes and R&D spending in nine OECD countries over a 19-year period, and found that tax incentives successfully increased R&D intensity. Falk (2006) uses panel data from OECD countries for the period of 1975-2002, with data measured as five-year averages to calculate the impact of tax breaks on R&D private investment. He found that tax incentives for R&D had a significant positive impact on employer R&D spend regardless of specification and estimation techniques, with an approximate increase of 0.9 per cent in the amount of R&D spending in the long run. Cunningham (2005) judges the UK R&D tax credit scheme to be of significant importance in increasing R&D spending by firms, although this is based on 'subjective judgement' rather than empirical evidence. This report also argues the need for more generous tax incentives for R&D in countries where business taxation is relatively low. Baghana and Mohnen (2009) evaluate the additionality of R&D tax incentives for the manufacturing sector in Quebec, specifically comparing the impact on small and large firms. They find positive effects in both. Russo (2004) and Klassen *et al.* (2004) compare the cost efficiency of tax incentives for R&D in the US and Canada. The findings of these papers are similar, in that both show that tax credits for R&D stimulate employer investment and are cost effective, but that the US' incremental system, which only rewards additional investment above the organisation's starting point, provides better value for money.

Leuven and Oosterbeek (2004) assessed the impact of a scheme in the Netherlands to encourage training of older workers through awarding tax incentives through a two-wave survey in 1994 and 1999 of over 2,000 people. They found no impact of the scheme on training of older workers, but some evidence that training was delayed until workers were old enough to be eligible for the incentive. However, they also note simultaneous tax breaks of 20 per cent on training expenditure for all firms, and an additional 40 per cent tax break on training expenditure to a specified maximum for small firms. An increase in the overall rate at which firms trained workers was observed over time, and the authors speculate that the tax regime contributed to this. A further tax break available to Dutch employers is a 15 per cent rebate on the wages of workers employed on training contracts (Sung *et al.*, 2006). However, the authors point out that the financial incentives are weak tools when used singly, and the strengths of the Dutch system arise from mutually reinforcing policies, such as accreditation of in-house employer training and close involvement in the development of competency frameworks.

It is, nevertheless, debatable whether or not tax breaks are likely to be a helpful policy lever to stimulate employer investment in skills. Some critics caution that worker mobility may inhibit employer appropriation of the benefits of training, which is a problem that does not affect R&D investment (OECD, 2002). Tax systems designed with incremental incentives related to level of spending are argued to produce less deadweight and therefore be a more cost effective policy lever, but disadvantage companies that invest heavily and stably over time (eg Baghana and Mohnen, 2009). Clarity of purpose, design and targeting of tax breaks therefore becomes critical. More fundamentally, tax breaks for R&D are most likely to be suitable for sectors of the economy that are engaged in technological innovation, and appeal to firms that are either already engaged or interested in the possibility of investment in this field. The policy challenge posed in relation to under-investment in training appears to be a slightly different one, according to the empirical review undertaken for this project, since it has identified that a major reason for firms not training is that they do not perceive it as necessary for their business. Similarly, the conceptual review noted a number of factors explored in the economic literature, concerning management education, bounded rationality, and problems relating to asymmetry of information. These indicate that major factors inhibit training that are not purely financial (see also IFF, 2008) and that ‘managers may not see themselves as part of the problem’. In these circumstances, it is questionable whether offering tax breaks will stimulate employers to train. The case of Brazil provides some support for this, where a tax break scheme ran from the mid-1970s until 1990 when it was discontinued. This was because only one per cent of firms had participated, and those participating already invested heavily in training, so there was very little evidence to suggest that it had increased employer spending on training (Dougherty, 1999). There have been suggestions in the UK that tax breaks could be used as an incentive to encourage SMEs to commit to gaining Investors in People accreditation (see Bell *et al.*, 2004), but there are risks that this motivates a compliance-based approach to IiP, rather than a genuine engagement with the goals of the standard. This could serve to devalue the Standard’s reputation.

3.8.2 Implications and conclusions

- There is evidence to suggest that tax-based incentives are helpful in stimulating employer investment in R&D.
- Like levies, the devil lies in the detail of design of tax breaks.
- It is questionable whether tax incentives will stimulate employer investment in training. At best, they may lower some financial barriers to investment for employers who wish to train. However, it seems unlikely that they will provide an incentive for employers who currently have little interest in training their staff.

3.9 General subsidies

3.9.1 Description and discussion

Much UK policy attention has been devoted in the past 20 years to improving the supply of skilled labour through investing significant sums of public money in subsidised training programmes. The review considered a number of policy interventions focussed on these objectives. Three initiatives were aimed at supporting training and development of employees in Wales, of which two had elements aimed at SMEs. These are the GO Wales programme for graduates, an ESF supported programme for North Wales 'Skills in the Workplace', and the Workforce Development Programme aimed at diagnosing training needs and directing businesses towards leadership and management development programmes. In addition, two pieces of research are discussed that consider apprenticeship programmes in England and Scotland[1], as well as the English 'Train to Gain' training brokerage service, and the Leadership and Management Development programme. Lastly, one statistical analysis is included that assesses the impact of subsidy on employer training at individual workplace level in the Republic of Ireland.

Ekos Consulting (2007) evaluated the GO Wales programme aimed at supporting the recruitment of graduates in Wales, run by the Higher Education Careers Services in Wales with funding from the Welsh Higher Education Funding Council. They comment positively on the impact of a subsidy of up to £500 for Continuing Professional Development of graduates, which was available to smaller firms providing they matched

[1] The evaluation for Wales focussed on employer and apprentice views on the programme, rather than the impact on training provision.

the contribution. Only one employer out of 25 sampled stated that they would have provided the training with partial subsidy. Interestingly, the report suggests that pooling graduate training in SMEs may enable employers to access training that would be too expensive or difficult for individual employers to source.

The Skills in the Workplace Programme used ESF funding to support training for SMEs in North Wales. An evaluation based on a survey of nearly 300 employers found that while a significant proportion of employers identified some additionality from the programme in that it provided supplementary training, they would have undertaken some form of training without programme support (CRG, 2008). However, the authors suggest that the quality of the training undertaken without the programme may not have been as effective in meeting employer needs. They also recommend further flexibility in any future provision, by using a wider variety of learning interventions such as 'bite size' modules, and distance learning methods.

The Workforce Development Programme was launched in 2005 and sought to provide diagnostic advice on workforce development to Welsh businesses, with signposting of organisations towards the IiP leadership and management module, and a leadership and management workshop. It is delivered by a network of advisers and has reached over 4,000 companies. Organisations from the public sector, health and manufacturing sectors have higher participation rates. The initial evaluation of the programme (Cambridge Policy Consultants, 2008) argues that firms are making greater investments in training as a result of participation, based on the reports of organisations participating. Over 40 per cent of organisations said they would not have sent staff to leadership and management workshops without the partial subsidy. This was directly associated with company size, smaller organisations being less likely to fund training without subsidy. Over 60 per cent of the 50 companies interviewed stated that they had increased training as a result of using the IiP module, but it is not known whether the training was employer or state-funded. A majority of companies would not have been willing to pay for using the model. The report recommends that there should be greater targeting of funding for the programme components, focussing particularly on SMEs at the expense of larger firms.

In England, Train to Gain was launched in 2006 and acts as a brokering service to help organisations diagnose and fill skills deficiencies, while a targeted programme for SME managers, called the Leadership and Management Development Programme, has also been piloted.

A recent evaluation of employer experiences of Train To Gain, using a telephone survey of over 3,000 organisations, finds uneven sectoral take-up of the provision, with public administration, health and education employers being most likely to use the service, whilst finance and business services are particularly under-represented (IFF, 2008). Participation among very small organisations (fewer than five employees) was disproportionately low compared to their representation in the English economy. The report also concluded that Train to Gain was not successfully reaching employers who had provided no training recently. Around half the organisations participating that had not previously undertaken training said that they would have done so without Train To Gain involvement, but for a proportion the availability of public subsidy was important.

A further example of targeted subsidies for SMEs for individual development is the Leadership and Management Development Programme (LMDP) in England, aimed at developing effective leaders and managers in SMEs. Components include training needs analysis, the creation of a Personal Development Plan, and funding of up to £1,000 to the costs of training and development over a 12 month period. An evaluation in six pilot areas (PACEC, 2006) found just over half the participants from a sample of over 300 stated that they would have sought training without the subsidy, although 60 per cent were contributing to the costs of the training and over one-third were paying more than half the costs. The funding was a particularly critical factor for managers from construction and private services sectors. Around half the managers felt they would have sought alternative provision without the programme, but of this group, half did not know which sources they would have approached.

One of the main state interventions in UK supply-side training policies that has received continued government emphasis since the mid-1990s is a series of activities to re-invigorate apprenticeships. This has included a comprehensive programme of expansion, rebranding, curriculum reviews and promotional campaigns. Anderson and Metcalfe (2003) report on employer views of what were then titled Modern Apprenticeships, from a telephone survey of 1,500 employers in a range of sectors. They were found to be concentrated in smaller firms, but under-represented in manufacturing, banking, insurance and finance sectors. There were fewer apprenticeships in organisations in London and Eastern England. Over half of employers claimed that having Modern Apprentices led to them to introduce new training, while almost one-third stated they had increased higher level or broader skills training as a result. Increases in the quantity or quality of training due to the use of apprenticeships were most common in Early Years, Travel Services, and

Retail occupations. Forty-one per cent of employers stated that using Modern Apprenticeships had also increased the quality or quantity of training for other staff.

Similar evaluations have been undertaken for apprenticeship programmes in Scotland and Wales. A survey of over 2,000 employers in Scotland asked managers about their reaction to the removal of public subsidy for apprenticeship programmes. One-third of employers stated that they would not have trained as many new recruits, while over 40 per cent stated that they would not have recruited as many staff (CPC, 2006). It is not possible to disentangle partial additionality (where employers would train fewer staff) from complete additionality (where employers would train no staff). The authors suggest that public subsidy should be targeted where it has most value and point to manufacturing being a more appropriate receiver of state funding for apprenticeship-type programmes, as evidence suggests that service sector training in some cases may suffer little consequence from no or reduced subsidy.

Gorg and Strobl (2005) specifically examine the impact of government subsidies on employer investment in training, at establishment level in manufacturing firms in the Republic of Ireland. This study used data on grants received by firms linked to results of a regular business survey. The researchers attempted to control for differences based on non-random take-up of grants. The research found that public subsidy increased expenditure on training in domestic firms, but not foreign-owned ones, but could not explain the difference in impact. However, a higher proportion of foreign-owned firms were likely to invest in training compared with domestic ones, so it is possible that sub-optimal investment in Irish-owned firms was being addressed successfully by the subsidies.

3.9.2 Implications and conclusions

- There is mixed evidence concerning the degree of additionality provided by the programmes assessed through commissioned policy evaluations. However, there is consistent evidence to suggest that without public subsidy, a proportion of employers would do less or no training.
- Particular value appears to be attached to subsidies, and advice and guidance, by SMEs.
- The nature and quality of apprenticeship training is uneven across sectors, as are completion rates, linked in some cases to the relative levels of skill demanded in different occupations (see also Fuller and Unwin, 2004). This concurs with difficulties

identified in the wider literature, of creating national frameworks when sectoral requirements for skills are highly variable (Fuller and Unwin, 2003).

