EENEE POLICY BRIEF 3/2012

NOVEMBER 2012

Apprenticeship Training Can Be Profitable for Firms and Apprentices Alike

Stefan C. Wolter (University of Berne – stefan.wolter@vwi.unibe.ch)

Although apprentices enjoy a smooth transition from school to work and effectively help to reduce youth unemployment, many employers are reluctant to provide training places because of the fear of uncovered training costs. Recent empirical evidence shows clearly that – for many firms – this fear is not justified, as apprenticeship training can already pay off in the short run.

Although apprenticeship training is recognized to provide school leavers with skills that match the needs of the labor market – and thereby to increase their chances for a smooth transition into work life – apprenticeship training has never taken off in many European countries. One particular reason for the low supply of apprenticeship training is the employers' fear that offering training places would be associated with a substantial net investment, which may not pay off if an apprentice subsequently moves to another employer.

THE BENEFITS FOR FIRMS

Offering apprenticeships may benefit an employer in at least three ways: First, as apprentices work (parttime) for the training firm, the value of their productive contribution may already offset the firm's costs of providing training (i.e., material and infrastructure costs, and wages for instructors and apprentices).

Second, a firm can use training as a screening device to identify the most talented and motivated apprentices. Although the apprenticeship contract ends by the end of training, the firm can always offer a work contract to the most able individuals (based on superior knowledge of the trainee's aptitudes that is not available to other firms) and thereby avoid costly mismatches.

Third, a firm can train apprentices in regard to its specific skills requirements – an increasingly important advantage in times of skilled-worker shortages in many industries that make it more difficult to fill

vacancies with workers from the external labor market. An externally hired worker still needs to acquire specific skills during a period of adaptation that initially restricts the productivity of a new hire. In many cases, external hiring costs are substantially higher than the potential net investment associated with training an apprentice. However, the relative importance of the three types of training benefits varies across firms, sectors, occupations, and even across countries, as differences in labor market regulations may shift the focus from long-term considerations to short-run goals.

PROFITABLE APPRENTICESHIP TRAINING IS POSSIBLE IN DEREGULATED LABOR MARKETS

In deregulated labor markets, the firms providing training are exposed to a high risk of losing their training investment because apprentices can easily move from one company to another. Thus, the screening benefit of apprenticeship training decreases if other firms can easily hire workers on the external labor market and lay off those who turn out to be a bad match. In such an environment, the training firms need to rely on the possibility to cover their training expenditures by the value of the apprentices' productivity during the training period.

Cost-benefit calculations for Swiss firms that operate in a rather flexible labor market environment showed consistently over the past ten years that an average firm can recoup its training investments already by the end of the training (see Figure). The productive contribution of an apprentice in a typical Swiss



training firm exceeds the training costs (including apprentices' wages) by more than 6,000 Euros per apprenticeship. For a firm to achieve such a net benefit in the short term, it is crucial that apprentices are involved early in productive work processes and that wages of apprentices are rather low compared to wages of skilled workers.

In Germany, the only other country where similar cost-benefit analyses have been conducted over many decades, the average training firm is willing to bear net costs during the training period, apparently because the labor market regulations allow for benefits afterwards. However, with the German labor market becoming more flexible, training firms have adopted changes in their training practices and involve apprentices much more in productive work. This move towards a more production-oriented training policy has resulted in substantially lower net costs of training.

KEY INGREDIENTS FOR A WIN-WIN SITUATION

If work and low pay are crucial to a profitable training provision from the perspective of firms, what's in it for an apprentice? To answer this question, it is important to understand that if firms provided apprenticeship mainly to have access to cheap labor, they would not be successful in attracting talented young school leavers into this type of training (as school leavers would opt for full-time schooling programs instead). The exploitation of apprentices would thus effectively destroy any prospect for a successful apprenticeship training system.

In order to achieve a win-win situation for firms and apprentices alike, it is therefore

important that two conditions are met. Firstly, productive tasks allocated to apprentices have to be of a qualifying nature and an important source of learning. In fact, first empirical evidence from the move of German training firms towards a higher involvement of apprentices in productive work shows that the apprentices' competencies have benefited from this and improved over time.

Secondly, the counter piece to low relative wages has to be a high investment in training from the side of the firm. In Switzerland, e.g., an average training firm invests in within-firm training in the order of one third of the school hours of a typical high-school curriculum. But unlike the learning in a crowded school-classroom setting, training happens mostly in a learner-oriented one-to-one trainer-apprentice configuration.

As long as these essential requirements are met, the apprentice is no longer a cheap worker, but rather a well-paid student – a perspective that would appeal to many talented school leavers.

Main reference: Stefan C. Wolter, Paul Ryan, "Apprenticeship," in Eric A. Hanushek, Stephen Machin, Ludger Woessmann (eds.), *Handbook of the Economics of Education*, Vol. 3, pp. 521-576, 2011.

European Expert Network on Economics of Education (EENEE) Funded by the European Commission, DG Education and Culture



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