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UPGRADING WORKFORCE SKILLS IN SMALL BUSINESSES: REVIEWING INTERNATIONAL POLICY AND EXPERIENCE

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1. ISSUES

1.1 Small firms and training

The workplace is where most adults learn and with businesses of 25 or fewer workers typically accounting for well over 90% of all employers (and perhaps two-thirds of employment), the extent and quality of training undertaken by small firms is thus an important determinant of training levels in the economy overall (EIM/SEOR, 2005). Indeed, in smaller countries, where few organizations are above the medium size, this is even more the case. From the economy's point of view, the issue is of considerable importance. Smaller firms been a much more dynamic element than large in most economies over recent decades and those that train their workers are significantly more likely to grow (and less likely to close) than those that do not (Collier *et al*., 2007). The increasing pace of technological change makes skills become obsolete more quickly, while older workers have to remain in the labour market longer for reasons to do with demographic change and pensions requirements. At the same time, in advanced economies, the role taken by large firms in training has changed, and their traditional contribution to the pool of trained labour within local areas and sectors has diminished, leading to even greater emphasis upon all firms to train their workers. The context of government responses in terms of influencing employer activity with respect to workforce training has been affected by public financial stringency arising out of the financial crisis. This inevitably leads to increased focus upon the costs, efficiency and effectiveness of interventions.

Given this context, it is a matter of policy concern, therefore, that, on various measures of the activity, the smaller the firm the less likely it is to be engaged in training, and a sizeable proportion of small firms undertake no training at all. The recent LEED programme studies, conducted in regions of Belgium, Canada, New Zealand, UK and Turkey, found that around a third of firms have not participated in training in the past year – a figure that largely reflects lack of engagement by small firms. The message is similar throughout the OECD: training activities are 50% lower in SMEs than larger firms, and small firms have the lowest participation in VET across all countries. Although the level varies hugely between, for example, Greece, Poland and Italy on the one hand, with below 30% engagement in any type of training, to higher performers (the Scandinavian countries and UK) all above 70% (Hoeckel, 2008), participation is consistently lower among small firms. Just one-third of Australian small firms provide structured training for employees compared with 70% and 98% respectively for medium and large enterprises (ABS, 2003). Canadian establishments of 500 or more employees have a participation rate (formal training) of 37% - double that of firms with fewer than 20 workers (CCL, 2007).

In a similar vein, a 2005 EU study concluded that CVT was the ‘weakest link’ in the lifelong learning chain: enterprises with 10-19 employees investing only 1.5% of labour costs, compared to the average of 2.3%. In Belgium, firms with 50 or fewer staff spend less than one-sixth the proportion of their total personnel costs on vocational and educational training, compared to large employers (250+) (de Vos, 2011). Smaller employers reveal a preference for informal training provided in-house, primarily because it can be tailored to their needs and conducted at suitable times. However, while including both on- and off-the-job training narrows the gap somewhat, a gap still remains: UK employers with 100+ workers are still nearly twice as likely to train compared to those with fewer than five employees (Johnson, 2002).

The situation is somewhat more pronounced with respect to education as opposed to vocational training. Just one-tenth of firms with up to 50 employees participate in formal education, compared to 50% for those with 250 and above (de Vos, 2011). In a similar vein, and confirming the point about small employers’ preference for informal training, training for certificated qualifications is given low importance, typically offering little benefit to the employer (e.g. Dawe & Nguyen, 2007).

Small firms often disregard the role of skills in the overall business planning process. Only 30% of small employers – mainly the more innovative ones - measure the effects of training, including its contribution to financial performance, or view qualifications favourably. Fully one-half of small firms perceive no need for further training of their workforce. Both formality of training, and proportion of education, as opposed to vocational training, rises with business size, as does the likelihood that the firm has undertaken both formal and informal training. Smaller firms are found to be less likely to have a training plan or budget, and HR strategy is typically not linked to the overall business strategy (Kitching & Blackburn, 2002). They also tend to train a smaller proportion of the workforce, such that, in Canada for example, the likelihood of an employee participating in employer-sponsored formal training (with probabilities adjusted for sector, occupation, age, ownership etc.) is twice as high in a firm employing over 100 people, than one employing fewer (Lin & Tremblay, 2003). The concentration of training that is undertaken by such employers upon the better educated/skilled workers adds a social dimension to the problem.

Of course, training engagement is not solely about size. Linked in part to sectoral influences, Canadian research shows that small businesses that pursue innovation and growth strategy are closer in their training behaviour to medium/large firms than to other small firms (Rabemananjara & Parsley, 2005). This finding underscores the importance of issues to do with firm ambition, in terms of innovation and high value added strategies, which is observed to be dependent upon investments in skills.

1.2 Objectives of report

Extant research on engaging employers in training is concerned with the general situation, rather than specifically smaller employers. Several works address the issue from the perspective of *SMEs* (e.g. Pukkinen *et al*., 2001; SEM/SOER, 2005), but this size category includes businesses that can call upon considerable resources to support their training activity and their position is often effectively little different from that of larger firms. Most reviews note the SME or small firm dimension with respect to specific provisions in policy, differential participation rates by size, etc. (e.g. Müller & Behringer, 2012). This report focuses specifically upon firms in the lower SME size brackets, given (1) the widely observed pattern whereby training investment is inversely related to firm size, (2) the tendency for small firms in different countries to share particular characteristics with respect to training capacity etc., and (3) the potential economic benefits of finding ways of engaging such firms more fully in the process.

The report identifies the main barriers to training faced by small firms, and especially employer-provided continuing vocational training (CVT), identifying different policy approaches used to influence training activity, and their relevance and impact with particular reference to small firms. Reviewing international experience, it discusses interventions that might raise training investment through addressing the specific circumstances and needs of small firms. Although it acknowledges the demand and supply side aspects of the problem – it recognises the importance of interaction between the two in terms of identifying policy solutions.

The report will also focus more upon policies focused upon on-going or continuing rather than initial vocational training; and at the training of employees, rather than unemployed (or unemployment threatened) individuals. Management training is specifically dealt with elsewhere in workshop, and thus, while it is identified as a problem in the 'barriers' section - because it affects decisions on training within the firms *per se* - it is not discussed here in terms of solutions. The report is concerned with firms that have fewer than 100 employees, and especially those with below 50 employees (which is a reasonable proxy threshold size with respect to firms with little or any in-house HR functions), including micro firms (with fewer than 10 employees). It does not aim to be comprehensive in its coverage of policy tools. Instead, it identifies the main types of approaches as they relate to small firms in (mainly) OECD countries, considers them both in their wider context, and makes observations regarding the way they operate and their potential usefulness. Key examples are drawn from different countries. It should note that some of the policy tools described were time limited in that they were introduced as pilots, or have subsequently been dropped for whatever reasons; others will have been modified in their provisions over time. The reader should not assume that the tools discussed are still in operation as described.

This study draws substantially upon a substantial body of recent work in which the author has been involved, reviewing and assessing international experience (Stone & Braidford, 2008; Stanfield *et al.,* 2009; Stone 2011). These sources both draw upon and stand alongside a series of other reviews of policy that embody observations relating to their design and impact with respect to small firms (e.g. EIM/SOER, 2005; Johanson, 2009; Müller & Behringer, 2012).

The report draws together experience from different countries. Section 1 concludes by identifying the barriers confronting small firms seeking to train employees. The focus then switches to potential policy tools and the way they relate to the obstacles. More specifically, Section 2 addresses the following central questions:

- What are the main challenges and obstacles to small employer investment in skills in the workplace?

- How can national and local policies address such barriers?
- Given that informal learning in the workplace plays a prominent part in small firm training activities, how can this be facilitated by national and local policies?
- What policies have been found to be effective with respect to engaging small firms in CVT?

There have been many interventions designed to incentivise employers and employees, applied within different national frameworks or systems. This raises the methodological issue of learning from policy tools that have been applied in the context of different systems – both in terms of the overarching political and institutional approach in the various countries (e.g. laissez-faire versus regulatory, and in the various ways in which interaction among policy tools influences decision-makers. From a policy formulation perspective, therefore, experience of particular policy levers in a country or countries is discussed in Section 3, bearing in mind the following issues:

- Different policy traditions are likely to make certain policy options more effective than others in influencing training behaviour of small employers.
- Given interaction between policy levers, how selected interventions might be combined for best overall effect in the national context.
- The potential for developing demand for training through linking skill formation in smaller firms with enhancement of ambition regarding product or service quality.
- The need to assess potential policy levers in light of the likely medium-term context of public finance constraints.

1.3 Barriers to training

Having described the broad picture with regard to training engagement, this section considers the processes contributing to this situation. It is widely accepted that many SMEs, and small firms in general, face special challenges in relation to training, as confirmed by various reports on the subject, exploring the situation from both a theoretical and empirical basis (e.g. Kitching & Blackburn, 2002; Observatory of European SMEs, 2003; Lin & Tremblay, 2003; Ipsos/MORI, 2006; CCL, 2007, Stone & Braidford, 2008; Boswell, 2009; Stanfield *et al*., 2009). In empirical surveys, small businesses consistently identify more barriers to training than larger firms (Shury *et al*., 2008). This suggests that the obstacles are amplified with regard to small firms – as summed up by Johnson & Devins (2008): such firms have 'less time to devote to training, limited resources to provide it, and much less understanding of what the formal VET system might deliver to their workplace needs'.

