Working Papers on Economics - Costs of training and the demand for apprentices

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Publication Date: Friday, 11 of April 2025 **Abstract**
In this paper, we show that an increase in apprenticeship wages reduces the demand for apprentices. We exploit a natural experiment that provides exogenous variation in apprenticeship wages combined with discontinuities in the eligibility criteria (firms with fewer than 15 employees are not required to train apprentices). Our main results, based on difference-in-discontinuity methods, indicate that increasing apprenticeship wages from 75% to 100% of the national minimum wage leads to a reduction in the demand for apprentices of 83% in non-eligible firms. The intensive margin analysis, which compares the number of apprentices observed for firms with their regulatory target, shows that the rise in training costs also reduces the demand for apprentices in eligible firms. The impact is considerable for large firms (over 250 employees) and for firms that pay low wages, with estimated effects of 28.8% and 48.2%, respectively.

The increase in the cost of training apprentices from 75% to 100% of the national minimum wage in 2014 caused significant cuts in demand. The estimated effect ranges between -0.092 and -0.104 apprentices per establishment, which translates to demand cuts between 74.4% and 83.2%. The implicit elasticity of apprentice demand is between -2.5 and -2.1 in non-mandated companies. In mandated companies, apprentice demand also decreased. The results suggest that the reduction in apprentice demand, following this increase, was between 7,000 and 32,000 depending on the empirical approach used.

Fuente: https://www.banrep.gov.co/en/publications-research/working-papers-economics/costs-training-demand-apprentices