This chapter has presented a discussion of the available evidence concerning the impact of a variety of policies to increase employer investment in training. In general, it has revealed a limited number of detailed and robust evaluations. However, a number of key messages have emerged. These include relatively positive support for the use of inter-employer networks and supply chain pressures, some evidence to support extension of occupational licensing, and limited evidence for the current impact of Investors in People, levies, rights to time for training, and tax breaks. Subsidies appear to carry high levels of deadweight but appear important in some circumstances, eg for SMES.

The next phase of the project involved identifying and defining the proposed policy options in more detail, including a prioritisation process, in which stakeholders from the devolved administrations, SSCs and the UK Commission participated. The process and the proposed policy options are outlined in the next chapter.

4 Developing Policy Options

4.1 Introduction

This policy review has considered a number of interventions that might address problems of market failure and increase employer investment in training. Before discussing proposed policy options, it is important to bear in mind a number of points and general observations.

First, to increase employer investment in training, it is necessary to address problems of capacity, capability and motivation. In considering the barrier of motivation, employers' failures to train their workforces must be judged within the context of their product market strategies, and organisational goals and aspirations. Societally sub-optimal investment in skills, when considered from a perspective of social justice or individual equality of opportunity, is not the same as sub-optimal investment for individual firms. This means that inequitable distribution of skills and training may not be economically inefficient. In some cases the nature of the product or service and/or the process of delivery suggests that there is no requirement for higher levels of skills that would stimulate employer demand for training (see examples in Lloyd, Mason and Mayhew, 2008). Lawton (2009) cites evidence concerning the persistence of an 'hour glass' economy in the UK and calculates that a similar number of jobs requiring no qualifications for entry will exist in 2020 compared to today. Tackling problems of poverty arising for individuals undertaking these jobs needs to be addressed by employment regulation, some of which is outside the scope of this project. In addition, there is a large literature that documents the absence of competitive pressures for some employers to move upmarket and employer interest in training may also be bounded by their choice of product market strategy (eg Keep and Mayhew, 2006). Policy efforts to address the latter problem need to be concerned with stimulating innovation in products and services, linked to skills utilisation issues of job design and work organisation. These are outside the scope of this review, but are being considered separately by the UK Commission in its 'Skills Utilisation' project. Other policy options, well outside the scope of UK could also serve to drive up demand for skills and training, and may have a larger impact on productivity. For example, tax breaks to encourage investment in capital could have the effect of increasing the employer investment in training (albeit among a smaller workforce) as employees learn to use new equipment effectively. However, much would depend on management discretion as to the level of skills required of employees, and whether this would result in upskilling or de-skilling the work process.

Second, in selecting policy options, the UK Commission is taking a specific focus on optimising investment in skills from an employer rather than a societal perspective. Policy goals of optimising firm outcomes, or optimising social justice, through redistributing training opportunities to disadvantaged groups are therefore not explicitly addressed in much of the literature reviewed for this report. Policies reviewed such as tax incentives and levies generally give employers a fair amount of discretion in targeting beneficiaries of training, and evidence suggests that employer involvement in selecting the type of training, including the staff who will receive it, is important in building employer commitment to training. It is important to note that the outcomes of policies to achieve increased employer investment in skills will therefore not necessarily be consistent with policy goals of redistributing training participation across workforce groups in the interests of social justice.

Third, securing employer commitment to the policy options proposed will be critical to securing widespread 'collective' change in employer investment behaviours. The policy review has highlighted a number of instances of attempted policy change that have either failed or not achieved their full potential due to large-scale employer hostility or disengagement. To this end, the need to engage with employers' business problems as a first order priority (rather than workforce skills development), and to do so using the language of employers (rather than education, training or policy expertise), is paramount (Sung *et al.*, 2006).

Fourth, policy borrowing is likely to be inappropriate and unproductive where the policies adopted are taken from institutional contexts that are considerably different from the UK.

In order to summarise evidence and reflect on policy implications, two tables are now presented. The first, Table 4.1, provides a comparison of the relative strength of evidence available to support different policy options across all three reviews conducted (including those with no examples of implemented policies to review within this report). Tables 4.2 and 4.3 then consider to what extent each of the policies covered by this review may address likely barriers to increased employer investment in skills that have been identified in the conceptual, empirical evidence and policy reviews.

Table 4.1: Level of support for different policy instruments

Policy lever	Conceptual Review	Empirical Evidence Review	Policy Review
Discounted cash flow and real options pricing accounting techniques	✓		
Tax breaks	✓	✓	✓ but possibly not appropriate for incentivising investment in training
Levies	✓	Limited evidence of impact due to problems of design, implementation and appetite from employers problems	✓ but limited evidence of impact due to problems of design, implementation and appetite from employers
Occupational licensing		✓	✓ but limited likely application
Inter-employer networks organised by geography/sector/supply chain	✓ (sectoral) (and (some overlap with neighbourhood policy measures?)	✓	✓✓✓ (strongest evidence found)
Rights to time for training			✓
Subsidised training			✓ will not increase employer investment but may be applicable in sectors with low skill demands, if 'more training' is a policy goal
Investors in People and quality standards		✓	May focus investment on training rather than increase levels of training

Source: IES, 2009

The volume of ticks in Table 4.1 represent a qualitative and subjective judgement on the volume of evidence in the literature indicating support for the effectiveness of the policy as a likely tool for raising employer investment in skills. In one case, that of accounting techniques, the absence of ticks in the second and third column is due to the absence of empirical evidence.

Overall, the Table shows least support for accounting techniques and rights to time off for training. There is little evidence of widespread impact of rights to time off for training in the policy review. Levies and tax breaks receive some support in the conceptual and empirical evidence reviews, but more detailed analysis of scheme evaluations conducted for the policy review identifies a significant number of problems in their operation, particularly without employer support. Social partnership is observed by both the empirical evidence review and the policy review to encourage employer investment in skills. However, this is evident in markedly different societal systems from the UK, characterised by significant coverage of employee representation mechanisms across sectors, bolstered in some countries by a stronger state compulsion. Strongest evidence across all three reviews is available for inter-employer networks. There is also some support in the policy review for some extension of occupational licensing.

Table 4.2 illustrates that in general terms, many of the barriers to training identified in the conceptual and empirical evidence reviews are most likely to be tackled through supporting inter-employer collaboration in training. Some may also be addressed through occupational licensing, though this policy lever is likely to be more restricted in scope. External investment barriers that firms encounter, such as obtaining finance for training or overcoming short-termism, do not appear to be addressed effectively from the evidence reviewed. However, training subsidies do appear to positively increase the volume of training, but not the level of employer investment in that training. Policies that operate through financial penalties and incentives generally appear to be less likely to be successful in educating managers and altering perceptions about the potential benefits of investing in workforce skills.

Table 4.2: Potential of different policy options to solve barriers to training that affect employers (I)

	Accounting techniques	Tax breaks	Levies	Occupational licensing
Lack of spillover benefits of training between firms	No direct effect	No direct effect	Could raise investment but not necessarily guarantee transferable learning. In most designs, firm decisions on training remain private	Could make spillover learning more appropriable through standardisation of skills required in affected occupations
Transaction costs to managers of organising training	No direct effect	No direct effect	No effect unless organised collaboratively	Would depend on whether organised by individual firms or through collaborations
Poaching	No direct effect	No direct effect as firm spending remains discretionary	Should help by levelling the playing field of training investment	May help by standardising entry levels to occupations
Bounded rationality	May help justify investment on training where pre-existing interest/commitment exists	No direct effect	No direct effect	May break pre-conceptions about benefits of training if implemented collaboratively
Lack of management education	May improve management understanding of the benefits of training to the firm	No direct effect	No direct effect	No direct effect, unless licence to practice is required for managers
Information asymmetry on training benefits	No direct effect	No direct effects	No direct effects	Potentially, if process of license design is collaborative, involving wide range of employers
Short-termism	Annual taxation mechanisms unlikely to address this, will not affect capital market problems	Yearly calculation of taxes unlikely to address this, will not affect capital market problems	Unlikely to alter the nature of employer investment and does not tackle capital market short-termism	May stimulate more workforce planning, but will not affect capital market investment

	Accounting techniques	Tax breaks	Levies	Occupational licensing
Economies of scale	No direct effect	No direct effect	No direct effect	Only if training arrangements are pooled/shared
Capital market imperfections	Accurate valuation of the benefits of training may improve investment decisions effect	No direct effect	No direct effects	No direct effects
Releasing staff to train	No direct effect	No direct effect	No direct effect	Would tackle the problem through compulsion
Access to suitable training provision	No direct effect	No direct effect	No direct effect	Possibly, if training arrangements are shared

Source: IES, 2009

Table 4.3: Potential of different policy options to solve barriers to training that affect employers (II)

	Time off to train	Social partnerships at sectoral level	Inter-employer collaboration	Subsidised training	Investors in People/ Quality standards
Lack of spillover benefits of training between firms	Possibly, if increased labour mobility occurs	No direct effect	Could be improved by inter-employer learning about optimal levels/ methods of training, and organisational benefits	Possibly, if increased labour mobility occurs	No direct effect
Transaction costs to managers of organising training	No direct effect	Not necessarily, unless training arrangements are shared	Yes, if shared between groups of employers	Depends on how subsidy is provided	No direct effect
Poaching	Possibly exacerbated, unless training restricted to firm specific skills	Possibly, if level of training is generally increased as a result	Yes, if levels playing field of training investment	No direct effect	No direct effect
Bounded rationality	No direct effect	May improve through learning from social partners	May improve through inter-firm learning about benefits/impact of training on solving business problems	No direct effect	Process of standard acquisition may improve management appreciation of purpose/ benefits of training
Lack of management education	No direct effect	May improve through learning from social partners	May improve through learning from other organisations	May be addressed through targeted leadership/manageme nt programmes	Process of standard acquisition may improve management appreciation of purpose/ benefits of training
Information asymmetry on training benefits	No direct effect	No direct effect	May improve through learning from other organisations		Process of standard acquisition may improve management appreciation of purpose/ benefits of training

	Time off to train	Social partnerships at sectoral level	Inter-employer collaboration	Subsidised training	Investors in People/ Quality standards
Short-termism	No direct effect	Better workforce planning could be enabled but financial short-termism is not necessarily addressed	No direct effect	No direct effect	Better planning of training could be enabled but financial short-termism is not addressed
Economies of scale	No direct effect	No direct effect	May be achieved through collaborative training arrangements	No direct effect unless training arrangements are shared	No direct effect
Capital market imperfections	No direct effect	No direct effect	No direct effect	May be addressed if subsidised training offered meets firms' needs	No direct effect
Releasing staff to train	Solved by compulsion, though does not address backfill problems	No direct effect	Could be solved through shared appointments	Some indirect effect if subsidy covers backfill costs, but this is dependent upon availability of staff to cover	No direct effect
Access to suitable training provision	No direct effect	Not unless training arrangements are shared	Likely to be tackled through employer involvement in tailoring and specifying training needs, with greater shared purchasing power	May be addressed if subsidised training offered meets firms' needs	No direct effect

Source: IES, 2009

4.2 Policy options: the way forward

This review has found limited evidence on effective policies to raise the levels of employer investment in training. While the review found a wide range of policy activity, there is little robust evaluative evidence available and the evidence that does exist tends to indicate that the effect of the policies that are in place is limited. The policy review now turns to the question of how policies were selected to be taken forward to the policy prioritisation exercise. We explain the reasoning behind decisions not to prioritise policies for wider discussion with stakeholders, provide some information on the policy prioritisation exercise and its contribution, and then outline the review's recommendations for policy options, noting important points which emerged from the discussions with stakeholders.