The main categories of obstacle to small firm training to emerge from such work are summarised below. These reflect various aspects of market failure - dimensions of the labour market's operation that can cause it to produce a sub-optimal outcome. Most seriously, from both employers' and national economic perspectives, these processes result in an under-supply of skills needed to produce higher quality goods and/or achieve higher competitiveness and productivity.

Information deficiencies. Small employers commonly lack of information on what training is available to them, as well as evidence of the benefits of training to set against perceived and real barriers to training activity. Such firms are especially prone to report that they do not know what is available to them (Shury *et al*., 2008). In some countries, especially, this reflects a supply side issue – the sheer complexity of the VET system. Smaller firms without special HR expertise are more affected by this problem (e.g. Colly, 2005). It is also the case that assessing the business benefits is often not straightforward, given the role of complementary factors, different costs, wage effects etc. Although evidence shows that benefits can be expected, they vary between firms – and there is uncertainty also with regard to the relevance and value of particular qualifications, especially at lower level (Hogarth *et al*., 2009).

Short-termism and risk aversion. Small firms tend to be more oriented to immediate goals, notably survival, and operate to shorter horizons than larger ones; thus higher (notional) discount rates apply in any calculation of the benefits of training investment. Opportunity costs are higher for formal training and informal methods allow firms to meet immediate business imperatives.

Training supply. Small firms often report difficulty in accessing training tailored to their needs in terms of type and quality, scheduling, location etc. Providers can be reluctant to supply to small businesses, given costs of organising and customising the training, the small numbers of trainees, and employer reticence with respect to paying the full cost. Training is thus often more costly to small compared with larger employers. Lack of access to economies of scale in training raise training costs for smaller employers, who, compared to large firms, pay typically three times more per member of staff undergoing formal training. There is a further aspect to cost, affecting small firms especially: even where they perceive training to be of value, releasing employees for (especially formal) training is more difficult for smaller employers. Lost working time is an especially important constraint with respect to owner-manager training.

Management capability. From surveys, a principal reason for small firms not providing training is the managers' belief that the workforce is already proficient (e.g. IFF, 2007). This raises issues to do management capability to identify skill requirements - not only in relation to existing training gaps, but 'latent' skills gaps. Owner-managers consider that undergoing training themselves will not enhance their ability to operate the firm, although fear of exposing deficiencies in their knowledge is sometimes behind their reluctance to participate. A further dimension to management failure, arising out of inadequate skills/qualifications, is the limitation this places upon an employer's ability to develop higher value-added strategies based on staff skill formation; firms with lower value-added strategies typically fail to recognise the importance of a skills or HR plan to support the current and projected product market position (Hogarth *et al*., 2009).

Externalities. Benefits to workforce skilling are not confined to the small employer investing in training because of 'spillovers'; part of the gains can go to individual employees (higher wages), the state (taxation) and other employers ('free riders' who 'poach' workers from other firms by offering higher wages, rather than train their own). Such concerns reduce the employer's incentive to train and induce patterns of training designed to minimise such losses. Larger firms often pay higher wage rates, so formal qualifications are perceived by many small employers as more valuable to *employees* than the business itself. Thus, it is frequently argued, many provide only in-house firm-specific training, which produces skills that are less transferable in the open market.

Capital market imperfections. The relatively high financial costs of training for small firms are exacerbated by the fact that the direct collateral to secure borrowing to invest in training – the individual employee – is mobile between firms. A further related problem is lack of information available to financial markets themselves about the costs and benefits of training. We can take this further in recognising the failure of current accounting rules to allow proper measurement of firm investment in training, leading to such expenditures being widely regarded as a 'cost' i.e. something that reduces rather than enhances cash flow (Bosworth, 2009).

Low skill equilibrium. It is widely recognised that suppressed demand for training among small employers arises because of a further 'system' failure – frequently referred to as the 'low skilled equilibrium', and occurring more readily in some national and regional contexts than others. This ultimately derives from product market strategies emphasising low specification products or services, produced by low skilled workers. Market demand, production strategies and skill levels become locked into a path dependent, self-reinforcing cycle. Limited employer demand for skills lowers uptake of learning opportunities; the impact upon skills supply, in turn, discourages employers from choosing production methods that emphasise skills. Surveys show that the weakest training performances tend to occur among small employers in such contexts, and where such firms are dominant, this can translate to sub-optimal performance of whole sectors.

Institutional frameworks vary substantially among nations; evidence suggests that those systems in place in countries like Scandinavia, the Netherlands, Germany and Denmark establish a relatively ***'high skill equilibrium'***, where firm's product market strategies, labour bargaining arrangements and a strong VET infrastructure together create a virtuous circle (Hogarth *et al*., 2009; Stone, 2010). Small employers with more expansive strategies – based on innovation, ambition for growth and higher value production - engage more intensively in training, in spite of the constraints. Providing the incentives and conditions that encourage firms on this path can be expected to raise the optimum level of demand for skills among employers so as to meet the needs of more sophisticated systems of production. There is dispute over direction of causation, between the 'universalist' approach (e.g. Huselid *et al*., 1997) where investment in training gives rise to better organisational performance, and the 'contingency' view (Youndt *et al*., 1996), which holds that HR strategies are likely to be more successful in the context of a relatively high value-added strategy. Certainly, there is clear evidence that staff development/training is an integral element within High Performance Working practices (Hogarth *et al*., 2009; Stone, 2011).

Such approaches depart from narrow and static approaches focused upon individual firms, rational individualism etc., in favour of understanding training decisions in their wider context: e.g. Bishop (2006), who views learning is a social construction and stresses the role of networks; Keep (2007), who favours public support for collective approaches (rather than for individual employers), and building capacity, rather than focusing upon shorter-term 'training throughput' goals; Evans *et al.* (2006), who stress the value of workplaces that offer 'rich or expansive learning environments'; and Kearns (2002), arguing (in an Australian context) the need for an integrated and holistic approach to learning, skills and enterprise in small business that brings together business-specific training, life-long learning and personal development in order to foster innovation, enterprise and continuous improvement in small businesses.

2. POLICIES

2.1 Key areas for action

Drawing upon, in particular, Dawe & Nguyen (2007), who distilled findings from a large body of research relating to small firm needs in relation to training activity, key areas for action can be identified. While the following summary points relate largely to demand aspects of the problem, some aspects call for supply side adjustments.

1. Present 'the business case' to small firms, as part of process of changing the prevailing perceptions/culture, including the desirability of skills-intensive production and workplace development strategies (e.g. high performance work systems, workplace innovation systems etc.).

2. Organise effective sectoral/local outreach mechanisms for directly dealing with small business owner-managers, providing them with information and support (including HR services) and identifying on-going training appropriate to their *evolving* business needs.

3. Ensure there is flexible provision where training information, content *and* delivery are matched more closely to the needs of the small business (including management training); appropriately linked to recognised to wider standards and frameworks.

4. Integrate formal training and learning with informal learning processes in the workplace, accommodating training around work demands and minimising staff time spent off-site.

5. Ensure that facilitators and trainers have the appropriate networks, motivation and experience to enable them to be trusted and respected by all business participants.

6. Provide financial incentives for training, especially by measures that reduce training costs e.g. via public subsidies and tax concessions, targeted on small firms and existing employees.

7. Collaboration between small businesses through pooling resources and networking (also providing opportunities for small businesses to share skills, knowledge and experience with other business people).

8. Develop training partnerships between larger firms and small businesses, utilising large firm resources (e.g. training facilities) and mutual cluster advantages.

2.2. International review of intervention measures

This section draws upon and updates the international review of measures undertaken in Stone and Braidford (2008). In particular, it takes account of extensive international policy and empirical reviews conducted as part of the UKCES Employer Collective Measures programme (Cox et al., 2009; Hogarth et al., 2009). It should be noted at the outset of the discussion that evaluation of initiatives is generally lacking, and rigorous evaluation very rare. To facilitate integration, the relevant item (or items) in the list of areas for action (section 2.1) are noted next to each identified policy area.

