Abstract
This paper presents a model of the life cycle that drives and is driven by R&D. In the model, firms have the option to improve their quality or to invest R&D resources in efficiency gains. Faced with this tradeoff, young firms opt for quality instead of efficiency improvements, whereas more mature firms will do both. This switch is endogenous and depends on past R&D choices. We explore these two hypotheses empirically using a panel of manufacturing industries across six European countries over the period 1980-1997. Our empirical results provide support for the model's predictions.