



Toolkit
Employment
Training
Financial incentives

What are they and what do they aim to do?

Financial incentives in employment training programmes are payments that aim to increase participation or completion of training. They may be offered to either the employer or the training participant. They may come in the form of a lump sum payment at the beginning or end of the programme, instalments during the programme, or a subsidy for the cost of participation (e.g. to the employer to cover wage costs of an apprentice).

We consider the effects of financial incentives for apprenticeships in a separate toolkit.¹

How effective are they?

The evidence suggests that payments to either individuals or firms may increase participation in, or completion of, employment training, but that effects on employment and earnings are less likely. There is some evidence that financial incentives partially crowd out privately-funded training.

1 <http://www.whatworksgrowth.org/policy-reviews/apprenticeships/toolkit/>

How secure is the evidence?

We found 11 studies that examined the effectiveness of financial incentives for employment training. Four of these provided high quality evidence based on randomised control trials, while seven others provided before and after comparisons using a control group.

Only two of these studies come from the UK. We also found a further five studies that examined the effectiveness of financial incentives for apprenticeships. The findings of these studies are discussed in a separate toolkit toolkit.² For a full list of studies and summaries of their findings see the Annex.

Are they cost-effective?

Incentives tend to be fairly expensive, since they involve cash transfers to firms or participants and the awards need to be large enough to incentivise training. But they can also have quite strong effects on behaviour, so it is important to compare costs and benefits.

For example, the incentive element of the UK ERA programmes cost around £500-£1,000 per participant. Given the effects on behaviour this equates to a cost of £5,000-£6,000 per extra trainee (this cost also includes a career counselling component).

One thing that emerges from the evidence is that incentives to increase participation in adult training do not necessarily need to be large. One Swiss voucher programme reports sizeable positive effects for training vouchers of relatively low face value (about £90). These effects were not much smaller than for vouchers of much higher face value (£880) implying that the cheaper voucher are five times more cost effective at promoting training (although this does not take into account potential differences in the quality of the courses taken).

In terms of employment, one evaluation in the U.S. suggests incentives to firms may cost as little as £630 per job created. However, the study only finds positive effects near administrative boundaries where the level of incentives differs, suggesting any employment effect is due to displacement (firms on one side of the border increasing employment at the expense of firms on the other side of the border).

Things to consider

- Increased participation and completion resulting from financial incentives does not necessarily translate in to increased employment or wages. This suggests programmes where financial incentives are provided need to think carefully about how they could support the transition from training to work.
- Financial incentives need not be expensive. One study finds that the lowest value training vouchers were the most cost-effective way to increase participation. That said, more generous financial incentives can be expensive, so the impact on participation or completion needs to be carefully monitored and evaluated.
- Financial incentives will not be appropriate for every programme. Other considerations such as increased wages or a job at the end of the programmes may make the financial incentive less impactful.
- Benefits and costs may differ depending on whether the firm or the individual receives the incentive.
- Increased participation on programmes with financial incentives may come at the expense of decreased participation for other training programmes

2 <http://www.whatworksgrowth.org/policy-reviews/apprenticeships/toolkit/>

Annex: Evidence on Financial Incentives for Employment Training

What kind of evidence do we consider?

Financial incentives are a common policy intervention to increase participation or completion for training programmes and for apprenticeships. They may be used with publicly funded programmes e.g. active labour market policies (ALMPs) or privately funded programs – either by firms for their employees or by employees themselves.

We looked for evidence on financial incentives that aim to increase participation or completion of ALMPs or apprenticeships. These may be offered to either the employer or the training participant. They may come in the form of a lump sum at the beginning or end of the programme, partial instalments along the duration of the programme, or a subsidy for the cost of participation (e.g. to employer to cover wage costs of apprentice).

We focused on evidence from the OECD, in English. We considered any study that provided before and after evidence on the effect on participants; or cross-sectional studies that compared effectiveness for individuals or firms receiving different kinds of support. We also included more robust studies that compared changes to participants with a control group.³

Using these criteria, we found 11 studies that examined the effectiveness of financial incentives for employment training.

We found a further five studies that examined the effectiveness of financial incentives for apprenticeships. The findings of these studies are discussed in a separate toolkit.⁴

Our evidence review on employment training⁵ summarises findings from the larger literature that considers overall policy effectiveness.

The evidence

Payments to either individuals or firms may increase participation in, or completion of, employment training

Study ET134 (scoring 3 on the Scientific Maryland Scale, or SMS) examines whether training subsidies increase Irish firm's own spending on training for the period 1999-2002. Export and high-tech firms were given grants towards training of employees. Using plant level data, the authors find a positive impact own expenditure on training for domestic owned firms. For foreign-owned firms there is no effect on own spending on training, suggesting the grants neither stimulate nor crowd out such spending for foreign firms.