4.2.1 Non-prioritised policy options

The review of policy options has revealed that there is no single magic bullet that will achieve the policy objective of increasing employer investment in training. Proposals were selected on the basis of the available evidence. The evidence base was wide ranging but stronger for some policies than others and this was taken into account in selecting policy options. The policies selected for prioritisation were nevertheless chosen according to their relative likelihood of success. This involved consideration of policy options on the basis of available evidence which leads us to conclude that they will work better than the alternatives, rather than grounded evidence that any policy option will provide a perfect solution when measured against an absolute standard.

A number of options were not proposed as standalone policies but merited consideration as part of a package of measures, so while some policies were discounted as individual levers, they may nevertheless appear as components of the policy options proposed.

1) Levies

There was a substantial body of evidence on levy systems. The policy review found more evidence of failure of levy systems than for any other policy. Failure was identified in both relative and absolute terms. There was widespread evidence that levy systems (which have significant administration costs and manipulation/compliance problems – see earlier discussion for detailed reasons) are not thought to be successful in allocating funding for training to targeted employer groups such as SMEs. Pre-existing strong tripartite relationships at sectoral levels are a feature of successful levy systems but these are not a feature of the UK economy. There was also evidence that levies can be deeply unpopular with employers and a number of examples where levy systems have been abandoned as a result. While not prioritising levies as a blanket policy option, the policy review also found a limited number of circumstances in which levies may have a useful role in stimulating employer investment in training. These conditions for success included fragmented and geographically dispersed industries, consisting of many small organisations in sectors where training may be resource/capital intensive and where there is a general employer consensus that levies are essential to ensure an adequate minimum level of training within the sector.

2) Individual training time rights

This policy option is a relatively uncommon one. There is significant widespread evidence that take up of individual training time rights is very low relative to the proportions of eligible employees (often less than one per cent). Individuals intending to change careers are among the groups most likely to make use of the right thus meaning that their current employer may receive little benefit, while there is mixed evidence on whether employees from vulnerable labour market groups make use of their rights. A heavy investment in a resource-intensive individual information advice and guidance service specifically dedicated to ensuring that employees make use of training rights appropriately is likely to be needed. An inherent feature of this policy option is the difficulty of aligning employee training interests and priorities with employer priorities. It is therefore likely to be difficult to achieve widespread employer support for such a policy option.

3) Standalone government subsidies for training

Government subsidies for training are a very widespread tool. However, some policy evaluations suggest that they increase the volume of training but not the volume of employer investment. This is due to high levels of deadweight and often little additionality which arises because more sophisticated organisations which already have well developed training systems and are astute in claiming government subsidies are more likely to make use of subsidised training. Subsidies may be required for specific groups of employers who would be genuinely unable to train without them, but the review concludes that they would need to be targeted and operate in conjunction with other policy levers, rather than as a mass market standalone policy lever.

4) Tax breaks

Tax breaks for training and R&D were considered in the policy review. There is very limited evaluative evidence of the impact of tax breaks on employer spending on training but a much more substantial evidence base on the impact of tax breaks on R&D. It is likely that tax breaks would need to be relatively generous in a low tax economy to stimulate employer action. Differential tax rates would be needed to target specific groups appropriately which would increase costs and reduce system transparency and employers are likely to be able to manipulate the system to maximise the financial benefit to them.

While much of the evidence on R&D tax breaks is positive, the policy review concludes that R&D tax breaks are targeted at firms that have a pre-existing commitment to or interest in R&D. The employer targets for this policy review is a much wider and more diverse group. The empirical evidence review noted that many employers do not train because they do not perceive training needs to exist in their workforce. Tax breaks are unlikely to drive up employer investment in training as they do not tackle employer motivation to train, but simply reduce the barriers for employers in circumstances where an employer demand for training is present. Therefore the conclusion from the policy review is that tax breaks may be a useful mechanism to stimulate engagement of certain groups of employers (eg small entrepreneurial firms) with other prioritised policy options (such as inter-employer collaboration). They are not, however, likely to be successful as a blanket option independent of another policy lever.

Three further suggestions for investigation as policy options emerged during the policy review process which were not identified at the outset of the study. They were not analysed in detail by the evaluation literature. The three suggestions were: loan guarantees for training; improved dialogue between managers and staff; and a more distinct focus on the use of public procurement policies beyond their consideration as part of supply chain networks.

5) Public procurement policies

Using public procurement policies to drive up investment in training may enable policy to target groups who are least likely to receive training from their employer. This policy has the potential to tackle some of the problems identified in the conceptual and empirical review. These include:

- employer failure to recognise the value of training particular groups of workers through information asymmetry

- rationally judging the private returns of human capital investment in certain groups in the workforce to be less profitable to individual organisations.

Current EU procurement rules and the national UK procurement policy permit using development of workforce skills as a criterion for awarding contracts to suppliers when skills are relevant to the goods or services supplied and can increase value for money obtained for the public purse. There is very limited evidence on the impact of public procurement policy on training (see Binks, 2006, discussed earlier). However, the Cabinet Office (2008) has issued a joint statement on use of public procurement policy to promote training, the thrust of which focuses primarily on plugging essential skills gaps up to Level 3. This is an important and worthwhile policy which may be extremely useful in tackling societally undesirable inequities in skills distribution. Indeed Binks' (2006) case studies illustrate a number of powerful examples. The explicit purpose of the collective measures project is nevertheless on policies which will encourage employer investment in skills, as opposed to state investment in skills. Training for lower level skills needs benefits from extensive state subsidy. Further work would be required to assess the implications of withdrawal of subsidies for Level 2 qualifications for firms seeking or holding government contracts and the potential of public procurement policy to encourage employer investment in higher level skills, potentially drawing on broader work on supply chain dynamics in the public and private sectors outside central government.

6) Loan guarantees for training

The purpose of offering loan guarantees for training is to help overcome costs as a barrier to investment, particularly for small employers or for those where costs of training are particularly high, eg owing to costs of materials/equipment. In practice, loan guarantee schemes are rarely used explicitly for training, with approximately two-thirds of them being used for investment in physical assets and one-third for working capital or cash flow. The main barrier to developing a policy of offering a loan guarantee for training is that the individual decision of whether or not to lend money rests with the financial institution rather than the government. Given the problems identified in the conceptual review of the difficulty in making the case for training as an investment rather than a cost and the short payback expectations from financial institutions for loans made (Bosworth, 2009), loan guarantees for training currently appear to be unpromising as a policy option. This is exacerbated by the current difficulties in the financial system which are leading to reluctance among investors to lend to organisations. Thus, while needed, the timing for launching such a scheme currently appears unpropitious. More fundamentally, investor reluctance to loan funds for training is partly connected to the current system of accounting standards and their treatment of human capital. It therefore may be worth revisiting this policy option once any policy proposals for changes in accounting standards are developed (see later discussion of policy options).

7) Improving dialogue on training between employers and employees

Evidence from other nations illustrates the potentially powerful role that dialogue between employees and employers, facilitated through employee representatives, can have on stimulating investment in and take-up of training. This is especially notable when training is incorporated as a focus of institutionalised collective bargaining. However, in the UK, effects of such social partnership on training appear to be relatively limited due to the erosion of trade union representativeness, reflected in low membership levels and decline in collective bargaining. Unions have made strong efforts, in particular through the work of Unionlearn, to advance the learning agenda and case study work has illustrated the impact of union learning representatives in stimulating demand for and take-up of training among workers with low skills or no previous qualifications. However, union coverage is higher in parts of the economy where organisations are most likely to train staff (such as the public sector and manufacturing) and lower in SMEs and private sector services. While there is clearly potential for unions to champion investment in skills, this is contingent upon them representing a wider proportion of the workforce than they currently do. The remit for the development of the policy options is to operate within the existing framework for employment regulation, and it is unlikely that this option could be pursued without altering this framework.

4.3 Options for further consideration

The four policy options which initially emerged as having the potential to further increase the level of employer investment in training in the UK and were taken forward to the Policy Prioritisation Exercise were:

1. inter-employer networks
2. extended occupational licensing
3. layered Investors in People recognition
4. modified accountancy standards.

4.4 Policy prioritisation exercise and final selection of policy options

Following the literature review, the proposed policies were then subjected to scrutiny at ten Policy Prioritisation Events. These were attended by members of the project team, stakeholders from the devolved UK administrations and Sector Skills Councils, and were followed by further discussion of policy options with UK CES staff. The Policy Prioritisation Exercises generated important information on the critical success factors, likely challenges, and feasibility of implementing each of the proposed options. This information was used to refine the policy options proposed. Stakeholders received prior information outlining each option, received a short presentation on each option at the event, discussed the potential option in detail in small groups, and were then asked to rank each option by distributing scores between them. Some of the important considerations related to specific policy options are raised in the discussion of each option which follows.

After careful consideration of stakeholder views and supplementary information which they provided, together with discussion among the review team and UK Commission staff, this review recommends that two of the policy options – extending better inter-employer networks and extending occupational licensing – are taken forward to be subjected to economic option appraisal. The remaining options of layered IiP and modifying accounting standards for valuing human capital requires further consideration and research, so this policy review proposes an alternative course of action to develop it.

4.5 Policy recommendation 1 – extending better inter-employer networks

Inter-employer networks have the potential to overcome a number of the problems and barriers to training identified in the conceptual and empirical evidence reviews (Bosworth, 2009; Hogarth *et al.*, 2009). These include: tackling of weak management and leadership capability through networking to solve business problems that may result in identifying training as a solution; information asymmetry on the benefits of training; poor social and network capital which may inhibit development of optimal solutions to business problems, difficulties in sourcing and accessing appropriately tailored learning through lack of economies of scale (which may be particularly acute for SMEs and geographically dispersed organisations) and fear of poaching. Risks of network activity which require minimising include a diversion of focus away from training, difficulty in securing employer engagement beyond coalitions of the willing, tensions between supporting flexibility of networks to be employer-led, while needing to demonstrate hard outcomes to employers of the benefits of participating.

Strengthening existing inter-employer networks and establishing a more comprehensive spread of networks appears from the evidence to be the most effective route to securing greater employer investment in training both on the basis of the evidence considered for the policy review and the views of stakeholders captured through the policy prioritisation process. Stakeholders stressed the potential benefits of knowledge spillovers and employers being able to develop economies of scale in accessing better tailored training. They also provided the useful caution that networks needed to be 'better' as well as simply more numerous, avoid duplication with existing networks, and incorporate mechanisms to include outreach eg to SMEs to avoid deadweight. The key issues for consideration are: what should the focus of network activity be, what policy should they be delivering, the level and nature of likely costs/funding mechanisms required and timescale for implementation, and any evidence on the parts of the UK economy in which networks should be targeted.