The measures described and analysed in this section have been deployed in different institutional, economic and cultural contexts. Countries thus differ in terms of the degree, focus (e.g. initial or continuing training) and form (e.g. direct/indirect) of spending in relation to vocational and educational training activity. A broad characterisation of ‘systems’ is: (1) Laissez-faire or liberal system (where there is no legal obligation for employers to train employees; qualification standards set down, but no compulsion – e.g. UK, USA, Canada, Sweden); (2) High employer commitment (employers voluntarily commit themselves to skills development and training – e.g. Germany, Switzerland, Japan); (3) Bi-partite or neo-cooperative model (actions taken under collective agreements, usually on a sectoral basis; state role limited to putting legal stamp on consensus – e.g. Denmark, Belgium, The Netherlands); and (4) Regulation or interventionist model (government is a leading actor and assumes a role in system design; imposing conditions, including compulsory levy – e.g. France, South Korea, Ireland) (Smith & Billett, 2005; Hoeckel, 2008; Müller & Behringer, 2012). Of course, this classification is only of use as shorthand; a more subtle appreciation of national systems would recognise that, while there is no legal obligation on employers to train their workers in the Netherlands (system 1), its operational system corresponds to the collective model (system 3); similarly in Denmark, there is compulsory financing of training by employers, alongside funding via voluntary collective agreements (Smith & Billett, 2005)

Individual mechanisms

- Changing employer outlook [area for action 1]

Making 'the business case for training' – based on empirical evidence on the links between skills and business performance - is widely recognised as a potential means of developing interest in skills formation among small firms. There are numerous possibilities for preparing and publicising such information, through public and stakeholder organizations, in ways that target small firms. Initiatives of this kind include competitions and award systems that focus upon enterprises representing good practice, and giving them suitable publicity within the business community. An example is a scheme in Manitoba, **Canada,** focused around the award of *Employer of Choice* certificates. Oriented exclusively towards small employers, those selected for the programme must expose their enterprise to scrutiny and (potentially) radical reform of HR structures, processes and strategies, and implement (with funded specialist guidance) a culture of learning (Brisbois & Saunders, 2005). Outlook change is claimed by the *Minho Industrial Association of Braga*, **Portugal**, which attempts to embed specialist management functions in enterprises through indirectly communicating actions to the owner-manager. A supervisor attending a training event is regarded as a change agent, who, appropriately supported, can instigate change by influencing the owner with respect to training activity more generally in the workforce. In **England** and **Wales**, Skills 'pledges', designed to exert moral pressure upon employers to train lower skilled employees, have been tried in recent years. With small firms very much in mind, the tripartite initiative Workplace Productivity Agenda in **New Zealand** has developed a website to deliver information that embodies the business case for training (Stone, 2011).

At a more ambitious level, various countries, notably including those in **Scandinavia**, have piloted approaches that encourage training as part of a broader attempt to improve competitiveness through strengthening workplaces and improving work experience. They seek to change the outlook of small firms generally towards a more holistic appreciation of the performance advantages of organisational development, and the integral place of training within this process. The approaches to training combine a solid business case (such as raising productivity) with elements of promoting a better work-life balance for employees, as part of an attempt to motivate and develop human capital (Stone & Braidford, 2008).

The *New Workplace Development Programme* provides SMEs in **Finland** with funding for workplace analysis, project planning, learning networks, and dissemination of lessons. Training is integral to this, but is placed in its organisational context, and both the quality and equality of access to learning opportunities are emphasised. The NWDP sits alongside other programmes that help integrate skills acquisition and improvements in workforce wellbeing and productivity. At a yet broader scale, the activities are framed by Finland's national innovation strategy, which has a particular emphasis upon SMEs (Alasoini, 2003; Arnkil, 2004; Hytti *et al.,* 2004; Stone & Braidford, 2008).

Similar policy approaches oriented towards SMEs, both with respect to workplace development and innovation, are embodied in **Norway**'s *Competence Reform* (Payne & Keep, 2003; Payne, 2005). This seeks to move beyond simply increasing the supply of skills, towards *deploying* them for purposes of innovation and value creation. Hence, there is much interest in linking human capital/knowledge assets to future earnings prospects and business value, and in approaching the quality of working life as a *driver* of training. As in Finland, there is emphasis upon quality of workplace training and more equal access to it.

Another aspect of organisational improvement, especially prominent within the Scandinavian countries, is the involvement of the workforce in decisions. This exposes employers to wider workplace perspectives, and is thus a potentially important influence over decisions on training. In **Finland**, statutory measures have long required firms to prepare an annual training plan and submit it to the joint enterprise committee (although this tends to exclude firms with fewer than 30 employees, which do not have to set up a works council) (Stone & Braidford, 2008). The training plan is central to the system in **France**; employers are required to identify training measures and consult with works councils or, for the smallest firms, employee representatives (Jallade *et al*., 2004). In these (and other) countries, widening the range of stakeholders involved in the process of decision taking on training is found to be an important device for engaging employers. The final decision on training action is often left effectively with the employer, rather than the employee, but that situation is likely to operate in favour of the former's engagement in training (Stone & Braidford, 2008).

- Information and guidance [areas for action 2, 5, 7]

Lack of capacity for human resource development within smaller firms inhibits their engagement in training through the restricting their knowledge regarding availability, eligibility and suitability of training relative to their situation. Most countries have given attention to the quality and mode of delivery of information about education and training opportunities. While the workplace is generally an appropriate place for delivering guidance to workers pertaining to training opportunities, this especially applies in relation to the employees of small firms, who tend to be less routinely exposed to such information compared with their counterparts in larger companies. This can be addressed through regular interactions with agents or brokers, or by actually establishing/buying in HR management capacity. In the **United Kingdom**, for example, the work done by Union Learning Reps naturally tends to apply more to larger workplaces than small ones.

The Netherlands has operated a scheme systematically to plan training routes for individuals, via 'personal development plans' (OECD 2005), while **New Zealand** has a sector-based system of this kind, working through Industry Training Officers (TEC, 2005). The 1% national training levy in **South Africa**, which embraces many micro firms, operates to encourage the development of such capacity. Part of the levy can only be re-claimed by enterprises if they have appointed a Skills Development Facilitator - either an externally-appointed consultant, or someone assigned the duty internally - to help enterprises develop an annual skills plan and to inform employers of developments relating to accreditation, available courses etc. (Sung *et al*., 2006).

Sector Councils in **Canada** recognise the need for outreach activities to small employers, to deliver HR-related information and advice to small businesses. Training advisors bring 'training conversations' to workplaces in small firm dominated sectors, as part of an extensive programme of visits to learn about employers' business and skills requirements, establish on-going relationships, and communicate how to access web-based and other services. An average of 6-7 visits is commonly needed, making this a resource-intensive approach (Stone & Braidford, 2008).

- Forms of training [areas for action 3, 4]

Training needs of small firms differ from those of larger firms, making design of training and qualifications an important factor in their engagement. Such employers tend view more positively training that is targeted on their skill needs and specific working environments. Flexibility in delivery systems is important - specifically the need for unit-based, 'bite-sized' qualifications compatible with the workplace. This, in turn, has implications for qualification and credit frameworks, in terms of accommodating packaged 'chunks' of learning (NSF, 2007). Understandably, success is harder to achieve where training is supply driven and lacking in appropriate complementary supportive measures (Müller & Behringer, 2012).

In Belgium, Flanders and Wallonia regional governments operate similar training vouchers schemes, targeted upon small (and especially micro) firms, which accommodates these needs – the criteria for use being permissive rather than restrictive. Employers purchase online €30 vouchers (one hour's training) for €15 (matched by public funds up to a maximum per individual and firm) which can be used by employers to purchase training from accredited providers (Müller & Behringer, 2012). While in Flanders, the annual maximum of 200 vouchers has tended to focus the scheme upon SMEs, in Wallonia eligibility was targeted upon the self-employed and firms with fewer than 50 employees, Both company-specific and general training are eligible, encouraging a wide range of training. Indeed, the scheme has encouraged providers to design courses specifically for small businesses. Indeed, firms with under 10 employees have been the main users of the scheme (OECD, 2004). The scheme has been popular for being non-bureaucratic and simple to use, and having the virtue of low administrative costs and good quality courses. On the other side, deadweight has been identified as an issue, as has the tendency for much of the resulting training to be job/company-specific rather than general in nature, and also for white-collar staff rather than the less skilled (Guridi & Amondarain, 2003; EIM/SEOR, 2005; Stone & Braidford, 2008).

The *Lifelong Learning Project*, piloted in among SMEs in Gronsjö, **Sweden**, integrates workforce skills-upgrading within a continuous learning framework. This is held to appeal especially to smaller employers because of its primary focus upon meeting their skill development needs rather than achieving formal qualifications. The qualifications framework in **New Zealand** appears successfully to facilitate the bespoke design of qualifications, allowing mixing and matching of course units tailored towards small businesses or sector-specific knowledge. Industry qualifications can consist of both generic and specific units – e.g. the commercial road transport certificate includes maintaining personal presentation and communication skills alongside credits for knowledge of traffic law and executing vehicle manoeuvres. Small firms have welcomed the framework for flexibility of content, emphasis on small units of assessment, and relevance to different sectors (Stone & Braidford, 2008).

- Tax incentives [area for action 6]

The use of this particular instrument has recently been explored in detail by Müller & Behringer (2012), who point out that most OECD countries routinely permit firms to offset 100% of training costs against annual profits in their tax returns.[1] The principal focus here, therefore, is upon systems that allow deductions greater than the costs incurred, and which can be targeted upon smaller firms. Attractions of such schemes are that they are easy to apply, inexpensive to administer, allow employers to decide who will be trained (and how), and tend to affect under-investment in training by shifting the incentive balance towards training rather than recruiting skills externally.

[1] An exception is **Ireland,** where it relates to a 3 year period (Cox *et al.,* 2009).