Study ET143 (SMS 3) examines if training subsidies increase youth employment outcomes in Italy over the period 1975-1997. The CFL on-the-job training programme offered two major benefits to firms: payroll tax exemption and the possibility to take on employees on a fixed term contract. Using a dataset of firms the authors investigate the effect of a policy reform that reduced the financial rebate element of the programme by 50%. The reduction did not apply, however, to firms in Southern Italy or those who produce via traditional methods (artisan firms). They find, following the reduction of the financial rebate,

3 <http://www.whatworksgrowth.org/resources/the-scientific-maryland-scale/>

4 <http://www.whatworksgrowth.org/resources/financial-incentives/>

5 <http://www.whatworksgrowth.org/policy-reviews/employment-training/>

that firms significantly cut new CFL contracts when compared with artisan/southern firms. This implies that the financial incentive was an important policy feature in boosting training of younger workers, and improving this group's employment outcomes.

Study ET400 (SMS 5) examines the Employment Retention and Advancement (ERA) Demonstration in the UK. The ERA targeted lone parents either on the New Deal for Lone Parents programme (NDLP) or in part-time employment and receiving Working Tax Credits (WTC). In an RCT setup, treated participants were offered a variety of financial incentives (e.g. a subsidy of £8 per hour of completed training up to a maximum of £1,000) and advisory support. Among the WTC group, take-up of training was increased by 6 percentage points (35% treatment vs. 29% control) and among NDLP participants there was a 15 percentage points increase (72% vs 56%).

Study ET405 (SMS 3) examines voucher-based reinforcement of attendance for a training programme for methadone patients in the US. Vouchers of different values in different time periods were given to promote attendance for five methadone patients on a computer training course. The study finds that attendance is highest when the voucher payments for attendance are highest.

Study ET406 (SMS 3) examines the effect on take up of changing the structure of performance-based incentives given to training agencies in the US. Using a dataset of enrolment by training agency, they find that lowering the performance targets for certain subgroups increases enrolment, but reduces employment performance in those groups. This is because caseworkers have more incentive to enrol people from those group and therefore take in people with expected lower performance. These findings suggest that performance awards can lead to 'cream-skimming' even if the awards are weighted for particular subgroups, because it lead to within-group 'cream-skimming' instead.

Study ET407 (SMS 3) examines Bluegrass State Skills Corporation training grants for firms in the US. Using county level data they find a 10% increase in the level of training incentives in a county increases employment by 0.022%. A 10% increase in grant is £5,328, which leads to 5.86 jobs (0.022% of the average total employment of 26,500).⁶ Overall this is a cost of about £932 per job created. Effect only exists for counties at state border, suggesting displacement effects may be in play.

Study ET418 (SMS 5) examines a training voucher programme for low-skilled workers in the Netherlands. In an RCT setup, vouchers of €1,000 were given to randomly assigned low-skilled workers, which they were able to use for costs of a training programme of their choice. The experiment found that voucher assignment increased participation in training by 20 percentage points from a base share of 0.45.

Study ET421 (SMS 3) examines the impact of a training voucher programme implemented in the German federal state of North Rhine-Westphalia. The voucher was available to both firms and employees of medium-sized enterprises (fewer than 250 employees) and reduced the cost of training by 50%. Using a dataset of firms, the study finds that the availability of the training vouchers increased the share of firms that invest in training by between 4 and 6 percentage points.

Study ET419 (SMS 5) examine the impact of a Swiss training voucher programme implemented as an RCT. The programme involved around 2,500 adults (aged 20-60), randomly chosen from the general population, who each received a voucher of either 200, 750 or 1500 Swiss francs (roughly equal to £90, £330, and £660) to pay for an adult education course.⁷ The programme found that receiving a voucher

6 Using GBP-USD average exchange rate for 1993 of 1.501607.

7 Using the CHF-GBP average exchange rate for 2005 of 0.442121.

had a significant effect on the likelihood that an individual undertook adult training.⁸ However, it had no impact on undertaking adult education, being employed, or earnings in subsequent year. In terms of voucher value, both the 750 and 1500 franc vouchers had about the same impact (15 percentage points) and the 200 franc voucher had a slightly smaller impact (10 percentage points) on adult education. In terms of subgroups, there are positive earnings effects for individuals with low education (non-university). However, the study also shows that low-education individuals are less likely to take up the vouchers, compared with university educated individuals. This suggests that untargeted voucher programmes may not be the most effective mode of delivery. The study also finds that voucher receipt predicts lower firm-financed adult education suggesting the scheme partly crowds out private training.

Study ET408 (SMS 3) examines the UK Employer Training Pilots which offers incentives to employers such as free or subsidised training plus paid time off for their employees. Using a dataset of employees they find no effect of incentives on training take-up in the first 3 years of the programme. This implies that all training would have happened even in the absence of the programme i.e. a very high level of deadweight.

A second study to find a no effect on take-up is number ET227 (SMS 5), which examines the effect of three different training delivery models on training outcomes in the Individual Training Accounts (ITA) experiment in the United States. The Structured Choice (T1) treatment gave tailored financial awards to participants and had the most intensive level of mandatory counselling. In the Guided Choice (T2), the awards were fixed (and more modest) and the mandatory counselling was less intensive. Finally, the Maximum Choice (T3) model offered voluntary counselling and fixed awards. Notably, very few participants in T3 took up the voluntary counselling. A total of 7,920 participants (job-seekers) were randomly assigned to one of the three programmes. The financial awards have little effect on the overall training rate or employment outcomes. Additional funding does, however, change the method of financing (typically from own savings to the awards) and increase the length of training undertaken.