4.5.1 The purpose, nature and focus of network activity

The evidence suggests that the subject focus for employer networks should be a broad one, as engaging managers in solving wider business problems may hold greater appeal than an initial direct offer of training-related solutions. Networks can provide an environment in which managers can gain advice from experts and other employers on solving existing problems, as well as supporting plans for innovation, expansion and development of products or services. This may then lead to the identification of training needs and result in employer demand for training, which could be provided by the network hub through its own facilities, delivered through a member company or sought from external providers. There is also a possible role for major employers in networks to lead on the implementation of occupational licensing or more general product market regulation which has implications for training. The most common model of network operations is a series of meetings facilitated by an independent project organiser, with a lead employer steering the network and drawing on input from members to define the network needs and appropriate activities to meet them. These might include sharing information and solutions on common problems, developing specific diagnostic or analytic tools for business improvement, and sourcing and delivering training provision.

The evidence has shown a very diverse set of networks in operation. Stakeholders participating in the policy prioritisation exercises also noted that there is plethora of network models in existence with risks of potential confusion and duplication among employers; the emphasis should be on improving the quality of existing networks and extending them, rather than establishing completely new models. As a result, no one network model is suggested, as this will need to be customised to different sectors, localities and sizes of organisation. Rather, it would be more appropriate to establish a employer network fund with a remit to award grants to networks through a competitive bidding process. This would involve setting award criteria carefully to establish a range of projects with some variation between the models that would permit evaluation. In order to be able to identify critical success factors in networks with different characteristics, it would be advisable to design the pilots using realistic evaluation principles (Pawson and Tilley, 1997).

A number of design considerations in establishing inter-employer networks need to be addressed, including identifying:

- the policy agencies that could develop such a network
- the target membership
- the level and nature of public support for the network.

4.5.2 Which policy agency?

A number of options already exist for the agency or agencies that could be eligible to co-lead bids for network leadership and links to other bodies involved in formulating and implementing skills policies and channelling public funding. These include: Regional Development Agencies, Chambers of Commerce, BusinessLink (for small firms), Learning and Skills Councils or Sector Skills Councils, and National Skills Academies. There are diverse benefits associated with each of these partners acting as the lead facilitator of any network. For example, Chambers of Commerce are organised on a local and regional basis and have a broad remit in business support that could ensure development of appropriate ‘hooks’ to engage businesses with skills development. Business Link has a particular responsibility for small business support, knowledge of the needs of SMEs and experience of what works in terms of effective processes of engaging them. In England, the Commission for Rural Communities has particular experience of the needs and challenges facing remoter geographical parts of the country, as does Highlands and Islands Enterprise in Scotland.

Location is important in terms of allocating proportions of funding for geographical areas for the establishment of inter-employer networks, and the empirical literature offers some information to shape these decisions. Hogarth *et al.* (2009) show that in more densely populated areas with large labour markets, employers are less likely to train, as they have a ready pool of skilled labour and may have greater concerns about poaching. While this may result in sub-optimal employer investment in training, from a societal perspective, if employers are able to obtain sufficient skills from the existing labour pool, targeting these areas may offer less return on investment. By contrast, for businesses operating in less populated areas, there may be both fewer sources of learning provision and a need to develop economies of scale and purchasing power for supplying training. Therefore there may be value in prioritising some support for inter-employer networks in geographically remote and less populated parts of the UK.

Sector Skills Councils have a distinctive focus and pre-existing engagement with particular industries and, through facilitating employer networks, these institutions would contribute to meeting the emphasis of Leitch on employer engagement in the design and delivery of training at sectoral levels (noted in Hillage *et al.*, 2008). The difficulties that SSCs are currently facing in meeting multiple, potentially conflicting demands of employers within and across sectors (Hillage *et al.*, 2008) might also be remedied appropriately by more local level engagement with employers based on mutual interests according to geography or supply chain basis. This goal arguably falls within SSCs' existing remit and some reports have argued that they should target smaller, single site private sector employers, while noting that 'limited resources' may have hampered their efforts to date to do so (Skills for Business, 2006). Some SSCs may wish to draw on their recently established National Skills Academies to help develop effective employer training networks.

It would be desirable for each bid for funds to be led by at least one employer, in addition to a stakeholder partner, in order to ensure employer engagement.

4.5.3 Target membership

Networks could be organised along sectoral, sub-sectoral, supply chain or geographical lines. The proposals we make for initial targeting of networks are based on configurations of all these characteristics and a recognition of the level of pre-existing employer engagement with training and development as part of their business agenda, since employers will not all start from a level playing field of expertise and interest. As a general principle, it should be noted that competition and commercial sensitivities may inhibit participation in some sectors so networks will need careful structuring and targeting to optimise employer engagement, and it will be important to have clearly defined boundaries to establish eligibility for public support. The literature points to the need for a core of around 10-20 highly engaged employer members to make networks effective, but it is desirable to supplement this with a wider peripheral group of employers who could be drawn into more active engagement. The evidence has noted that SMEs appear to benefit in particular from network membership and the need for resource-intensive, face-to-face targeting to engage SMEs. This policy review therefore recommends that a minimum number of SMEs should support any bid for network funds in order to ensure that this group of employers is reached.

In terms of selecting different types of employers for membership, we propose a dual-pronged approach. This would involve allocating a proportion of network funding for:

a. Building some networks around existing projects or propitious contexts to maximise chances both of early success through 'quick wins'. This could include, for example, extensions of existing supply chain initiatives in the automotive/manufacturing sectors, with a focus on using skills development strategies linked to product market innovation to tackle the impact of recession in these sectors, learning from the policy evidence reviewed which demonstrates the success of similar approaches in the US. Similarly, this policy option recognises that different nations within the UK have adopted slightly different policy emphases on drivers for employer demand for skills. Scotland has arguably developed a particularly innovative approach to skills development by promoting a skills utilisation agenda that seeks to tie employer investment in skills closely to the deployment of skills. It does this through high-performance work systems required by business strategy, and innovation in moving Scottish businesses up the economic value chain. This is being supported by plans for a cross-sectoral network for leaders and innovators (McAvenue, 2009), and may offer a platform for developing pilot activity for inter-employer networks, to which allocating a pool of funding would be worthwhile.

b. Organisations identified as being likely derive significant benefits from inter-employer networks and/or without a history of inter-employer collaboration. Hogarth*et al.* (2009) report from the empirical review that sectors which report both a low incidence of training, low levels of vocational qualifications and high levels of barriers to training include those covered by the following SSCs: Skills for Logistics/Construction, Proskills, Skillset, Lantra, and Skillfast, in addition to e-skills and Improve, that also report encountering barriers to training and a low take-up of vocational qualifications. Within these sectors, there is evidence of particular occupational skills gaps. These focus on operatives, skilled trades and elementary occupations in each of these sectors, with the exception of Skillset where the main shortage is in the Associate

Professional and Technical/Managerial category. It is notable that these skills shortages are mostly in sectors which are either covered by an existing levy (Construction/Skillset) or in a number of occupations which would be covered by proposals for extended occupational licensing (see discussion below). Hogarth *et al.* (2009) also find evidence of likely management skills shortages, indicated by less training of managers and lower levels of qualifications held in the following sectors: construction, agriculture, wood/pulp, retailing, hotels and restaurants and motor vehicle sale/repairs.

4.5.4 Funding

The type of public support provided to employers through networks also requires consideration, and is closely linked to the question of how best to incentivise participation and the parameters placed around the purpose of funding. From the evidence reviewed, it seems that funding is likely to be needed for three purposes.

- First, funding should be focussed on establishing and supporting dedicated network champions with skills and credibility to function as project managers who co-ordinate the operation of the network, liaise between participating employers (including face-to-face marketing identified as necessary to persuade SMEs to join), and source input for network activities from other agencies such as learning providers.
- Second, funding should be provided through a competitive funding system of state grants to networks, using thematic criteria to encourage organisations to address some of the priority issues identified as important to the UK skills agenda. These might include, for example, generic priorities across all parts of the economy such as innovation, as well as sector or industry specific needs.
- Third, it may be desirable to use funding mechanisms to generate initial employer participation in networks. Previous research has demonstrated that networks sometimes encounter difficulties connected with sustainability once pump-priming funding ceases. It would be important to overcome this through developing network capability through the project champion roles. Additionally, providing funding for network projects for a minimum duration of three years to allow sufficient time for networks to develop their own momentum is important.

The division of funding responsibilities for activities between employers and the state is also important. A funding input from employers of 25 per cent of the costs of any network appears to be the minimum used in existing networks. This would require more detailed costing analysis in future option appraisal. It may be advisable for differential levels of funding to be made available to networks depending on their needs and significance within the direction of government policy.

There is some information on how the networks reviewed for this report have been funded, but costs and scope of activities are highly variable so network costs are in no way comparable. Burge *et al.* (2002) report that membership fees cover up to 20 per cent of running costs for nearly 90 per cent of the sample of the Group Training Associations they analysed, but contracts from the Learning and Skills Council and income generated through training services were more important. Membership fees were usually in the order of around £100 per year and the average number of members was 67 so membership fees total an average of £6,700 per year. If this represents 20 per cent of costs, then total costs average at £33,500. Rhodes and Graver (2002) identified that funding costs for 16 employer learning networks from DfES amounted to £1,929,972, (they engaged at least 1,561 employers at a cost of £1,236 per employer and reached at least 6,000 employees at a cost of £320 per employee). Focus groups with network facilitators in the evaluation study recommended that funding of at least £200,000 per network was required, awarded in tranches as projects achieved specified outcomes. Skillnets in the Republic of Ireland and Northern Ireland are able to draw on funding worth €115 million between 2005-2010. There are a number of separate calls for proposals, some of which are only available to existing networks, so calculating exact costs and investment is not straightforward. However, in 2006/07, literature from Skillnets states that 54 networks were operating, grants of €15.9 million were awarded for the training networks, and companies invested €10.8 million in training, amounting to 38 per cent of the total network costs, from which 36,500 workers received training (Skillnets, 2008).

On this basis, initial indicative estimates of likely costs could be as follows:

> Ten networks at £200k per network = £2,000,000.

However, this does not include the costs to central government of designing the bidding process, administration, monitoring and evaluation processes, and the additional demand for existing employer facing subsidies it may trigger in England (Train to Gain) and Wales (Workforce Development Programme).

4.5.5 Incentivising network membership

There are three sub-models that could be considered which deploy different strategies to achieve employer engagement: (a) subsidised training, (b) tax break, (c) levy. A proportion of network funds could be allocated for any networks designated as appropriate beneficiaries of options (a) or (b).

