
Firms' engagement with the Apprenticeship Programme

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In the UK there is strong evidence that individuals who acquire an apprenticeship qualification go on to have good labour market prospects, in terms of their earnings and indeed their employability.

This is consistent with international evidence on the high economic value of these qualifications for individuals.

However, in the UK there are insufficient numbers of firms who take on apprentices to meet the demand for apprenticeships from young people (Leitch, 2006; Wolf, 2011).

Given that apprenticeships are valuable for the individual, i.e. they improve individuals' earnings and by implication their productivity, we need to determine why more firms are not willing to engage with the apprenticeship programme.

In this report we explore what types of firms engage with the apprenticeship programme and ask: are there characteristics of firms that make them more or less likely to offer apprenticeships? The aim of the research is therefore to identify whether there are key determinants of firms' engagement with the apprenticeship programme that may be susceptible to policy intervention.

In the second part of the report we also ask whether firms that take on an apprentice have more rapid firm productivity growth. This would of course provide prima facie evidence that apprentices have a direct impact on firm performance. We acknowledge this question is challenging to answer from a methodological perspective and our evidence on this is more tentative.

We used two data sets, namely the National Employers Skills Survey (NESS) and the Annual Business Inquiry (ABI) to undertake the research. The former contains detailed information on a range of skills issues faced by firms and variables measuring their engagement with the apprenticeship programme. The latter provides additional information on the productivity, capital investment and employment characteristics of firms. We linked these two data sets in the secure Virtual Micro Laboratory (VML) enabling us to create a

data set which includes both good measures of firms' engagement with apprenticeship and information on their gross value added.

NESS09 data suggested that 8% of all establishments were offering an apprenticeship at the time they were surveyed in 2009. Not all of these establishments actually had an apprentice at the time of the survey, however, since overall only 4% of establishments reported having an apprentice.

We addressed the following research questions:

What are the characteristics of firms that take on apprentices?

- Larger establishments are more likely to offer apprenticeships than smaller establishments, with establishments with more than 500 employees being the most likely to offer apprenticeships. However, smaller establishments, with fewer than 24 employees, have a higher number of apprentices per 1000 employees than larger establishments.
- This result is not driven by small establishments that are part of larger organisations. We observe the same result of more apprentices per 1000 employees in smaller establishments even when we focus only on single-site establishments.
- Private sector establishments are more likely to offer apprenticeships than charities, local and central government establishments.
- Establishments belonging to the construction sector are the most likely to offer apprenticeships.
- Establishments in all areas of the country are more likely to offer apprenticeships than those in London.

Do firms tend to engage with apprenticeships as a response to facing particular kinds of skills shortages?

- Establishments suffering an external shortage of appropriately qualified skilled trade workers are more likely to engage with apprenticeships. They are more likely to take on new apprenticeship recruits particularly at age 19-24.
- Establishments suffering an internal skills gap amongst skilled trade or personal service workers are more likely to engage with apprenticeships than establishments that do not suffer such internal skill gaps, though they do this by taking on new recruits rather than training existing workers. Establishments with and without an internal skills gap for any other category of workers show no significant difference in their likelihood of engagement with apprenticeship.

Does apprenticeship training replace or complement other forms of training?

- Apprenticeships clearly complement, rather than replace, other forms of training.
- Firms that train also take on apprentices.
- This suggests that deadweight may not be as serious a problem as expected.

Do employers facing different levels of market competition vary in their engagement with apprenticeships?

- Establishments operating in national or international markets are less likely to engage with apprenticeships holding other things constant, particularly for new recruits.
- Hence although large firms are more likely to take on apprentices, where firms face more intense competition, i.e. from national or international firms, they are actually less likely to engage with the apprenticeship programme.

Is engagement with apprenticeships part of an overall business strategy by employers to gain competitive advantage in ways other than cost/price minimization?

- Engagement with apprenticeships does complement other business strategies.
- Being a market leader in product/service development means a firm is more likely to train apprentices.
- Firms that emphasise product/service quality are also more likely to train apprentices.

Is apprenticeship engagement lower in firms at greater potential risk of 'poaching', i.e. at risk of having trained workers that then leave and take their enhanced skills to another firm?

- High rates of worker turnover are associated with lower engagement with apprenticeship, though only for new recruits.
- Firms appear less willing to recruit new workers as apprentices where the risk of poaching may be higher, as might be expected.

Is apprenticeship engagement associated with productivity?

- We found no evidence of a statistically significant relationship between apprentice engagement and establishment productivity.
- This finding holds whether productivity and apprenticeship engagement are measured contemporaneously or with one year time differences, whether productivity is measured in levels or first differences (value-added) and whether apprenticeship engagement is treated as exogenous or endogenous.

- This finding was perhaps to be expected, given the limitations of the research imposed by data availability. In particular, we only have productivity data at most one year after the apprenticeship is observed, and employers typically use apprenticeships as a longer term investment in their workforce.¹ If an individual recorded as an apprentice one year is still an apprentice the following year when the establishment's average productivity is measured, then there is no reason to expect productivity to be higher, and indeed the presence of apprentices who are not fully trained may lower productivity. We might therefore expect an effect of apprenticeships on productivity to emerge only in the longer term.
- Ideally, we would therefore like to observe productivity some years after, once the apprenticeship is fully completed. This is not possible with the available data however.

¹ Identifying sectors with prospects for expanding the number of Apprenticeships (Experian, 2009).
http://www.apprenticeships.org.uk/About-Us/~media/Documents/Publications/Sectors_for_expansion_Apprenticeships_Main_Report.ashx

Additional Information

The full report can be accessed at <http://www.education.gov.uk/publications/>

Further information about this research can be obtained from
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This research report was commissioned before the new UK Government took office on 11 May 2010. As a result the content may not reflect current Government policy and may make reference to the Department for Children, Schools and Families (DCSF) which has now been replaced by the Department for Education (DFE).

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.