The Netherlands experimented with an extra deduction from taxable profits on training expenditures (totalling 120%), plus an *additional* deduction (20%) for firms spending less than a specified amount. In targeting firms with low absolute levels of training expenditure, the incentive both automatically targeted small firms and minimised deadweight losses. **Malta** has developed arguably the most elaborate and highly targeted tax-related scheme, where eligibility for deduction is focused on training of full-time employees in particular sectors. The rate of reimbursement is higher for small than large enterprises, and respectively higher still if the training is generic rather than workplace-specific. **France**, too, has long operated a training tax credit for those SMEs that, year after year, invest in vocational training beyond the statutory obligation, with a higher credit for firms with fewer than 50 employees. Through being related to the previous year's training, the device is an incentive for both *increasing* training expenditure *and* restricting deadweight expenditure (OECD, 2005; Stone & Braidford, 2008).

The *Vlamivorm* project[2] in **Belgium** (Flanders region) offered a reduction of property tax equivalent to spending on worker training. It achieved good results without undue deadweight cost through targeting sectors with a poor training record, and firms that had previously been expanding their training. It achieved a very high participation of micro firms (73% with fewer than 10 employees, and a further 11% with 10-100 employees) although a disproportionate share of the budget went to larger firms. However, the resulting average number of training hours (43) was 40% higher for the smaller firms, who made more use of internally organised informal training that was eligible for the reduction (EIM/SEOR, 2005; Müller & Behringer, 2012). The scheme was terminated because of administrative problems, which in no way invalidates the instructive value of an innovative scheme with effectively engaged small and micro firms (Stone & Braidford, 2008).

Although targeting – e.g. through differential rates based on firm size - and allowing for previous training performance - can lower deadweight expenditure, it usually also leads to higher administration costs for tax authorities and employers. The burden of 'form-filling', together with various other barriers, may explain why substantial fiscal incentives might be needed to activate small employers. Indeed, this is suggested by **South Korea**'s experience in the mid-1990s, where training investment was little affected by tax incentives, even though re-imbursement levels were *three times* the actual outlay on training fees (and three times higher than for larger firms) (Lee, 2006). Larger firms were more responsive than small ones, and benefited more from the scheme, causing a change in policy orientation towards network-based solutions (Ra, 2005).

Through careful design, tax arrangements can specifically incentivise small employers to invest in training *and* reduce the level of deadweight costs (Stone & Braidford, 2008). However, examining policy experience has led some observers (Leuven & Oosterbeek, 2004; Sung *et al.*, 2006) to argue that such tools have relatively weak effects in their own, and that training investment increases in, e.g. **the Netherlands**, were also influenced by the overall system of mutually reinforcing policies - including, importantly, the accreditation of in-house training, and involvement in the Dutch competency framework. Müller & Behringer (2012) argue that schemes targeted upon SMEs can often favour the larger of firms eligible to participate. Furthermore, it has also been suggested that tax incentives designed to raise incremental investments can work to the disadvantage of steady investors over time, even if deadweight effects are minimised (Baghana & Mohnen, 2009). Other

[2] Introduced in 1999, the name of the scheme is an abbreviation of 'more investment in human capital is needed'.

points made with regard to the impact of tax schemes aimed at smaller firms, are that concessions typically apply to externally-provided formal training expenditure, rather than internal informal training costs that is often important to small firms, and complex systems with different rates for different target employers can be administratively expensive and confusing for smaller employers. Finally, ensuring clarity is important, in order to avoid the discouraging effects of uncertainty over how the tax authorities are likely to treat the case of an individual employer (Müller & Behringer, 2012).

- Training subsidies [areas for action 6,1]

Smaller employers are also frequently targeted with respect to direct training subsidy schemes. **Belgium**'s voucher scheme (discussed above in relation to type of training) is one example; another is in **France**, where the *Engagement de développement de la formation* provides a subsidy of up to 70% of training costs (with a further 10% for special groups of employees). Some 90% of recipients have fewer than 50 employees, and evidence suggests that the incidence in training rose significantly in those small enterprises assisted - with respect to both qualified and unqualified workers (Pukkinen *et al*., 2001; Jallade et al., 2004).

The Training Support Scheme in **Ireland** (1990-2003) was established to promote training in SMEs, funding training linked to an approved business plan (EIM/SEOR, 2005; Stone & Braidford, 2008; Müller & Behringer, 2012). The subsidy offered was linked to firm size, providing 65% of the direct costs (not trainee wages) for enterprises with fewer than 50 employees, rising to 50% for those with 51-100, and 25% for those in the 101-250 range, and priority skill areas were identified. Evaluation showed the scheme to be suitable to employers, who liked the fact they were free to choose the training provider. It resulted in increased training activity, although only of four days duration on average, and limited deadweight (55% of small firms would have engaged in less or no training without it – compared to 27% for the larger firms). It was also relatively expensive to administer. Although well regarded as an intervention, it was unexpectedly terminated in 2003. While typically, subsidy support schemes are related only weakly to business performance. The TSS is notable for purposely directing subsidies to training activities explicitly linked to business strategy.

Targeted subsidies have been used in a number of ways in the **UK**. In the early 2000s, pilots were conducted of Small Firm Development Accounts, targeted upon firms with fewer than 50 employees. This provided funding for a 'training champion' and development of a training plan in each participant firm, and 50% (falling to 33% in year 2) of external training costs (up to £150 per employee), plus mentorship support for 6 months and membership of a training network. Evaluation showed that the scheme clearly reached micro firms (if not the 'training inactive' enterprises), and suggests that a proportion underwent behavioural change (70% intended to maintain the training champion), but the drop-out rate after year 1 was high, as was the deadweight effect (only 7% reported that the training would not have occurred without the subsidy) (Hogarth *et al*., 2009; Müller & Behringer, 2012).

The ESF-funded 'Skills in the workplace', 'Workforce development programme' (in **Wales**), and 'Train to Gain' (**United Kingdom** more generally) have similarly incorporated diagnosis of training needs, and firm-centred training advice. T2G, which focuses upon Level 3 or below skills, is deliberately aimed at 'harder-to-reach' employers, including small firms. Evaluations (CRG, 2008; IFF, 2008) suggest that additionality results from these schemes, but that it they tend not to reach the smallest firms. Successful engagement of small employers was a feature, however, of the UK Employer Training Pilots in the early 2000s. This initiative offered free or subsidized training at Level 2, provided information and support and - crucial to its success – compensated employers for the indirect costs, employee time taken off for training (EIM/SEOR, 2005). Reviewing UK evidence regarding subsidies for various forms of training, Hogarth *et al*. (2009) concluded that there was mixed evidence on the degree of additionality arising from training subsidies, it was clear that they encouraged a proportion of employers to do some or more training, and that there was particular value for SMEs in having both a subsidy and specialist advice/guidance.

Overall, evidence tends to support the view that small firms are more inclined to invest in training if a subsidy is available (see LEED programme e.g. Kubisz, 2010; also CPC, 2008). Müller & Behringer (2012), conclude that direct subsidies are more effective in this respect than tax incentives and may also better facilitate targeting of particular enterprises, which can also reduce the extent of deadweight. Experience in a number of countries tends to show that without a clear small firm focus larger firms benefit disproportionately from such schemes; yet targeting efforts that rely upon complicated application procedures can itself favour larger firms, which typically have more administrative capacity than small firms (Müller & Behringer, 2012).

Others (e.g. EIM/SEOR, 2005) have argued that subsidies (and fiscal incentives) need to be *substantial* in order to engage small as opposed to large firms. This is necessary to compensate them adequately for both the paid-out and indirect costs (e.g. lost working time) – and especially the aim is to get small employers to engage (more) in formal/certified forms of training rather than on-the-job learning. To Müller & Behringer (2012) this is a general problem: reducing the costs of training investment through the subsidies (or indeed the tax system) addresses only some of the set of barriers faced by small firms. Larger firms are more willing and able to respond to such measures, and it is necessary to complement such intervention with other forms of support to achieve greater effect among small firms.

- Training levies [areas for action 2,5,6,7,8]

Levy systems can result in higher levels of employer-based training, while addressing the issue of ‘poaching’ through requiring all firms to contribute to training expenditures (SEM/SEOR, 2005). Such schemes are common – a recent EU review found that they accounted for one in ten demand-oriented instruments for fostering workforce training (SEM/SEOR, 2005). Müller & Behringer (2012), who have recently reviewed experience with levies, show that the schemes vary greatly in terms of design and focus, making it difficult to generalise with respect to their effects. A common typology is: (1) ‘train-or-pay’ systems requiring employers to invest a particular amount (typically by share of payroll) on training, or pay a tax based on the shortfall; and (2) employer contributions to a common fund (administered nationally or through a sector body), from which training costs are met. These offer considerable scope for facilitating training among small employers through earmarking funds. In particular, fund authorities administering resources raised by levies are able to mutualise some of the funds acquired through the levy and establish priorities for their use with respect to form of training, target groups or type/size of enterprise, and even allowing firms that exceed their target level to reclaim the surplus. Moreover, deadweight expenditure is reduced if firms currently doing little training are targeted (Sung *et al.*, 2006).