1. *Inter-employer networks – offering subsidised training.* The offer of subsidised training possibly provides the most appealing 'carrot' to employers, but could cast employers as passive recipients of training and might risk deadweight effects. It could function as a policy lever to redistribute employer investment in training by making subsidies available for particular forms of learning, but it would not necessarily increase either the volume of training or employer investment in workforce skills development. It is therefore likely to be appropriate in a limited number of contexts in which market failure of employer capacity and/or capability shows that other compulsion or exhortation mechanisms are unlikely to generate the appropriate investment from employers. The evidence is clear that training subsidy is of considerable importance to some organisations which would find it very difficult to train without it. This sub-option is recommended for consideration for small organisations which face practical difficulties in providing training. Further scoping work would be required to determine eligibility criteria for subsidy.

2. *Inter-employer networks – involving a tax break for participation*. These might be most suitable for small start-up organisations or in sectors characterised by entrepreneurialism and interest in product innovation. There are potential difficulties in auditing what constitutes satisfactory participation. Tax breaks were considered to be a particularly desirable mechanism to encourage participation in networks by stakeholders contributing to the policy prioritisation exercises. There is very little empirical evidence to suggest in which sectors tax breaks might be most appropriate, so this sub-option requires further scoping work.

3. *Inter-employer networks – involving a sectoral levy*. Levy-based inter-employer networks are likely to be appropriate where industry structure demands them, indicated by the existence of a high proportion of small organisations that are geographically dispersed and fragmented, evidence of skills shortages and where exhortatory policies for employers to invest in training are unsuccessful. These conditions are exemplified by the existing levy schemes in film and construction. Criteria applied to the construction industry levy are that consultation processes must gain agreement from organisations representing at least half the employers who would

be eligible to pay the levy. After consideration of the existing evidence, the policy review proposes that levies might be appropriate to consider for the rail, print, broadcasting and private healthcare sectors.

Costs of levy systems such as the UK construction and film industry levy include tasks such as gathering and processing payments, redistribution through grants, and enforcement. Much of the published data assessing costs of the construction scheme focuses on costs to employers (see below). Current levies are administered through the Construction Industry Training Board (CITB) and the Film Industry Training Board (FITB). The latter is funded partly by levy costs, partly by the National Lottery through the UK Film Council and also supported by Skillset, the relevant Sector Skills Council. DIUS (2007) estimates that operational costs of each Industry Training Board to DIUS are £10,000 per year but it is not clear whether this includes the start-up costs for new ITBs or equivalent organisations. Enforcement costs in 2007 for the construction levy were estimated as £260K (DIUS, 2008b), but this does not tell us whether the enforcement mechanisms are proportionate and deliver value for money in relation to the potential risks of non-compliance. Further details of operational costs and funding mechanisms should be sought through consultation with the relevant bodies to guide economic option appraisals.

Evidence from DIUS (2008b) on the construction industry estimates that there are 75,000 eligible employers, and bases the costs of completing levy returns on a non-professional costing £30 per hour. This calculates that there are 30,000 small employers taking 30 minutes to complete the form, 30,000 larger employers taking 60 minutes to complete the form and 15,000 employers who will not complete the forms because they are in their first year of trading or cannot be contacted. Grant claims are also estimated to take 30 minutes per person trained, with around 41,500 trainees involved.

Networks have already been justified as requiring at least three years to generate their own momentum. Option appraisal, design of the funding criteria and development of associated application, monitoring and review processes, will all be required beforehand. Networks might therefore conceivably be established in 2010 at the earliest and run for three years.

4.6 Policy recommendation 2 – more extensive occupational licensing

4.6.1 Introduction

Occupational licensing has the potential to overcome a number of the barriers to training identified in the conceptual and empirical evidence reviews (Bosworth, 2009; Hogarth *et al.*, 2009). In particular, it directly tackles market failure to demand training, has the potential to level up training received among an occupational group thus reducing fear of poaching among employers, and could compel suppliers of training to invest in provision in under-resourced subjects or occupational areas.

Where skill levels are critical to a particular business activity and competence-based entry benchmarks are feasible to devise, occupational licensing can increase individual participation in skill development and lever in greater employer investment. Licensing offers potential to improve the quality of training received by focussing on standards achieved rather than evaluating training through input or process-based measures. One policy option worthy of further exploration therefore is the design and implementation of an occupational licensing scheme in a limited number of sectors for a limited number of occupations. It received broad support as a policy measure in the responses received by the UK Commission to its call for evidence on appropriate collective measures policies, but many respondents stressed that it would only suited to some sectors. A number noted consumer risk or safety as an important dimension on which to judge the applicability of licensing for particular occupations. There was somewhat less support for occupational licensing from the policy prioritisation exercise conducted as part of the Collective Measures project compared to the option of improved employer networks, although it still emerged as the option with second greatest level of support. Stakeholders recognised the direct potential of the option to make a difference in a relatively short timescale and to connect directly to the VET system. Their concerns related to its inappropriateness as a blanket measure, likely employer disaffection or increased costs from potential bureaucracy of implementation and reduced labour market mobility. Design considerations to ensure accreditation and use of skills and appropriate sharing of costs also emerged as important concerns. The major risks of occupational licensing as a policy option are over-development of skills for which there is no demand, since this may lead to increased costs to the consumer without discernable improvements in product or service quality, and the creation of superficial training and licensing processes through a bureaucratised ‘tick box’ process of accreditation. These risks can be mitigated by selectivity in choice of occupations to be licensed to ensure there is a genuine need and careful design of the licensing, assessment and accreditation processes with appropriate enforcement mechanisms.

Through the mechanism of re-licensing, further investment in training (and potentially time out of the workplace to undertake it) could be assured, since a minimum amount of continuing professional development could be stipulated, and varied according to the occupation concerned. The design of occupational licenses and delivery of training to meet the skill levels required could constitute a focus of the inter-employer network activity discussed in Option 1. Occupational licensing may serve to increase quality and reassure or inform consumers about the competence of individuals, but it is likely to be most feasible where there are existing concerns about professional competence, where consumer demand exists for a ‘badge’ of trust, and where skills are sufficiently tangible and observable for individual competence in them to be verified. Additionally, discussions with staff at the UK Commission suggest that fragmented sectors that have limited or no co-ordination, such as privatised public services and goods or services which it is not possible to source from overseas (to avoid trade being lost outside the UK) may be eligible for consideration.

Occupations that could be considered for licensing include plumbers, beauticians, cooks, motor mechanics, bricklayers, assembly line workers (Frontier Economics, 2003), to which could be added other occupations such as estate agency (suggested by Asset Skills) and rail signal workers, in addition to customer service skills within the leisure and tourism industry, proposed by stakeholders during the policy prioritisation exercises. More detailed modelling would be required to determine the number of people within each occupation, for example, using the Labour Force Survey.

4.6.2 Funding of occupational licensing

The major question for developing an occupational licensing system is who should pay for the initial licensing and re-licensing and the associated training, since a number of occupations already covered by licensing are characterised by self-employment, eg gas installers. This was raised as a concern during the policy prioritisation exercises, as the policy intention for the collective measures project is to increase investment in training on the part of employers rather than transfer the burden to employees or leave the state to fund it. This policy review recommends that some limited state subsidy of up to 25 per cent of costs should be provided for individuals who are self-employed, but responsibility for licensing costs of employees should largely fall to employers, with employees paying no more than 25 per cent of costs. Employer funding could be raised through a levy-based mechanism in the occupations and sectors discussed.

Detailed elements of the costs of licensing would include testing, administrative costs of processing licence applications and issuing licences, in addition to start up, advertising and marketing costs, and costs of staff required to run a licensing body, aside from training costs incurred by the employer. The duration of licensing within different occupations would need to be considered but might run from one to three years, and appropriate penalties/sanctions and monitoring for non-compliance would need to be devised.

There is limited evidence on the actual costs of occupational licensing and further analysis and discussion with licensing bodies is recommended. A number of current licensing schemes attempt to be self-financing and Frontier Economics (2003), for example, calculates that the former CORGI gas registration scheme costs approximately £11 million per year to run at £113 per qualified installer, while the licensing scheme for ‘black cab’ taxi drivers costs around £6 million per year covering 25,000 drivers at a cost of around £240 per driver. Private hire licensing costs approximately £6 million per year, covering 40,000 drivers at £150 per driver. However, this report cautions that the start-up costs for licensing schemes for occupations without the existing infrastructures in the previous two examples are likely to be higher and attention might need to be given to the costs of enforcement regimes. There are also costs to individuals of initial and subsequent registration which amount to at least £300 per year.

In addition to direct costs, opportunity costs to individuals and employers of investing time in training to gain the licence must be considered, as well as the costs of providing additional training. Shortages of training in some occupations such as plumbing were identified by Frontier Economics (2003), which could incur additional subsidy costs from the state if such courses are not economic for learning providers to run.

In progressing the economic appraisal of this policy option, we recommend that the UK Commission consult with the UK office of the US based Council on Licensure, Enforcement and Regulation (CLEAR) which has extensive experience of the many US systems of occupational licensing. Licensing may require development of industry infrastructures to support policy option. Coupled with likely reduced employer appetite for licensing in the current economic climate, it may be advisable to aim for medium-term introduction.

4.7 Policy recommendation 3 – modify accounting standards for valuing human capital

The purpose of this policy option is to make it easier for employers to invest in training by making it a less risky form of expenditure when judged from an accountancy perspective and to overcome information asymmetry on the benefits of investment in training and to help evaluate its impact more accurately. The conceptual and empirical evidence reviews for this project (Bosworth, 2009; Hogarth *et al.*, 2009) noted that conventional accountancy methods tend to regard training as a cost rather than an investment, and may therefore discourage employer investment in skills. There is also limited evidence of organisations undertaking thorough cost-benefit analyses of training interventions that they provide to staff. One way of overcoming this is by using a real options method for evaluating the costs and potential benefits of training, as outlined in the conceptual review. This would enable organisations to re-evaluate the likely benefits of investment in training regularly on a real time basis for accounting purposes, rather than committing to predictions about future value and impact of training well before the benefits can be accurately assessed. However, the effects may be limited for low level training which would support the current direction of an organisation's business strategy. There may, however, be more benefit for firms which are contemplating major expansion plans involving more significant investment in workforce skills. Potential difficulties may include harmonisation of reporting methods with international accounting standards, which may pose particular problems for multi-national organisations.

The main challenge of this policy option is its novelty and consequent lack of empirical evidence about how it could be developed and applied. Stakeholders attending the policy prioritisation exercises noted this and expressed interest in the principles of the policy, recognising its potential to bring about longer-term cultural change in the treatment of human capital and its potential low cost to implement. However, some felt that it would have little impact on SMEs, while larger firms might be creative in the way they applied the standard to advantage their organisations. Further work is required to determine the appropriate measures that would be required and the best way of applying new standards. This policy review suggests that further investigation should start by revisiting the recommendations and methods proposed in the final report of the Kingsmill Accounting for People Taskforce. This proposed that a standards board should convene to determine the most appropriate common indicators in valuing human capital. In a similar fashion, a working group representing accountancy experts, employers and policy makers should lead the development of this policy option. Stakeholders at the policy prioritisation exercises also noted the need to involve accountancy experts and advisors in further development work. This policy option requires significant development and any implementation is likely to follow a medium-term timescale.

