

How to evaluate case study: Apprenticeships

Statistical approach (SMS level 4)

What was the programme and what did it aim to do?

This study examines the effects of a package of employment policy reforms introduced in Italy in 2003. The reforms liberalised apprentice employment by loosening the requirements for awarding apprentices a training certificate upon successful training completion. Furthermore, the reforms allowed firms to substitute on-the-job training for external training courses, and the maximum age at which apprentices could be hired was raised from 25 to 30. The reforms were implemented at the regional or sectoral level, and some regions and sectors implemented them immediately, while others did so only later or not at all. The reforms were aimed at increasing firms' productivity and employment, notably by increasing labour turnover, which is traditionally low in Italy.

What's the evaluation challenge?

Evaluating the effects of apprenticeship liberalisation is challenging because such reforms are often implemented nationwide – thus making it difficult to find a suitable control group for comparison. Furthermore, if the reforms are implemented selectively, it may be that only regions or sector with specific characteristics get the reforms. If this is the case, then differences in outcomes for firms who got the reforms and firms who didn't may not be due to an effect of the policy, but rather due to differences in the types of firms in regions or sectors who get the reforms.

What did the evaluation do?

The study made use of a source of randomness in firms' exposure to the reforms due to the fact that, as a result of political bargaining by industrial lobbies, the policy was implemented only in specific sectors and regions. The study estimated the effect of the policy by identifying firms who received the reforms simply because they were in regions or sectors that successfully lobbied for liberalisation and comparing them to similar firms who were in non-liberalised sectors or regions.

How good was the evaluation?

According to our [scoring guide](#), methods that exploit a source of randomness can achieve a maximum score of 4 (out of 5) on the Maryland Scientific Methods Scale (SMS). This is because such methods can control for both observable and unobservable differences between treated firms who received support and control firms who didn't. For the method to be well implemented, the source of randomness (in this case, location or sectoral affiliation) must identify firms who received support but were not different in any other way to firms who didn't. Since the reforms were implemented at the regional and sectoral levels, individual firms are unlikely to have influenced the decisions on reform implementation. Thus, the reforms could be regarded as an external "shock" to a subset of firms. The study supported this idea by analysing changes in outcome variables in the time period that preceded the reforms, finding no differences between the treatment and control group. Since the method was well implemented in this evaluation, we score the evaluation at 4 on SMS.

What did the evaluation find?

The main result was that apprenticeship liberalisation increased the number of apprenticeships, and thereby, employment levels and employment growth. Equally important, the study suggests that this led to an increase in firm productivity. Furthermore, the results indicate that the positive effect on

apprentice employment came at the expense of other types of non-permanent employment. The positive productivity effect of the apprenticeship reform was thus potentially due to a higher work effort of apprentices, compared to other temporary staff, possibly because apprentices are motivated by the prospect of higher future wages after completing training.

What can we learn from this?

The results of this evaluation should be interpreted in the context of the broader package of reforms of which the apprenticeship liberalisation was a part. The reforms also included a liberalisation of other temporary work contracts. While the “other” reforms failed to deliver their objectives (according to the same evaluation), the apprenticeship reform seems to have made apprenticeships more attractive to employers, compared to other forms of temporary employment. Thus, it seems that in some circumstances liberalising apprenticeship regulation can achieve higher numbers of apprenticeships, by enabling firms to hire apprentices where they would have otherwise hired other temporary staff. This might also have overall positive productivity and employment effects. However, such liberalisation may have negative effects on training quality, which might have additional (potentially unintended) productivity and employment effects, particularly in the long run.

Reference

Capellari, L., Dell’Arlinga, C., and Leonardi, M. (2012). Temporary Employment, Job Flows and Productivity: A Tale of Two Reforms. *The Economic Journal*, Vol. 122 (562), pp. F-188-F215. [Study 897 from our Apprenticeships Review, available [here](#)]

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