Train or pay schemes tend to give employers more discretion in how money is spent upon training, but the individualistic nature of this approach works against more collective solutions, based upon pooling of funds to address sector priorities. **France** and **Canada** (Québec) operate such statutory schemes. The complex French scheme gives rate concessions to small firms, and Quebec's exempts many such firms. But both systems relate only weakly to smaller sized businesses – among other things, they involve detailed paperwork - and such firms are primarily addressed through separate training instruments (discussed elsewhere in paper) (Stone & Braidford, 2008). These are perceived as having so few benefits for small employers that they often regard it simply as a tax (EIM/SEOR, 2005; Stone & Braidford, 2008). It has also been argued that they encourage inefficient and inappropriate training (e.g. 'superficial compliance') and may even cause firms to reduce their investment towards the minimal level (Johanson, 2009).

The latter appears to be tackled more effectively through linking the levy with collective agreements at sector level. In **Denmark** sector levy funds are used less for funding training than for the important task of developing and testing training programmes (Müller & Behringer, 2012). **The Netherlands** operates over 100 schemes, levying on average 0.67% of gross wages, with funds supplemented by ESF etc., but usually also requiring co-funding from employers (of 50% or more). Based firmly on consultation, which promotes employer commitment, these thoughtfully designed systems incorporate infrastructure support (such as qualifications design), administration of public funds for training, and facilitate longer-term perspectives on sectoral training. The Dutch system finances collective training for employers, on-the-job training, advisors to help formulate training needs etc. The system reportedly has had a positive influence upon training culture, improved the quality of training supply and achieved employer 'buy-in' (helped by pre-existing local and sectoral bi- and tri-partite relationships) (Müller & Behringer, 2012). However, the schemes do not to target small firms in particular, and research shows that small firms benefit less than larger ones (Gasskov, 2001).

In their review, Cox *et al*. (2009) conclude that impacts are often uneven across firm size bands, with the larger firms making greater use of training grants funded by levies than small firms in many countries. The experimental 1990s *Training Guarantee Levy* in **Australia** increased substantially overall private sector spending on training, but noticeably less so among small employers, which were not specially allowed for in the scheme's design. Recent debate regarding its possible re-introduction featured a plea for incorporation of substantial support for small firms (Ok & Tergeist, 2003; Stone & Braidford, 2008). The levies in **Belgium**, set by bipartite agreements at 0.1-0.6% of payroll and collected by the national office of security, supports sectoral training funds that operate according to sector priorities, give special emphasis to developing training plans, and include provision for 'at risk groups', defined to include small businesses (Ok & Tergeist, 2003; Müller & Behringer, 2012). The system encourages cooperation between stakeholders, and helps foster a training culture, but small firms are found to be under-represented (Cedefop, 2008).

Certainly, there is evidence that training levies can be an effective instrument in relation to small employers, provided they are appropriately designed (Sung *et al*., 2006; Stone & Braidford, 2008; Greenhalgh, 2001). In **Spain**, they have been deployed to encourage firms with fewer than 100 employees to cooperate over training. By requiring sector or territorial groups of such employers to submit *joint* plans, group-training programmes have resulted that benefit from reduced costs through economies of scale. Some bids for funds (e.g. auto-repair shops) are from groups made up of virtually all the enterprises in a sector (Ok & Tergeist, 2003). Joint funds for training plans in **Italy** offer yet another demonstration of how levies can be used to target support to small and micro businesses. Administered by the social partners, funds are earmarked for the preparation of training plans, and then training itself (via the issue of vouchers), in firms with fewer than 15 employees (Stone & Braidford, 2008).

Experience in use of levies as a tool for boosting training activity, shows that this approach – appropriately designed – can make a positive contribution to the engagement of small employers in training. Where they are effectively administered by or on behalf of collective/sectoral bodies, levy-based funds can find a good level of acceptance, and influence the level and type of training undertaken by small enterprises - and even the very approach to training of such organisations. They can also potentially affect the relevance/quality of available training. As well, they can be used to address the need to train less-qualified workers in such firms. It should be stressed that realising the full effect of levies is also dependent upon broader structures of advice and support. Müller & Behringer, 2012) draw attention to the dangers of 'revenue-generating' schemes 'creating bureaucracies', and of 'incentive-generating' ones putting off small firms through onerous approval processes that favour larger firms with HR administrative resources.

- Rights to training leave [areas for action 1]

Whether by means of a statutory right for employees (as in France) or collective agreements between employers and employees (common throughout Europe), training leave is a direct means of encouraging CVT. While such instruments can be focused upon small businesses, most study leave schemes do not discriminate by firm size, prioritising instead disadvantaged *employees* (e.g. at risk of becoming unemployed in **Sweden**, or less educated/qualified in **Denmark** and **Belgium**) (OECD, 2005). Some countries (such as **Spain** and **South Korea**) fund such leave through employer (and employee) contributions to a special training fund. By contrast, in **Portugal** employers are expected to bear the cost of the compulsory training leave (20 hours per year) (OECD, 2003). The inherent tension in giving an individual entitlement and choice of training can be expected to intensify as the outlay expected of the employer rises.

In no country is take-up of training leave schemes high; less than 2% is typical. The agreement of the employer is, of course, central to the process. In **South Korea**, for example, this is reportedly granted only in exceptional circumstances, thus making the number actually receiving this leave tiny (Stone & Braidford, 2008). The stumbling block, especially for small employers, is how the leave costs – training fees, wages of the absent employee, and costs of replacement staff – are to be met. Scandinavian countries achieve comparatively somewhat higher rates of leave take-up among smaller firms, not because of targeting by firm size, but because of their more generous financial support overall, plus supportive institutions and social norms that encourage employers to grant such leave. For example, **Denmark**'s system includes both education and vocational training, with no time limitation to the latter (as opposed to one year full-time in 5 years for general education). Employers contribute towards the vocational element (through the levy); education costs are covered by the state budget, while local government supports training cover/wage costs of replacement staff (see 'job rotation' below) (Stone & Braidford, 2008).

France is notable for its integrated system granting a general right to training with special provision for small firms to receive support to replace a worker on approved training leave. The statutory right to training leave for individuals (*congé individuel de formation*) is embodied in enterprise training plans, and substantial funding of the costs is facilitated through joint training funds. For firms with fewer than 50 workers, assistance is provided to replace a worker who is away undertaking approved training (*aide au remplacement d'un salarié en formation*). Cox et al. (2009) report Cereq findings on impact of the *droit individuel* scheme, which was based upon an inter-sectoral agreement for training of 20 hours per year for each employee with one year's service. Recent figures suggest that just 5% of the workforce (20% of organizations) have used it, but it appears to have successfully reached the smallest firms (and lower skilled workers). This has been interpreted as reflecting use of the levy system and external sources of advice and information, which have played an important role in enabling smaller firms to support employee's training requests.

- Job- rotation schemes [areas for action 6, 3, 4]

Job-rotation potentially offers a solution to the problem of worker absence for purposes of training. Originating in **Denmark**, such schemes now operate in a several countries. Job-rotation supports CVT through addressing the need to replace the absent workers *and* cover the cost of a replacement worker. Such schemes are often seen as having the virtue of both meeting the training needs of firms and aiding unemployed persons, and in the 1990s, accounted for around 1.3% of the workforce (Kruhoffer, 2002; Stone & Braidford, 2008).

Experience shows, however, that these schemes are not necessarily helpful to small firms, and in Denmark itself they are found to be relevant mainly to larger SMEs (Kruhoffer, 2002). However, similar projects in **Germany** have been designed so as to play a significant role with respect to smaller enterprises, including micro-firms. Up to two-thirds of employers participating in job rotation have fewer than 50 employees, and in North Rhine Westphalia a quarter of participants are micro-firms (Siebert, 2002). These projects appear to be well funded, and thus some localities have been able to develop in particular sectors a substantial support infrastructure purposely orientated to the needs of small firms, where replacement workers are carefully prepared in advance of taking up a position. The scheme is used mostly for replacement of skilled workers and managers rather than the unskilled; thus, not all unemployed people are suitable for such programmes.

- Employer networks [areas for action 1,2,3,5,6,7,8]

Pooling of resources is commonly used to address various obstacles to training confronting individual small firms. This may involve local or sectoral cooperation among SMEs themselves, or between larger firms and their supply chain partners, including small firms, in forms such as group training associations, chambers of commerce, sector skills councils and business clubs. The use of collective funds (e.g. from levies) is one example of pooling resources - as in **Spain** (see above), where small firms submit joint bids for levy funding to cover costs of common training programmes. There is evidence that embedding firms in wider networks can positively affect the number of training days undertaken by SMEs; with even higher training inputs for those firms involved in multiple networks (Cox *et al*., 2009).

Conceptually, developing networks can not only strengthen engagement of small employers in training (through educating managers about the value of training; 'institutional isomorphism' – diffusing management practices and behaviour; enhancing the flow and credibility of information – e.g. on training provider quality; and discouraging poaching), while also giving rise to further dynamic benefits based on opportunities for knowledge exchange, collaborative R&D, etc. (Bosworth (2009).

Group training associations, which are often principally focused upon apprentice-type training, but can also offer non-accredited learning (and NVQs) at a local scale, offer to members various benefits related to economies of scale, specialist training expertise, reduced transactions costs in handling administration (including in applying for public subsidies). The pooling of trainees can not only reduce unit costs, but also facilitate the tailoring of courses to employer requirements, as well as trainee sharing arrangements, and represent to some small employers an outsourced training function (Cox *et al*., 2009).