4.8 Policy recommendation 4 – developing the Layered Recognition Framework for the Investors in People Standard

It is noted that there has been a recent review of the Investors in People Standard and that a new approach has been launched in May 2009. The new approach to the Standard bears some similarities with the policy option developed through the Collective Measures study in terms of introducing a layered approach with additional recognition for additional achievement and a more flexible approach which may encourage engagement from SMEs.

The Collective Measures study identified IiP as a policy option, as it is strongly connected to the rationale for intervention as highlighted in the conceptual and empirical evidence reviews. These emphasise the need to strengthen management capability and understand the links between organisational performance and workforce competence. IiP can also be linked to the adoption of higher value-added business strategies which can increase demand for skills, and is much more explicitly about training as a potential business solution than other quality standards. For this reason, the review recommends that IiP is the vehicle that is used to achieve longer term change in training behaviour amongst employers.

Stakeholders in Policy Prioritisation Exercises noted that the IiP brand was well recognised but required refreshing. They were concerned about the limited evidence of any positive impact of IiP on employer investment in training, as shown in the policy review, and the possible bureaucratic or process-based approach to gaining recognition of the Standard that was shown by some employers. However, the exercise showed varying responses across the four nations of the UK, with Northern Ireland having a particularly strong engagement with the Standard. Concerns were raised about the use of the Standard as a public procurement policy because of the potential adverse impact on SMEs and adding perceived bureaucracy to the system as a result of the 'layering' option.

The policy review also found limited evidence of the impact of IiP in terms of the level of training undertaken by employers, and recommended that IiP should develop in a number of ways:

- to layer the Standard for large and small employers, with the current Standard being applicable for small (less than 250) employers;
- to stretch larger employers by having a tougher standard which would require them to (a) conduct audits of training volume along the same principles as gender pay gap audits and (b) to attain equality in provision of training across all staff groups, subject potentially to a pro rata basis of distribution to allow for differences in working-time, eg part-time/full-time and differences in skill levels and needs between occupational groups;
- to encourage collaboration between employers by accrediting employers at a higher level who share training facilities and resources with other (especially smaller) employers, consistent with the remit of the Collective Measures study.

The review found that a potential risk of changing the IiP Standard in this way, in addition to diluting brand clarity, is that some larger organisations may not wish to pursue the Standard at the higher level. This could be addressed by public procurement policies, which would require large organisations seeking public contracts to attain the higher level of accreditation.

Given the new approach to the Standard, and that the management of the Standard is currently in transition as the UK Commission for Employment and Skills is due to assume responsibility for it in 2009, the policy option recommends:

- a comprehensive evaluation of the Standard, and in particular the impact on take-up of the Standard by SMEs, and the business and training outcomes, which must include evaluation of additionality; the longer-term change in business culture and attitudes to training generated by the Standard; the process of accreditation – since concerns were expressed in the Policy Prioritisation Events that IiP had become a ‘tick-box’ activity
- the Standard should be assessed alongside findings from the UK Commission’s Skills Utilisation project to consider whether further review needs to be made of the role of the Standard in stimulating the use of skills in the workplace
- if no improvements are apparent over an initial 12-24 month period, then the Standard should be reviewed to assess its ability to deliver a longer-term change in training behaviour, attitudes and practice amongst employers. Further options to consider at this time may include the requirement for large organisations seeking public contracts

to attain the higher level of accreditation and outreach activities to smaller employers to encourage their take up.

4.9 Conclusion

The package of policy options presented are those which the evidence suggests might best serve to increase employer investment of skills on a collective basis. It is apparent that some of the options have a shorter time frame in terms of implementation than others. Subject to funding being made available, the establishment of effective employer networks might encourage more employers to train within 12 months of starting the process of bidding; extended and enforced occupational licensing would also have the effect of raising skill levels within an occupation within a 12 month period. The developments of the Investors in People Standard mean that we need to wait to assess the impact that the new approach will have on training, and further work is required to develop the modified accountancy standard. However, this could achieve longer term change as it could a) underpin any tax break options which might be put forward by networks or come into force through other means; b) more convincingly demonstrate the business benefits of training to other employers and to investors.

As the evidence suggests there is no ‘silver bullet’ to achieving change, so the policy options proposed incorporate both short and long term measures to address the issues. But it is also important to note how outcomes might be optimised through synergies achieved by deploying the proposed policy options in combination with each other and existing policies. For example, the UK Vocational Reform Programme may encourage greater take up of qualifications amongst employers who may subsequently expect employees to hold such improved qualifications and occupational licenses. Equally, the existing training subsidies across the UK nations might be harnessed as a ‘carrot’ to encourage engagement in employer networks. Clearly, raising the demand for skills and training and the use of that training in the workplace is also important as is raising the demand amongst individuals, and in this way, the most effective collective measures also need to be considered within a broader policy framework which is the remit of the UK Commission as a whole.

5 Bibliography

Abdel-Wahab, M., Dainty, A., Ison, S. and Hazlehurst, G. (2008) 'An Exploration of the Relationship between Training Grants and Profitability of UK Construction Companies', in *International Journal of Training and Development*, Vol. 12, No. 3, pp. 188-205.

Anderson, T. and Metcalf, H. (2003) *Modern Apprenticeship Employers: Evaluation Study*. National Institute of Economic and Social Research, London.

Bosworth, D. *Review of Employer Collective Measures: A Conceptual Review from a Public Policy Perspective (2009).* UK Commission for Employment and Skills. Wath-upon-Dearne.

Beaumont, P., Hunter, L. and Sinclair, D. (1996) 'Customer-supplier Relations and the Diffusion of Employee Relations Changes', in *Employee Relations*, Vol. 18, No. 1, pp. 9-19.

Bell, E., Taylor, S. and Hoque, K. (2004) 'Workplace Training and the High Skills Vision: Where does Investors in People fit?' SKOPE Research Paper No. 45. SKOPE, Coventry.

BIBB (2009) *Policies to Encourage Employer Investment in Skills*. BIBB, Bonn.

Billett, S. and Smith, A. (2003) 'Compliance, Engagement and Commitment: Increasing Employer Expenditure in Training', in *Journal of Vocational Education and Training*, Vol. 55, No. 3, pp. 281-300.

--- (2005), 'Enhancing Enterprise Expenditure on VET: Policy Goals and Mechanisms', in *Journal of Vocational Education and Training*, Vol. 57, No. 1, pp. 5-23.

Binks, J. (2006) *Using Public Procurement to Drive Skills and Innovation*: *A Report for the Department of Trade and Industry*. Local Futures Group, London.

Bowman, J. (2005) 'Employers and the Politics of Skill Formation in a Co-ordinated Market Economy: Collective Action and Class Conflict in Norway', in *Politics and Society*, Vol. 33, No. 4, pp. 567-594.

Brown, A., Rhodes, E. and Carter, R. (2004) 'Supporting learning in advanced supply systems in the automotive and aerospace industries', in Rainbird H, Fuller A and Munro A (eds.), *Workplace Learning in Context*. London, Routledge, pp. 166-182.

Brummelkamp, G., Gelderblom, A. and van Elk, K. (eds.) (2005) *Final Report Lifelong Learning: Vol. 1 Main Report, Policy Instruments to Foster Training of the Employed*, EIM Business and Policy Research, Zoetmeer.

Buchanan, J. and Evesson, J. (2004) *Creating Markets or Decent Jobs? Group Training and the Future of Work*. NCVER, Adelaide.

Burge, K., Vasey, A., McQuade, K. and Hardcastle, R. (2002) *The Role and Impact of Group Training Associations.* DfES Research Report No. 384. DfES, Nottingham.

Cabinet Office (2008) *Joint Statement on Access to Skills, Trade Unions and Advice in Government Contracting*. Cabinet Office, London.

--- (2009) *New Opportunities, Fair Chances for the Future*. TSO, Norwich.

Cambridge Policy Consultants (2006) *Evaluation of Modern Apprenticeships and Skillseekers: Final Report*. Scottish Enterprise, Glasgow.

Cambridge Policy Consultants (2008) *Evaluation of the Workforce Development Programme – Year 1 Management and Leadership Draft Report*. Welsh Assembly Government, Cardiff.

Cedefop (2008) *Sectoral Training Funds in Europe.* Cedefop Panorama Series No. 156. Office for Official Publications of the European Communities, Luxembourg.

Cooney, J. and Gospel, H. (2006) 'Interfirm Co-operation in Training: Group Training in the UK and Australia', in *Industrial Relations Journal*, Vol. 39, No. 5, pp. 411-427.

CRG Research (2008) *Evaluation of Skills in the Workplace Final Report*. Welsh Assembly Government, Cardiff.

Croce, G. (2007) 'Supporting Disadvantaged Target Groups by vouchers', in *Motivating, Financing, Profiting: Current Trends in Financing Continuing Vocational Education in Europe*. Frankfurt, September 26th-28th. BIBB, Bonn.

Culpepper, P. (1999) 'Individual Choice, Collective Action, and the Problem of Training Reform: Insights from France and Eastern Germany', in Culpepper P and Finegold D (eds.) *The German Skills Machine: Sustaining Comparative Advantage in a Global Economy*. Berghahn Books, New York, pp. 269-325.

Cunningham, P. (2005) *Monitoring and Analysis of Policies and Public Financing Instruments Conducive to Higher Levels of R&D Investments: The 'Policy Mix' Project, Country Review*: *United Kingdom*. DG for Research, European Commission, Brussels.

Dar, A., Canagarajah, S., and Murphy, P. (2003) *Training Levies: Rationale and Evidence from Evaluations*. World Bank, Washington DC. Available: http://siteresources.worldbank.org/INTLM/Resources/TrainingLevies.pdf. [Accessed 19th October 2009].

Department for Employment and Learning (NI) (2005) *Review of CITB Final Report.* DELNI, Belfast.

Devins, D., Nunn, A. And Stewart, J. (2009) *Review of Employer Collective Measures: Policy Prioritisation*. UK Commission for Employment and Skills, Wath-upon-Dearne

DIUS (2007) *Explanatory Memorandum to the Industrial Training (Film Industry Training Board For England And Wales) Order 2007* (S.I. 2007/3148). Office of Public Sector Information, London.

--- (2008a) *Time to Train: Consultation on a New Right to Request Time to Train for Employees in Great Britain: Summary of Responses to the Consultations Conducted by the Department for Innovation, Universities and Skills; the Welsh Assembly Government (DCELLS) and the Scottish Executive*. DIUS, London.

--- (2008b) *Explanatory Memorandum To The Industrial Training Levy (Construction Industry Training Board) Order 2008* (SI 2008/534). Office of Public Sector Information, London.

Dougherty (1999) 'Financing Training', in *World Employment Report 1998-1999*. ILO, Geneva.

DfEE (2000) *Time Off for Study or Training: Preliminary Evaluation of the Implementation of the Employment Right*. DfEE Research Report No. 221. TSO, Norwich.

Econ (2008) *Adult Training – What We Can Learn from Europe*. Econ, Oslo.

Ekos Consulting (2007) *GO Wales Evaluation of Phase II Final Report*. Higher Education Funding Council for Wales, Cardiff.

