

Apprenticeship training and further training within the economic crisis

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Even though the 2008/09 economic crisis had only little effects on the employment and unemployment level in Germany, it might have affected firms' further training and apprenticeship training behavior. From a theoretical point of view, the impact of the business cycle on training is ambiguous. There are reasons for an increase as well as reasons for a decrease of training during an economic downturn (e.g., Sepulveda 2004, Brunello 2010, Muehlemann et al. 2009). On the one side, underutilized capacities reduce the opportunity costs of training which should enhance the incentive to invest in training. Furthermore, business cycle effects can influence the quit rate of (trained) employees. Because exit options usually decrease during a recession, firms should be more willing to invest in training. On the other side, the uncertainty concerning the realization of the returns of training plays an important role. Since the demand for skilled workers is lower during an economic downturn and the future prospects are not clear, it might be expected that the extent of training will be reduced. Even though there are some major differences between apprenticeship training and further training (e.g., concerning the length of the training period, the degree of institutionalization as well as the dismissal protection of apprentices), both can be regarded as market-driven types of education, and it seems to be an important research question if and how both programs were influenced by the economic crisis.

There are a number of empirical studies from different countries investigating the business cycle effects on training and education (see Brunello 2010 for an overview). Most of these studies are focused on apprenticeship training whereas the empirical evidence on the impact of cyclical fluctuations on further training is relatively scarce. While the major part of the studies dealing with apprenticeship training reveals a pro-cyclical association (i.e., declining apprenticeship training activities during an economic downturn), most analyses looking at further training find a counter-cyclical connection (i.e., rising further training activities during a recession). However, we are not aware of any empirical study investigating the effect of the most recent economic crisis on firms' further training and apprenticeship training activities in Germany or elsewhere.

Our paper aims to fill this gap by presenting empirical results on the basis of the IAB-establishment panel, a representative German panel data set with annual information from almost 16,000 establishments. In particular, we analyze the development of the incidence (provision of further training/apprenticeship training yes – no) and the intensity of apprenticeship training and further training (proportion of employees participating in training)

during the recession by using the difference-in-differences method, i.e. by comparing the time trends between firms which were affected by the crisis and those which were not. Thereby, we do not only look at the development of the outcome variables from year 2008 to 2009, but also at the development of the outcome variables from year 2007 to 2008 as well as from 2009 to 2010.

Our empirical results show that there is a strong and significant trickle-down effect for the plants' training activities during the economic crisis, i.e. the establishments reduced their training incidence and intensity from 2008 to 2009 irrespectively of whether they were directly affected by the recession or not. This applies to further training as well as to apprenticeship training. However, we find a stronger effect for the establishments' further training activities than for their apprenticeship training enrolment. This is probably due to dismissal protection of apprentices which hinders the adjustment to short run business cycle fluctuations as it is possible with continuing training.

Looking at the development from 2007 to 2008, we find an increase in the incidence of apprenticeship training in crisis-plants, but no significant differences in the development of the incidence of further training and the intensity of both types of training. After the crisis (from year 2009 to 2010), the incidence as well as the intensity of further training increased significantly in crisis-plants whereas we cannot find any significant changes for non-crisis plants and for apprenticeship training.

Comparing our results to the empirical results presented above, we find differences with respect to the development of further training. These differences are likely to be due to the severity of the most recent economic crisis: If companies expect a relatively short crisis and have positive business expectations, they might have an incentive to hoard their employees and to train them. If the future prospects are uncertain, in contrast, the arguments against training programs should be of a greater importance.

References

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