Culpepper's work (1999) documents, through a study of group training mechanisms in **France** (built around centralised regional facilities), the way in which group training can operate to enable small firms to engage in more generalised skills training. SMEs not in a position to design their own customised programme had previously to accept standardised apprentices. Collaboration among smaller firms led to the design, through a manufacturing trade association, of a more suitable qualification. The facilitation of wider access to national subsidies for the training, and high quality equipment at the local training centre, were further reasons why the small firms became more engaged in this training – and the potential advantages similarly apply to CVT.

Supply chain relationships, often built around a major employer, are also a means of driving skill formation, both in terms of motivation and practical effect in terms of the cost and quality of training. Nissan's supply chain training organisation in the **UK**, as described by Gospel & Foreman (2006), consists of over 50 member companies, each paying a basic membership fee plus an amount trainee. The TO coordinates and delivers training, largely indirectly, and positively attracts SME members, whose training activities are found to involve more transferable training than would normally occur, and more focused upon key skills. **Austria**'s Graz-based automobile manufacturer *Magna Steyr,* organises training for its supplier network, partly motivated to do so because of the quality and other production gains (OECD, 2005). Small firm engagement is encouraged by prospects of access to the supply chain, on achieving the requisite accreditations. Evaluation found sustained benefits in terms of both business performance and network building. In **South Korea**, as a result of collaboration between government, chambers of commerce and the private sector has led to companies like Sanyo operating (with funding from a payroll tax) joint training centres for their suppliers, including many small firms (Ra, 2005). Alongside these networks, training consortia of perhaps 50 SMEs appoint training managers to liaise with local providers to deliver members' training needs[3]. Evaluation shows that the approach results in training that is more relevant, of improved quality, and available at lower cost (and for which levy support is available). Training consortia have helped smaller firms to shift from reliance upon pre-service to in-service training, and from supply oriented public institution training to more cost-effective demand oriented in-plant and on-the-job training (Lee, 2006).

The enterprise-led *Skillnets Training Networks Programme (STNP)* in **Ireland** is another successful variant on the network model, with 55 sector or area-based networks in operation - all focused upon small firms. Designed to mobilise and support groups of enterprises to strategically address their joint training requirements, the scheme mobilises enterprises through networking techniques, provides funding to networks (50-75% of the costs); promotes an enterprise-led outlook with respect to how to develop, recognise and certify learning and qualifications. Companies have decision-making power and can customise training to their specific needs. Skillnets does not specify the type or scope of training; its role is to support the networks with resources and expertise. Launched in 1999 the STNP was supplemented in 2005 by *Accelerating in-Company Skills (ACCEL)*, which identifies those enterprises most in need of vocational advancement and supports them with grants of up to 75% of costs.

The Skillnets approach has been found particularly appropriate for smaller firms that frequently lack the time, expertise or money to develop training customised to their specific needs and directly relevant to their size and industry sector. Although not excluding larger firms (those with over 250 employees can receive up to 50% of

[3] Ministry of Labour figures indicate that there were 60 such consortia operating in 2006, training 90,000 workers. Lee (2006) also points out that the number of Training Consortia enterprises receiving training increased sharply relative to national training rates.

training costs), ACCEL targets mainly smaller firms. Around 85% of participants in 2005 employed under 50 people, and two-fifths had fewer than 10 employees.

Government currently provides two-thirds of funding in grants to networks, with the rest mainly from participant firms, among which, evaluators report, a significant development of interest in training has occurred, with many intending to invest more in human resources in the future. Nearly four-fifths of the courses developed through the Skillnets initiative are customised to meet Network member requirements. The experience suggests: (1) training networks require strong facilitated support (both internal and external); and (2) once they are fully engaged, small enterprises are able to both determine and satisfy their own training needs (Nuzum, n.d.).

In **Canada**, joint action on skills development by business associations, colleges and groups of enterprises, has in recent years been facilitated through the *Workplace Skills Initiative*. WSI funds partnerships to explore innovative ideas for building SME workplace skills through forming new local or sectoral networks of training providers and enterprises, including larger firms. Support is available through a competitive fund. Successful bids typically require matched resources and plans for future sustainability (Stone, 2009b)).

The evidence shows that networks can alleviate some of the market failures by providing training which individual employers, and especially smaller firms, find hard to organise. There are indications that they can extend training beyond immediate areas and engage high quality training providers. Many, however, tend to rely upon state subsidy, and focus on areas (such as apprenticeships) which attract such funding, and (as the experience of the **United Kingdom** Employer Learning Networks suggests), many have problems in continuing after network funding expires. The quality of network facilitation is crucial in terms of influencing employer engagement, as is their ability to accommodate the demand for tailored ('bite-sized') elements, and to incorporate the training into qualification frameworks (Cox *et al*., 2009).

'Employer Collective Measures' policy options for raising investment in training, including 'harder to reach' employers, were recently reviewed in a large research and consultation exercise by the UK Commission for Training & Skills (Stanfield, Sloan, Cox & Stone, 2009). From a wide-ranging review of options, expanding the number and quality of inter-employer networks was selected as the most appropriate feasible approach in the UK context. Recommendations along these lines led to the launch of a (two-year £250m) pilot scheme, the *Growth and Innovation Fund (GIF*), which is at the heart of the government's now approach to skills policy, based on encouraging employer leadership. This initiative, which incorporates key features of the Canadian WSI, seeks to encourage joint training action by groups of firms, especially including SMEs, in collaboration with Sector Skills bodies, training organizations etc. Collaborators bid for (matched) funding to establish a network and deliver training benefits, based upon member needs, including small employers.

- Accounting standards [areas for action 6, 1]

Modifying accounting standards theoretically makes investment in training less risky from an accountancy perspective. Conventional methods tend to treat training as a cost, and thus discourage employer investment in skills; moreover, few firms, especially in the SME bracket, make use of cost-benefit assessments of training options. Bosworth (2009) draws attention to the potential value of evaluating training benefits on an ongoing or real time basis, as an alternative to making long-term predictions about the future value of training investments. Cox *et al*. (2009) point out that the novelty of the idea and lack of empirical evidence as to how it might be applied, are a barrier to its use – especially among (often small) employers with less sophisticated grasp of accounting.

- Pay-back contracts [area for action 6]

Contract arrangements are sometimes made to permit employers to recover at least part of their investment in training staff members in the event that they leave voluntarily soon afterwards. Through reducing the risks involved, this encourages employers to support training. While such arrangements are in rare cases enshrined in law, they are relatively common in individual contracts and collective agreements. In **Germany**, they are found to operate in perhaps 15% of firms – and proportionately more in **Switzerland** - but no example is found of the mechanism targeted on small firms specifically or specifically adapted to their needs, and it is likely that enforcement is regarded as a bigger problem by small as compared with larger employers.

- Occupational licensing [area of action 1]

Recent interest has been shown in **the United Kingdom** in using this device to raise levels of training. Occupational licensing requires practitioners to demonstrate competency in order to be allowed to practice, and it is a statutory means of driving up skills investment, levelling up training received by particular groups, and reducing fear of poaching. Occupational licensing mainly relates to professionals, but includes a range of other skills, especially where health and safety or financial risk is involved, and would automatically affect small firms involved in particular product or service areas. Cox *et al.* (2009) undertook a review of practice and evidence and concluded that such licensing was likely to be of value in a relatively limited number of occupations, and that significant issues arise with respect to paying for the costs of administration and training connected with the scheme.

3. FUTURE DEVELOPMENTS

3.1 Policy considerations and challenges

There is a widespread contention that employer investment in training is curtailed for reasons that are partially static (i.e. market failure) and partially dynamic or cumulative (i.e. processes connected to low aspirations regarding production strategies) in nature. In both respects, there are solid grounds for anticipating that these processes operate more influentially with regard to small than large firms. The policy challenge of raising levels of skill formation among small employers, is thus one of identifying mechanisms that address the static and dynamic influences through understanding the conditions under which small employers operate (internally and externally), how these affect training decisions relative to the processes applying in relation to larger firms. In essence, policy needs to help small firms overcome specific barriers and where possible help them access a more dynamic operating context that both demands and gives rise to higher skills investment.

To develop demand-led training, policymakers should not only demonstrate the 'bottom line' value of training, based on achieving an efficient investment level in a static sense, but seek to go beyond that by encouraging skill enhancement as a logical and necessary dimension of innovation and product/service quality enhancement. There are clearly substantial elements of such thinking embedded in policy within Scandinavian countries, for example. Strategies that seek to raise productivity and competitiveness through organisational development and more ambitious production objectives, and within which skills investment is integral, are found to be relevant to certain types of small firms, especially those in higher technology areas. A key challenge is how to extend generally the interest in such approaches – and even embracing firms with less skilled workers and more routine processes. It was noticeable that, while there are interventions that embody explicitly performance concerns (e.g. TSS in Ireland), there is often little evidence of creative thought with respect to effectively linking training support measures to innovation and growth strategies of businesses.