Elson-Rogers, S. and Westphalen, S. (2000) 'Funding Continuing Vocational Training in the European Union', in *Journal of Vocational Education and Training*, Vol. 52, No. 4, pp. 687-708.

Falk, M (2006) 'What Drives Business Research and Development (R&D) Intensity Across Organisation for Economic Co-operation and Development (OECD) Countries?', in *Applied Economics*, Vol. 38, No. 5, pp. 533–547.

Frontier Economics (2003) *An Economic Review and Analysis of the Implications of Occupational Licensing*, DfES Research Report No. 467. DfES, Nottingham.

Fuller, A. and Unwin, L. (2003) 'Creating a "Modern Apprenticeship": A Critique of the UK's Multi-Sector, Social Inclusion Approach', in *Journal of Education and Work*, Vol. 16, No. 1, pp. 5-13.

--- (2004) 'Does Apprenticeship Still have Meaning in the UK? The Consequences of Voluntarism and Sectoral Change', in Hayward, G. and James, S. (eds.), *Balancing the Skills Equation*. Policy Press, Bristol, pp. 101-115.

Gasskov, V. (1998) 'Levies, Leave and Collective Agreements Incentives for Enterprises and Individuals to Invest in Training', in *Vocational Training: European Journal*, No. 13, pp. 27-36.

--- (2001) *Government Interventions in Private Financing of Training*. ILO, Geneva.

GHK (2006) *Review of the Skills For Business Network In Scotland*. Scottish Executive, Edinburgh. Available: www.scotland.gov.uk/Resource/Doc/135971/0033695.pdf. [Accessed 19th October 2009].

Gordon, K., and Tchilinguirian, H. (1998) *Marginal Effective Tax Rates On Physical, Human and R & D Capital*. OECD Economics Department Working Paper 199. OECD, Paris.

Görg, H. and Strobl, E. (2005) *Do Government Subsidies Stimulate Training Expenditure? Microeconomic Evidence from Plant Level Data*, IZA Discussion Paper No. 1606. IZA, Bonn.

Gospel, H. and Foreman, J. (2006) 'Interfirm Training Co-ordination in Britain', in *British Journal of Industrial Relations*, Vol. 44, No. 2, pp. 191-214.

Greenhalgh, C. (2002) 'Does an Employer Training Levy Work? The Incidence of and Returns to Adult Vocational Training in France and Britain', in *Fiscal Studies*, Vol. 23, No. 2, pp. 223-263.

Grugulis, I., Bevitt, S. (2002) 'The Impact of Investors in People: a Case Study of a Hospital Trust', in *Human Resource Management Journal*, Vol. 12, No. 3, pp. 44-60.

Haas, J. (2008) 'Occupational Licensing Versus Company-Led Training: The Controversy over the Competence Assurance System for European Aircraft Technicians', in *European Societies*, Vol. 10, No. 4, pp. 597- 617.

Haldenby, A., Rainbow, H., Thraves, L. and Truss, E. (2008) *The Mobile Economy*. Reform, London.

Hegewisch, A. (2005) 'Employers and European Flexible Working Rights: When the Floodgates Were Opened', *Work Life Law Issue Brief*,Fall. UC Hastings Center for Work Life Law, San Francisco, CA.

--- (2009) *Flexible Working Policies: a Comparative Review*. Equality and Human Rights Commission, Manchester.

Herschbach, D. (1993) *Financing Vocational Education and Training in Developing Countries*. ILO Training Discussion Paper No. 111. ILO, Geneva.

Hogarth, T., Bosworth, D., Gambin, L. and Wilson, R. *Review of Employer Collective Measures: Empirical Review (2009)* UK Commission for Employment and Skills. Wath-upon-Dearne

Holzer, H., Block, R.N., Cheatham, M. and Knott, Jack H. (1993) 'Are Training Subsidies for Firms Effective? The Michigan Experience', in *Industrial and Labor Relations Review,* Vol. 46, No. 4, pp. 625-636.

Hooker, H., Neathey, F., Casebourne, J. and Munro, M. (2007) *The Third Work-Life Balance Employee Survey: Main Findings*, Employment Relations Research Series No. 58. DTI, London.

Hoque, K. (2008) ‘The Impact of Investors in People on Employer-Provided Training, the Equality of Training Provision and the “Training Apartheid” Phenomenon’, in *Industrial Relations Journal*, Vol. 39, No. 1, pp. 43-62.

Hoque, K. and Bacon, N. (2006) ‘The Antecedents of Training Activity in British Small and Medium-sized Enterprises’, in *Work Employment & Society*, Vol. 20, No. 3, pp. 531-552.

Hoque, K., Taylor, S. and Bell, E. (2005) ‘Investors in People: Market-led Voluntarism in Vocational Education and Training’, in *British Journal of Industrial Relations*, Vol. 43, No.1, pp. 135-153.

Huggins, R. (1997) ‘Local Business Co-operation and Training Enterprise Councils: The Development of Inter-firm Networks’, in *Regional Studies*, Vol. 32, No. 9, pp. 813-826.

Johansen, L.H. (2002) ‘Transferable Training as a Collective Good’, *European Sociological Review*, 18, pp. 301-314.

Johnson, S., Sawicki, S., Pearson, C., Lindsay, C., McQuaid, R. and Dutton, M. (2009) *Employee Demand for Skills: A Review of Evidence and Policy*. UK Commission for Employment and Skills, Wath-upon-Dearne.

Keep, E., Mayhew, K. and Payne, J. (2006) ‘From Skills Revolution to Productivity Miracle’, in *Oxford Review of Economic Policy,* Vol. 22, No. 4, pp. 539-559.

Kempson, E. and Collard, D. (2005) *Advice on Pensions and Savings for Retirement: Qualitative Research with Financial Intermediaries*. DWP Research Report No. 289. DWP, London.

Klassen, K., Pittman, J.A., and Reed, M.P. (2004) A Cross-National Comparison of R&D Expenditure Decisions: Tax Incentives and Financial Constraints’, in *Contemporary Accounting Research*, Vol. 21, No. 3, pp. 639-80.

Kleiner, M. (2000) ‘Occupational Licensing’, in *Journal of Economic Perspectives*, Vol. 14, No. 4, pp. 189-202.

--- (2006) 'A License for Protection', in *Regulation*, Vol. 29, No. 3, pp. 17-21.

Kleiner, M. and Krueger, A. (2008) *The Prevalence and Effects of Occupational Licensing*. IZA Discussion Paper No. 3675. IZA, Bonn.

Lawton, K. (2009) *Nice Work If You Can Get It: Achieving a Sustainable Solution to Low Pay and In-Work Poverty*. London, IPPR.

Leitch, S. (2006) *Prosperity for All in the Global Economy – World Class Skills. Final Report*. HM Treasury, London.

Leuven, E. and Oosterbeek, H. (2004) 'Evaluating the Effect of Tax Deductions on Training', in *Journal of Labor Economics*, Vol. 22, No. 2, pp. 461-488.

Lister, S., Hadfield, P., Hobbs, D. and Winlow, S. (2001) 'Accounting for Bouncers: Occupational Licensing as a Mechanism for Regulation', in *Criminal Justice*, Vol. 1, No. 4, pp. 363-384.

Lloyd, C. (2005) 'Training Standards as a Policy Option? The Regulation for the Fitness Industry', in *Industrial Relations Journal*, Vol. 36, No. 5, pp. 367-385.

Lloyd, C., Mason, G. and Mayhew, K. (2008) (eds.) *Low Wage Work in the UK*. Russell Sage Foundation, New York.

LSC (2008) *Train to Gain Employer Evaluation: Sweep 1 Research Repor*t. LSC, Sheffield.

McAvenue, K. (2009) 'Skills Utilisation: Scottish Government Update', Presentation to UK Commission for Employment and Skills High Performance Working Stakeholder Group, 26 March. Unpublished presentation.

Nahapiet, J. and Ghoshal, S. (1998) 'Social Capital, Intellectual Capital, and the Organizational Advantage', in *Academy of Management Review*. Vol. 23. No. 2. pp. 242–266.

OECD (2002) *Entrepreneurship and Growth: Tax Issues*. OECD, Paris. Available: www.oecd.org/dataoecd/10/19/2079715.pdf. [Accessed 19th October 2009].

--- (2003a) *Beyond Rhetoric: Adult Learning Policies and Practices*. OECD, Paris. Available: http://browse.oecdbookshop.org/oecd/pdfs/browseit/9103011E.PDF. [Accessed 19th October 2009].

--- (2003b) *Upgrading Workers' Skills and Competencies, OECD Employment Outlook 2003: Towards More and Better Jobs.* OECD, Paris. *Available:* www.oecd.org/dataoecd/62/57/31775229.pdf. [Accessed 19th October 2009].

--- (2004a) *Co-financing Lifelong Learning: Towards a Systematic Approach.* OECD, Paris.

--- (2004b) *Developing Highly Skilled Workers: Human Capital Peer Reviews*. OECD, Paris. Available: www.oecd.org/document/21/0,3343,en_2649_34173_32120213_1_1_1_1,00.htmlfind. [Accessed 19th October 2009].

OECD, LSC and the European Learning Account Network (2003) *Mechanisms for the Co-finance of Lifelong Learning Second International Seminar: Taking Stock of Experience with Co-finance Mechanisms.* OECD, Paris. Available: http://www.oecd.org/dataoecd/51/27/2501342.pdf. [Accessed 19th October 2009].

Ok, W. and Tergeist, P. (2003) *Improving Workers' Skills: Analytical Evidence and the Role of Social Partners*, OECD Social, Employment and Migration Working Paper No. 10. OECD, Paris.

Parker, E. and Rogers, J. (1999) 'Sectoral Training Initiatives in the US', in Culpepper P and Finegold D (eds), *The German Skills Machine*. Oxford, Berghahn Books.

Payne, J. (2008) 'Sector Skills Councils and Employer Engagement: Delivering the "Employer-led" Skills Agenda in England', in *Journal of Education and Work*, Vol. 21, No. 2, pp. 93-113.

Pratten, J. (2007) 'Securing the Doors: Bouncers and the British Licensed Trade', in *International Journal of Contemporary Hospitality Management*, Vol. 19, No. 1.

PRI and IES (2006) *Skills for Business Network: Phase 3 Evaluation Main Report*. SSDA Research Report No. 19. Sector Skills Development Agency, Wath-upon-Dearne. Available: http://www.ukces.org.uk/upload/pdf/060831-r-research-report-19-Exec-Summary_1.pdf. [Accessed 19th October 2009].

Public and Corporate Economic Consultants (PACEC) (2006) *The Leadership and Management Development Programme for SMEs: An Evaluation of the Pathfinders.* DfES Research Report No. 770. DfES, Nottingham.

Quazi, H. and Jacobs, R. (2004) ‘Impact of ISO 9000 Certification on Training and Development Activitie: An Exploratory Study’, in *International Journal of Quality and Reliability Management*, Vol. 21 No. 5, pp. 497-517.

Ram M (2000) ‘Investors in People in Small Firms: Case Study Evidence from the Business Services Sector’, in *Personnel Review*, Vol. 29, No. 1, pp. 69–91.

