Aims and Methodology

This report had the aim of quantifying the wage returns received by individuals who have completed an apprenticeship. Such returns provide information on the value of apprenticeships to employers (assuming wage differences reflect productivity differences), as well as providing information to individuals as to the value of apprenticeships, when they are deciding whether to invest time and money in such programmes.

The methodology involved using data from the Labour Force Survey from 1996-2002, to estimate wage equations that included indicators of successful completion of an apprenticeship amongst their explanatory variables. The analysis also interacted the variable indicating apprenticeship completion with variables indicating acquisition of qualifications, to see whether the obtaining of qualifications increased the value of the apprenticeship (or, equivalently, whether acquiring a qualification through an apprenticeship increased its value).

Key Findings

- The results are heartening for apprenticeships, at least for males. They reveal returns to apprenticeship of around 7 per cent for men. In other words, a man who has completed an apprenticeship can expect to earn on average 7 per cent more than a man who has not, holding personal characteristics and other qualifications held constant. For women, however, there seems to be no gain in wages at all from completing an apprenticeship.

- Turning to the interaction effects between apprenticeships and qualifications, the key finding is that an NVQ qualification at level 3 or above seems to double the return to an apprenticeship, to around 14 per cent. These returns compare quite favourably with returns of 17 per cent to acquiring 2 or more A levels. Thus there are significant rewards on offer to individuals if they complete an apprenticeship and acquire a level 3 vocational qualification. These rewards presumably reflect the gain in value to firms, in terms of higher productivity, from employing such qualified men. This increased productivity can of course also be viewed as beneficial from society's point of view, as well as tackling well-documented skill shortages in the area of technical intermediate skills.
• Looking at the interaction results from the point of view of NVQs rather than apprenticeship, the significant interaction coefficient is also very good news for these qualifications. There appear to be very low or even no returns at all to NVQ qualifications themselves, even at level 3, for men. However, when obtained together with a completed apprenticeship, they receive a 7 per cent return.

• The subsequent analysis in the paper goes on to investigate these effects further, for particular subsets of the population, and always for men, since the returns for women are consistently zero. When the sample is restricted to young men, the results remain very similar, and so the effects identified above are not remnants of old-style apprenticeships from a bygone era. In particular, the importance of NVQ qualifications at level 3 or above for doubling the value of an apprenticeship remains.

• When the sample is split according to prior qualifications obtained at school, then clear differences emerge between those who were successful at school and those who were not, as shown in Figure 1 below. For each school qualification group, the columns show, moving from bottom to top, the wage return to an apprenticeship on its own, the wage return to an NVQ 3 qualification on its own, and lastly, the lightest colour at the top, the additional wage return if the apprenticeship and NVQ 3 qualification are completed together. The figure shows that those men who left school with no qualifications earn good returns to apprenticeship, even when no qualifications are obtained. Similarly, an NVQ 3 qualification yields high returns when obtained on its own. There is no additional gain from combining apprenticeship and NVQs for this group. However, as the level of success at school rises, so it becomes more important for this combination to be made.

• For those men who left school with 5 or more good GCSEs, the total height of their column reveals that acquiring an NVQ 3 qualification through an apprenticeship increases their earnings by 13 per cent. However, most of this wage return is due to obtaining the NVQ 3 and apprenticeship in combination, and if they had been received in isolation, they would have created much smaller wage returns (zero returns to the NVQ 3 qualification on its own, and only a 4 per cent return to an apprenticeship without qualifications). Thus the importance of acquiring a level 3 qualification whilst on an apprenticeship, as described above, is particularly relevant to those who have left school with good qualifications, in order to stand out amongst their peers.
Finally, splitting the sample by industry revealed that apprenticeships without qualifications have more value in manufacturing than in service industries. Formal qualifications as part of an apprenticeship appear to be more important in service sector industries. In particular, an NVQ 3 effect is observed boosting the returns to apprenticeship in the travel agent, post office/telecommunications and public administration industries, as well as, away from services, in the construction industry.

Policy Issues

- This paper therefore found support for the continued use of apprenticeship training, given the healthy returns observed. These returns need to be advertised amongst potential recruits to apprenticeship programmes, in order to make apprenticeship a more attractive option.
- The results also make clear, however, the importance of acquiring qualifications, particularly an NVQ 3 qualification, through the apprenticeship, if the full gain in earnings (and hence productivity) is to be realised. This is particularly important for those who have already acquired good GCSEs at school (who make up much of the market for Modern Apprenticeship).
- However, at present, too few individuals who complete apprenticeships are acquiring level 3 qualifications, and this must be improved
- Looking at the results from the point of view of NVQ qualifications, the positive and significant interaction effects between apprenticeships and NVQ 3 qualifications suggests that embodying such NVQs in formal training structures such as apprenticeship may be a way of making them more valued
by the labour market, in contrast to the disappointing value that has been placed on such qualifications so far.