Moreover, while the review yields numerous examples of effective mechanisms and broader practice that can inform policy, it is plain that the national context (institutions, business culture etc.) is a huge factor in determining the feasibility of the various intervention tools. In exploring a range of potential policy tools with respect to 'employer collective measures' to encourage training in the UK, a useful diagrammatic device was deployed, based upon a cross-quadrant structure, with voluntary to compulsory involvement represented horizontally, and the public to employer resource level shown vertically. In the UK context, feasible options clearly cluster in the employer-resourced/voluntary involvement quadrant (Stanfield *et al*., 2009, p.60). The configuration of interventions on this space would plainly be different for a country such as Denmark, which commits more to public funding, or France, which is more inclined to use compulsory measures. In many countries, greater financial stringency is likely to promote a shift somewhat towards more employer-resourced training within the quandrant framework, opening up opportunities and pressures to realign and redesign (and re-target) intervention mechanisms, but the different situation of countries in relation to the framework means that the choice of intervention (and their deployment in combination) will be necessarily need to be customised and thus unique to each circumstance (nation, region, sector etc.).

Keep's (2007) argument, made with small firms especially in mind, that national policies need to avoid a 'one-size-fits-all' approach to intervention, is fully borne out by the findings of this report. Although the situation is arguably less pronounced in countries with high general levels of public funding for training, it is clear that most small firms are at a disadvantage in responding to, and benefiting from, training support and that special arrangements are likely to be justified. Many schemes make no specific provision for such harder-to-reach firms, and even where SMEs are targeted, the large differences within this category produces substantial unevenness of access to/benefit from support. As the report shows, there are numerous ways of providing specific support to counteract the effects of small employers' lack of resources etc. relative to larger firms, but they need to be designed with reference to the specific context and barriers. In providing support, policy-makers need to be mindful of the widespread experience that targeting of small firms achieved through onerous administration procedures, although reducing deadweight, can also restrict take-up by the smaller firms relative to larger ones (including ones higher within the SME hierarchy).

The general absence of substantial evaluations of intervention tools is striking – especially given the indications of a (often) substantial deadweight element. This is especially the case in relation to interacting interventions (e.g. the combination of rights to training leave with job-rotation initiatives). The evaluations that exist, show that instances of *effectiveness* being enhanced by a scheme (i.e. firms did more training than would have been undertaken in its absence) can frequently be at the expense of *efficiency* in terms of public expenditure. This will be of greater concern in financially constrained times, and there appears considerable scope in many countries for policy-makers to target their measures more precisely, and to reduce outlays without affecting proportionately the level of training undertaken. In some circumstances, evidence shows the deadweight element to be greater among larger firms – raising the possibility of achieving both efficiency and equity improvements through targeting.

From a policy analyst's perspective, it is instructive to observe the way different intervention tools relate to areas of action in response to known barriers faced by small firms (section 2.1). As can be seen from cross-referencing in the review (section 2.2), some intervention mechanisms operate in relation to just one or two of the barriers, while others are strikingly more wide-ranging in the way they work. Given that research clearly shows that small firms face multiple barriers in respect to engaging in training, there may be particular advantage in the use of (appropriately designed) levies and/or networks, for example, variants of which exist that simultaneously address a number of the barriers. Certainly, these would appear to have more potential for influencing small employers than certain other mechanisms, such as payback contracts, occupational licensing and modified accounting standards, which address fewer barriers and may have problems of application in respect to small workplaces.

With regard to encouraging small employers to engage in training their workforce, evidence exists of potential benefits from carefully designed individual and inter-connected instruments that address the multiple barriers that increasingly restrain or discourage such training as firm size diminishes. Since small firms are special in relation to the extent of barriers confronting them, a larger effort is needed to reach them. It is clear from existing research that small firms are unlikely to find their situation fundamentally altered by a single intervention (e.g. cost-reducing tax incentive or direct subsidy) – even if such concessions are quite large. Among other things, a prime reason is the need to replace workers undergoing training.

Thus, tax incentives fail to qualify as a prime mechanism for encouraging training among small employers. Since relatively high tax concessions appear to be required, this brings with it the risk of substantial deadweight costs. There are other issues that arise with this form of incentive, in terms of the type of eligible training and the extent of costs claimable. Policy-makers attempting to incentivise small firms via tax deductions should thus consider targeting support on *additional* training by such employers, guided by experience of such schemes applied overseas.

The use of direct employer subsidies varies greatly among countries examined. The evidence suggests that, appropriately targeted upon small firms, direct subsidies have the potential to positively affect training activity. However, the design of such schemes needs to take account of the issues of administration costs and deadweight. Moreover, experience suggests that subsidies may be most effective when deployed supportively as part of other interventions, such as networks or training leave – and any scheme will need to ensure that the flow of information to firms is adequate. Some subsidy schemes – such as those used in Belgium involving vouchers – have be so designed as to be closely aligned to the needs of small employers, delivering low administrative costs and appropriate training.

Levies vary hugely in form - beyond the usual distinction between statutory 'train or pay' and voluntary ones organised on a partnership basis (often focused on sectors). Where they are appropriate to the sector's labour market conditions and the majority of firms are supportive, they have been found to be a viable approach. Appropriately designed, levy funds administered through collective or sector bodies can positively influence the level and type of training undertaken by small enterprises (as well as promoting training of less qualified workers). They can be an effective vehicle through which training is planned at employer level, and – on the supply side - play an important role in raising the standards of available training.

Statutory rights to training leave, generally applied, convey an appropriate message, but depend for their success largely upon funding resources available. Financial support is likely to be needed for small employers to help cover both the absent employee's wages and costs of replacement staff. While experience with job-rotation schemes has been somewhat mixed, such initiatives do address the main problem with releasing staff - the difficulty of providing cover. Experience overseas suggests that job-rotation is potentially of considerable value in helping even the smallest firms to train their workers, especially in some sectors and localities. However, it is far from a cheap policy option – although possibly justifying the higher public sector costs if viewed also from an active labour market policy perspective.

Collaboration among firms - including vertically between large firms and their suppliers – can effectively address market failures restricting training by individual firms acting alone. There is a wide range of network formulations whereby resources can be pooled, including through levy systems. Such networks, it has been shown, can both strengthen small employer engagement in training *and* give rise to other benefits based on associated networking and knowledge exchange – with innovation and technical collaboration benefits. Links between large and small firms have many potential advantages in terms of cluster development benefits and access to training facilities. Evidence suggests that networks often need support in order to develop, and there exists numerous examples of initiatives designed for this purpose. Emphasis in developing such schemes needs to be placed upon properly embedding small firms into such networks, and identifying mechanisms for ensuring sustainability as external funding is scaled down.

Other issues for consideration include: (1) It is noticeable how seldom 'entrepreneurial' (as opposed to bureaucratic) thinking (and approach/methods) appear to have been applied in relation to the design and marketing of such policies – especially given the onus on information and the development of a culture of engagement. The whole question of imbuing policy-makers with a more entrepreneurial outlook and way of working is an interesting one; (2) There is little in the literature or review of practice that helps with respect to addressing how to target *within* the small firm category, since practical policy involves considering where resources will be committed, based on, for example, efficiency or equity grounds; (3) Small firm targeting in relation to measures for encouraging is often accompanied by a concern for other 'hard-to-reach' elements – especially particular social groups (less skilled workers, those vulnerable to unemployment). From a small firm perspective, support measures or requirements that focus upon particular groups of employees are not necessarily of help in their business context. Given that multiple objectives can undermine attempts to address the needs of hard-to-reach *firms*, achieving some clarity regarding now the different objectives relate to each other might be helpful.

BIBLIOGRAPHY

ABS (2003), *Employer Training Expenditure and Practices,* Australian Bureau of Statistics, Canberra

Alasoini T (2003), *The Finnish National Workplace Development Programme as a New Public Strategy*, Ministry of Labour, Helsinki.

Arnkil R (2004), "The Finnish workplace development programme: A small giant?", *Concepts and Transoformation*, 9:3, 249-78

Baghana R and Mohnen P (2009), "Effectiveness of R&D tax incentives in small and large enterprises in Quebec", Scientific Paper, Cirano, Montreal.

Beale M, Brush P, Campbell D and Hopley L (2007), *Developing Workforce Skills: an International Perspective*, Report of Norfolk Charitable Trust.

Bentabet E, Michun S, Laget M and Meriaux O (2002), *De l'Apport des Organismes Collecteurs au Dynamisme du Marché de la formation: La Difficile Approche des Petites Enterprises*, CEDEQ, Marseille.

Bishop D (2006), "The small firm in the training market : illuminating the social construction of market behaviour", SKOPE Research Paper 67, University of Warwick, Coventry.

Brisbois R and Saunders R (2005), *Skills Upgrading Initiatives in Canada: Regional Case Studies*, Canadian Policy Research Networks for OECD, Ottawa

Bosworth D & Stanfield C (2009), *Review of Employer Collective Measures: A Conceptual Review from a Public Policy Perspective*, evidence Report 6, UKCES, London.

CCL (2007), *Canada's Biggest Economic Challenge – Improving Workplace Learning*, Canadian Council on Learning/CCA, Ottawa.

Cambridge Policy Consultants (2008), *Evaluation of the Workforce Development Programme*, Welsh Assembly, Cardiff.

CEDEFOP (2008), *Sectoral training funds in Europe*, Panorama series 156, Luxembourg.