Rayton B (2007) *The Causes and Consequences of Investors in People Accreditation*. DTI, London.

Rhodes, P. and Graver, A. (2002) *An Evaluation of Employer Learning Networks*, DfES Research Report No. 367. DfES, Nottingham.

Rogers, R., Lewis, C. and Alter, R., (2002) *Regulatory Approaches to Skills Development.* DfES, Sheffield.

Russo, B. (2004) ‘A Cost-Benefit Analysis of R&D Tax Incentives’, in *Canadian Journal of Economics*, Vol. 37, No. 2, pp. 313-335.

Sadler, J. S. (2008) ‘How Can the Pensions Market be Made to Work Better?’, in *Economic Affairs*, Vol. 17, No. 2, pp. 34-38.

Scarbrough, H. (1999) ‘The HR Implications of Supply Chain Relationships’, in *Human Resource Management Journal*, Vol. 10, No. 1, pp. 5-17.

Senker, P. (1995) *Training Levies in Four Countries: Implications for British Industrial Training Policy*. EnTra Research Report No. 105. Engineering Training Authority, London.

Shapiro, C. (1986) ‘Investment, Moral Hazard and Occupational Licensing’, in *Review of Economic Studies*, Vol. 53, No. 5, pp. 843-862.

Skillnets (2008) *The Training Networks Programme Summary Report 2006-2007*. Skillnets, Dublin.

Smith, A. and Billett, S. (2003) ‘Making Employers Pay: How Do They Do it Overseas?’, in *The Sixth Australian VET Research Association Conference, The Changing Face of VET, 9-11 April 2003, Sydney*. Australian Vocational Education and Training Research Association, Crows Nest, New South Wales. Available: http://www98.griffith.edu.au/dspace/bitstream/10072/1730/1/22444.pdf. [Accessed 19th October 2009].

--- (2006) ‘Mechanisms for Enhancing Employer Investment in Training: A Comparative Perspective’, in *Research in Post-Compulsory Education*, Vol. 11, No. 1, pp. 1-18.

Smith, A.J., Boocock, G., Loan-Clarke, J. and Whittaker, J. (2002) ‘IiP and SMEs: Awareness, Benefits and Barriers’, in *Personnel Review*, Vol. 31, No. 1/2, pp. 62–85

Stanfield, C., Sloan, J., Cox, A. and Stone, I. (forthcoming, 2009) *Review of Employer Collective Measures: Final Report*. UK Commission for Employment and Skills, Wath-upon-Dearne

Stanwick, J. (2009) *Employer Engagement with Vocational Education and Training in Australia*, NCVER, Adelaide.

Stevens, M. (2001) ‘Should Firms be Required to Pay for Vocational Training?’, in *The Economic Journal*, Vol. 111, No. 473, pp. 485-505.

Stone, I. and Braidford, P. (2008) *Engaging Small Employers in Continuing Training: An International Review of Policies And Initiatives*. SSDA Research Report No. 30. Sector Skills Development Agency, Wath-upon-Dearne.

Streeck, W. (1989) ‘Skills and the Limits of Neo-liberalism: The Enterprise of the Future as a Place of Learning’, in *Work, Employment and Society*, Vol. 3, No. 1, pp. 89-104.

Sung, J., Raddon, A. and Ashton, D. (2006) *Skills Abroad: A Comparative Assessment of International Policy Approaches to Skills Leading to the Development of Policy Recommendations for the UK*. SSDA Research Report No. 16. Sector Skills Development Agency, Wath-upon-Dearne.

Warda, J. (2005) *Tax Treatment of Business Investments in Intellectual Assets: An International Comparison*. OECD Science, Technology and Industry Working Paper No. 4. OECD, Paris.

Westergaard-Nielsen, N. (2001) *Danish Labour Market Policy: Is it Worth It?*, Working Paper, Centre for Labour Market and Social Research Department of Economics. The Aarhus School of Business, Aarhus, Denmark.

--- (2008) 'Low Wage Work in Denmark' in Westergaard-Nielsen N (ed.) *Low Wage Work in Denmark*. Russell Sage Foundation, New York, pp.34-103.

Wurzburg, G. (1999) *Alternative Approaches to Financing Lifelong Learning: Country Report Denmark*. OECD, Paris.

Ziderman, A. (1989) *Payroll Taxes for Financing Training in Developing Countries*. World Bank, Washington DC.

Appendix 1: Search terms used to identify materials for review

- Training levy/levies
- Tax incentives/tax breaks (+ training/R&D)
- Occupational licensing
- Occupational license
- License to practice
- Time off to train
- Right to time off for training
- Investors in People evaluation
- Individual training rights
- Training vouchers
- (Un)paid educational leave
- (Government) training policy evaluation
- Training subsidy evaluation
- Apprenticeship evaluation
- Human Capital Reporting
- Inter-employer collaboration (+ training)
- (Employer) learning networks
- Group training associations
- Inter-firm networks (+ training)
- Human Capital Reporting
- Public procurement policy

Appendix 2: Review Proforma

UK COMMISSION Collective Measures Policy Review Proforma

Article/report reference number:

Study title:

Author(s):

Reference:

Year of publication:

1st reviewer: Date of 1st review:

2nd reviewer: Date of 2nd review:

Which type of policy is the subject of the piece?

(tick more than one if necessary)

1. License to practice ☐
2. Levies ☐
3. Rights to time off for training ☐
4. Tax breaks ☐
5. Subsidised training ☐
6. Any other policy, eg supply chain requirements/group training arrangements (please specify) ☐

c. Is it sector specific?

General ☐

Specific sector, please specify sector(s) ☐

Agriculture ☐

Hunting and forestry ☐

Fishing, Mining and quarrying ☐

Manufacturing ☐

Electricity, gas and water supply ☐

Construction ☐

Wholesale and retail trade and repair ☐

Hotels and restaurants ☐

Transport, storage and communication ☐

- Financial intermediation ☐
- Real estate, renting ☐
- Public admin and defence ☐
- Education ☐
- Health and social work ☐
- Other community, social and personal services ☐
- SMEs ☐

d. Which nation(s) does the policy relate to?

  a. Whole UK ☐
  b. England only ☐
  c. Scotland only ☐
  d. N Ireland only ☐
  e. Wales only ☐
  f. Overseas (state nation(s))

Evidence base

e. Is a description given of the evidence on which the research is based? (eg direct measurements, survey data, interview and focus group findings, case-studies, diaries, accident reports, document reviews, press citations etc.). Opinion pieces should be excluded.

  Yes ☐ No ☐ Not clear ☐ Can't tell ☐

  If Yes, please provide details:

f. Does the research indicate where the sample came from (eg whole population, randomised, systematic, snowballing, other non-random and how was the sample achieved? (NB. Size and methods used are not in themselves grounds for exclusion, but they must be reasonably apparent for the research to gain inclusion in the review).

  Yes ☐ No ☐ Not clear ☐ Can't tell ☐

  If yes, please provide details:

Inclusion in review

The study must pass ALL of the Evaluation Criteria (then complete the Research Findings Form).

g. Is study to be included in the in-depth review?

  Yes ☐ No ☐ Not clear ☐ Can't tell ☐

  If answer is no, or not clear, please supply any additional information that will help to explain why the study has been rejected:

Review Findings

Study aims and objectives

h. Please provide an overview of the study aims and objectives

i. Were these met?

Yes ☐ Partly ☐ No ☐ Not clear ☐ Can't tell ☐

If 'partly' or 'no', please provide brief details of what the study did achieve:

Methods

j. What data is the research based on? In answering consider a)method(s) of data collection (eg secondary analysis of statistics, experiment, questionnaire, interviews etc.); b) sample size or numbers involved; c) response rates/numbers of achieved interviews; d) the time period and/or waves of data collection, eg whether the data is cross-sectional, longitudinal etc.

k. Are any problems or weaknesses in the data considered when interpreting the results and drawing conclusions, including the influence of potentially intervening variables?

Yes ☐ No ☐ Not clear ☐ Can't tell ☐

If yes, please provide brief details:

Analysis

l. What form of analysis of the data is used? (eg types of stats for quantitative and types of content analysis, including coding details for qualitative data).

m. What is the aim or purpose of the policy being discussed/evaluated?

n. When was it introduced (and discontinued if applicable)?

o. What does the piece tell us about the impact of the policy on employer investment in training? Please specify:

a) type of training affected: general/specific

b) measures used to gauge nature and extent of investment. These may include indicators such as participation and/or completion rates for training/qualifications, wage increases, management time in organising training or employee release time from work, backfill costs etc.

p. Does the piece identify any critical success factors which influenced the policy's success?

q. Did the policy overcome any failures/barriers to investment by firms? (tick and explain).

   a. Spillover effects ☐

   b. Transaction costs ☐

   c. Poaching ☐

   d. Bounded rationality ☐

   e. Information asymmetry (on benefits and choice of suppliers) ☐

   f. Management education ☐

   g. Short-termism ☐

   h. Economies of scale ☐

   i. Capital market imperfections ☐

   j. Releasing staff to train ☐

   k. Access to suitable training provision ☐

r. Do the authors make any recommendations?

   Yes ☐ No ☐

   If yes, please provide brief details of these recommendations:

s. Are there any knowledge gaps - either specified in the piece or noted by the reviewer?

   Yes ☐ No ☐

   If yes, please provide brief details:

t. Are there any weaknesses in the research techniques or evaluation that should be avoided or tackled in future research on this topic?

List of previous publications

Executive summaries and full versions of all these reports are available from www.ukces.org.uk

Evidence Report 1

Skills for the Workplace: Employer Perspectives

Evidence Report 2

Working Futures 2007-2017

Evidence Report 3

Employee Demand for Skills: A Review of Evidence & Policy

Evidence Report 4

High Performance Working: A Synthesis of Key Literature

Evidence Report 5

High Performance Working: Developing a Survey Tool

Evidence Report 6

Review of Employer Collective Measures: A Conceptual Review from a Public Policy Perspective

Evidence Report 7

Review of Employer Collective Measures: Empirical Review

Evidence Reports present detailed findings of the research and policy analysis generated by the Research and Policy Directorate of the UK Commission for Employment and Skills. The Reports contribute to the accumulation of knowledge and intelligence on a range of skills and employment issues through the publication of reviews and synthesis of existing evidence or through new, primary research. The Evidence Reports are accompanied by Executive Summaries, presenting the key findings of the main Evidence Report. These and other outputs in the Research and Policy Analysis series can be accessed on the UK Commission's website at **www.ukces.org.uk**

Produced by the Institute for Employment Studies for the UK Commission for Employment and Skills.

To obtain copies of this document, contact:

UKCES
3 Callflex Business Park
Golden Smithies Lane
Wath-upon-Dearne
South Yorkshire
S63 7ER
T +44 (0)1709 774 800
F +44 (0)1709 774 801

UKCES
28-30 Grosvenor Gardens
London
SW1W OTT
T +44 (0)207 881 8900
F +44 (0)207 259 1290

Email: communications@ukces.org.uk
www.ukces.org.uk

ISBN: 978-1-906597-21-4