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# Openness and innovation performance: are small firms different?

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Traditionally, literature on open innovation has concentrated on analysis of larger firms. We explore whether and how the benefits of openness in innovation are different for small firms (less than 50 employees) compared to medium and large ones. Using panel data over a long time period (1994-2008) from Irish manufacturing plants, we find that small plants have on average significantly lower levels of openness, a pattern which has not changed significantly since the early 1990s. However, the effect of ‘breadth’ of openness (i.e. variety of innovation linkages) on innovation performance is stronger for small firms than for larger firms. For small firms (with 10-49 employees) external linkages account for around 40 per cent of innovative sales compared to around 25 per cent in larger firms. Small plants also reach the limits to benefitting from openness at lower levels of breadth of openness than larger firms. Our results suggest that small firms can gain significantly from adopting an open innovation strategy, but for such firms appropriate partner choice is a particularly important issue.