Cost effectiveness

The UK ERA programme (Study ET400) costs around £1,000-£2,000 per participant. Given the effect sizes, this equates to a cost-benefit of £5,000-£6,000 per extra participant. Note, however, that the ERA programme involves a combination of incentives and counselling elements – each of which contributes around half of total costs. It is not possible to attribute the benefits to either the financial incentive or counselling elements so a component specific estimate of cost-effectiveness is not possible.

The Irish training programme subsidies (Study ET134) are around 10-20% of firm's own spending on training (which itself is around 2% of the wage bill). The study does not provide information on the number of trainees so a cost/benefit per participant cannot be calculated. For the Italian on-the-job training programme (Study ET143) the main cost is an income tax rebate of between 25% and 98%. The tax itself is around 40% of income. The benefits of participation in the programme were a 5% increase in firm employment.

For Study ET407 the average training award for a firm is £53,792 and average employment is 26,500 (in border counties). The effect size reported relates to an increase in the award of 10%, which equates to £5,328, and leads to an increase of 5.86 jobs (0.022% of the average total employment of 26,500). Overall this is about £930 per job created. However, the study only finds positive effects near administrative boundaries where the level of incentives differs, suggesting any employment effect is due

8 The same effects on training take-up and on crowding-out of privately financed training were reported by an earlier study of the same programme by some of the same authors (Study ET420). Since these earlier findings are covered by Study ET421 we dropped the earlier study from the toolkit.

to displacement (firms on one side of the border increasing employment at the expense of firms on the other side of the border).

The estimated impact of vouchers on adult training from ET421 imply a cost per training participant of around £4,400 (for the top-value franc voucher), £2,200 (the middle-value voucher) or £880 (for the lowest-value voucher). Course quality notwithstanding, the lowest-value voucher is five times more cost effective than the top-value voucher in terms of training attendance.

Evidence Reviewed

Ref. No	Reference
ET134	Görg, H. and Strobl, E. (2006): "Do Government Subsidies Stimulate Training Expenditure? Microeconomic Evidence from Plant-Level Data", <i>Southern Economic Journal</i> , Vol. 72, No. 4, pp. 860-876.
ET143	Tattara, G. and Valentini, M. (2009): "Can employment subsidies and greater labour market flexibility increase job opportunities for youth? Revisiting the Italian On-the-job Training Programme", <i>ZAF</i> , 42, 197-212.
ET227	Perez-Johnson, I., Moore, Q. and Santillano, R. (2011): "Improving the Effectiveness of Individual Training Accounts: Long-Term Findings from an Experimental Evaluation of Three Service Delivery Models", <i>Mathematica Policy Research</i> .
ET400	Hendra, Richard, Kathryn Ray, Sandra Vegeris, Debra Hevenstone and Maria Hudson. <i>Employment Retention and Advancement (ERA) Demonstration: Delivery, Take-Up, and Outcomes of In-Work Training Support for Lone Parents (2011)</i> . http://ssrn.com/abstract=1824082
ET405	Silverman, K., Chutuape, M. A. D., Bigelow, G. E., & Stitzer, M. L. (1996). Voucher-based reinforcement of attendance by unemployed methadone patients in a job skills training program. <i>Drug and Alcohol Dependence</i> , 41(3), 197-207.
ET406	Courty, P., & Marschke, G. (2011). Curbing cream-skimming: Evidence on enrolment incentives. <i>Labour Economics</i> , 18(5), 643-655.
ET407	Hoyt, W. H., Jepsen, C., & Troske, K. R. (2008). <i>Business Incentives and Employment: What Incentives Work and Where?</i> . Institute for Federalism & Intergovernmental Relations Working Paper, (2009-02).
ET408	Abramovsky, L., Battistin, E., Fitzsimons, E., Goodman, A., & Simpson, H. (2011). Providing employers with incentives to train low-skilled workers: Evidence from the UK Employer Training Pilots. <i>Journal of Labor Economics</i> , 29(1), 153-193.
ET418	Diana Hidalgo; Hessel Oosterbeek and Dinand Webbink, (2014), The impact of training vouchers on low-skilled workers, <i>Labour Economics</i> , 31, (C), 117-128
ET419	Schwerdt, G., Messer, D., Woessmann, L., and Wolter, S. C. (2012). Effects of adult education vouchers on the labor market: Evidence from a randomized field experiment. <i>Journal of Public Economics</i> , 96(7-8):569-583.
ET420	Messer, D. and Wolter, S. (2009). Money matters: Evidence from a large-scale randomized field experiment with vouchers for adult training. Technical report, IZA Discussion Paper 4017.
ET421	Görlitz, K. (2010). The effect of subsidizing continuous training investments – Evidence from German establishment data. <i>Labour Economics</i> , 17:789–798.

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