CEDEFOP (2009), *Using tax incentives to promote education and training*, Panorama Series, Luxemburg.

CEDEFOP (2010), *Employer-provided vocational training in Europe: Evaluation and interpretation of the third continuing vocational training survey*, Research Paper 2, Luxemburg.

Collier W, Green F, and Young-Bae Kim (2007), *Training and Establishment Survival,* Research Report 20, SSDA, Wath-Upon-Dearne

Colly M (2005), *Employer-provided training: findings from case studies*, NCVER, Adelaide.

Cox A, Sumption F, Hillage J and Sloan J (2009), *Review of Employer Collective Measures: Policy Review*, evidence Report 8, UKCES, London.

Cox A (n.d. 2003?), *Achieving the Lisbon goal – the contribution of VET Systems. Country Report: Belgium*, CINOP.

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

Culpepper P (1999), "The future of high-skill equilibrium in Germany", *Oxford Review of Economic Policy*, 15:1, pp. 45-59.

Dawe S and Nguyen N (2007), *Education and Training that Meets the Needs of Small Business: A Systematic Review of Research*, NCVER, Adelaide.

de Vos A and Willense I (2011), *Leveraging training and skills development in SMEs: an analysis of E Flanders, Belgium*, LEED, OECD.

EIM/SEOR (2005), *Policy Instruments to Foster Training of the Employed*, vol. 1 (Full Report), vol 2 (Summary Report), Zoetermeer/Rotterdam.

European Commission (2005), "Progress towards the Lisbon Objectives in Education and Training", Commission of the European Countries, Working Paper, 22 March.

Gasskov V (2001), *Government interventions in private financing of training*, International Labour Organization, Geneva.

Gospel H and Foreman J (2006), “Interfirm training coordination in Britain”, *Journal of Industrial Relations*, 44:2, 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”, *Fiscal Studies*, 23:2, pp. 223-63.

Guggenheim E (ed) (2002), *Agora VIII: Jobrotation*; Papers from Forum held in Thessaloniki, CEDEFOP, Luxembourg.

Guridi J and Amondarain J (2003), “Demand-led financing of Lifelong Learning”, OECD Conference, 8-10 October, Bonn.

Hoeckel K (2008), *Costs and Benefits in Vocational and Educational Training*, EDU/EDPC/CERI, OECD.

Hogarth T, Bosworth D, Gambin L and Wilson R (2009), *Review of Employer Collective Measures: Empirical Review*, Evidence Report 7, UKCES, London.

Huselid M, Jackson S and Schuler R (1997), “Technical and Strategic HRM as determinants of firm performance”, *Academy of Management Journal*, 40:1, pp. 171-88.

Hytti H, Henonen L and van den Boom L (2004), “Instruments and Incentives for Promoting Lifelong Learning: Country Profile for Finland”, EIM/SEOR, Zoetermeer.

IFF (2007), *National Employers Skill Survey*, Learning & Skills Council, Coventry.

IFF (2008), *Evaluation of Train to Gain: Sweep 1*, Learning & Skills Council, Coventry.

Ipsos/MORI Social Research Institute (2006), *Skills for Business Network 2005: Survey of Employers*, Research Report 18, SSDA, Wath-on-Dearne.

Jallade J-P, de Kok J and Telussa J (2004), “Instruments and Incentives for Promoting Lifelong Learning: Country Profile for France”, unpublished paper, EIM/SEOR, Zoetermeer.

Johanson, R. (2009), “A review of national training funds”, Social Protection Discussion Papers 922, World Bank, Washington.

Johnson S (2002) “Lifelong Learning and SMEs: issues for research and policy”, *Journal of Small Business and Enterprise*, 9:2, pp. 285-95.

Johnson S and Devins D (2008), “Training and workforce development in SMEs: Myth and reality”, *Catalyst*, no. 7, SSDA, Wath-on-Dearne.

Kearns P (2002), *Are two worlds colliding? The provision of training and learning services for small business,* NCVER, Leabrook, South Australia.

Keep E (2006) ‘Market Failure in Skills’, *SSDA Catalyst*, Issue 1, February.

Keep E (2007), *The Keep Review of Skills 2008*, ESRC Centre of Skills, Knowledge and Organisational Performance, University of Cardiff.

Kitching J and Blackburn R (2002), *The Nature of Training and Motivation to Train in Small Firms*, DfES, HMSO, London.

Kruhoffer (2002), “Jobrotation development and dissemination in Europe”, in Guggenheim E (ed), *Agora VIII: Jobrotation*, Forum held in Thessaloniki, CEDEFOP, Luxembourg.

Kubisz M (2010), *Leveraging training and skills development in SMEs: an analysis of Zaglebie sub region, Poland*, LEED, OECD and Ministry of Regional Development, Poland.

Lee, K W (2006), “Effectiveness of Government's Occupational Skills Development Strategies for SMEs: Case Study of Korea”, *International Journal of Educational Development*, 26:3, 278-94

Leuven E and Oosterbeek H (2004), "Evaluating the effect of tax deductions on training", *Journal of Labor Economics*, 22:2, pp. 461-88.

Lin Z and Tremblay J-F (2003), *Employer-supported training in Canada: policy research, key knowledge gaps and issues*, HRSDC/IC/SSHRC Skills research initiative, Ottawa.

Muller N and Behringer F (2012), *Subsidies and levies as policy instruments to encourage employer-provided training*, Working Paper 80 (EDU/WKP/2012/17) OECD.

National Skills Forum (2007), *Incentives to Train: Ensuring Employer Engagement*, report sponsored by City & Guilds, London.

Observatory of European SMEs (2003), *Competence Development in SMEs*, Enterprise Publications, 2003/1, European Commission

OECD (2003), *Beyond Rhetoric: Adult Learning Policies and Practices*, Paris.

OECD (2004), *Developing Highly Skilled Workers: Peer Review of Belgium,* Organisation for Economic Cooperation and Development, Paris.

OECD (2005), *Promoting Adult Learning,* Organisation for Economic Cooperation and Development, Paris.

OECD (2010), *Learning for Jobs*, Organisation for Economic Cooperation and Development Paris.

Ok W and Tergeist P (2003), “Improving workers skills: analytical evidence and the role of social partners”, *Social, Employment and Migration Papers*, OECD, Paris.

Payne J and Keep E (2003), “Revisiting the Nordic approaches to work re-organisation and job re-design: lessons for UK skills policy”, *Policy Studies*, 24:4, pp. 205-24.

Payne J (2005), ‘What progress is Norway making with lifelong learning? A Study of the Norwegian Competence Reform”, SKOPE research paper 55, Oxford and Warwick Universities.

Pukkinen T, Romijn C and Elson-Rogers S (2001), “Funding Continuing Vocational Training in SMEs”, CEDEFOP Panoramic Series 17, Luxembourg.

Ra Y S (2005), *OECD Thematic Review on Adult Learning: Korea Background Report*, Korean Institute for VET, Seoul.

Rabenananja R and Parsley C (2006), *Employee training decisions, business strategies and human resource management practices: a study by size of business,* Working paper, Small Business Policy Branch, Industry Canada, Ottawa.

Schick H (2002), ‘Jobrotation from the perspective of enterprises… the Bremen Region’, in Guggenheim E (ed), *Agora VIII: Jobrotation*; Papers from Forum in Thessaloniki, CEDEFOP, Luxembourg.

Shury J, Davies B, Riley T and Stanfield C (2008), *Skills for the Workplace: Employer Perspectives*, Evidence Report 1, UKCES, London.

Siebert R (2002), ‘Jobrotation as a means of promoting innovation and employment: a model for SMEs in North Rhine-Westphalia’, in Guggenheim E (ed), *Agora VIII: Jobrotation*, Papers from Forum in Thessaloniki, CEDEFOP, Luxembourg.

Smith A and Billett S (2006), ‘Mechanisms for increasing employer contributions to training: An international comparison’, *Research in Post-compulsory Education,* 11:1, pp. 1-18.

Smith A and Billett S (2005), "Getting Employers to Spend More on Training: Lessons from Overseas", in K. Ball (ed.), *Funding and Financing of Vocational Education and Training*, NCVER, Adelaide.

Stanfield C, Sloan J and Stone I (2009), *Review of Employer Collective Measures: Final Report*, Evidence Report 10, UKCES, London.

Stone I and Braidford P (2008), *Engaging Small Employers in Continuing Training: An International Review of Policies and Initiatives*, SSDA, Wath-on-Dearne.

Stone I (2009b), ‘Canada’s Workforce Skills Initiative’, unpub. briefing report for the UKCES, Wath on Dearne.

Stone I (2010) “Encouraging small firms to invest in training: learning from overseas”, *Praxis*, UKCES, no.5.

Stone I (2011), *International approaches to High Performance Working*, Evidence Report 37, UK Commission for Employment and Skills, London.

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*, Research Report 16, SSDA, Wath-on-Dearne.

TEC (2005), *The Challenge of Engagement: Involving SMEs in Industry Training*, Tertiary Education Commission, Wellington, NZ.

Youndt M, Snell S, Dean J and Lepak D (1996), “Human management, manufacturing strategy and firm performance”, *Academy of Management Journal*, 39:4, pp. 836-66.