

The Determinants of High-Tech Versus Low-Tech R&D Investment: Evidence from Testing the Pooling Assumption

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In this paper we test the pooling assumption for the determinants of R&D investment. Most studies consider pooled estimates, but if the parameters are heterogeneous, pooled coefficients will not provide reliable estimates of individual effects. Moreover, pooled coefficients may not even be consistent estimates of the average. For a panel of UK manufacturing industries we find that pooling is valid only for output fluctuations, lagged R&D and real interest rates. Implementing the test results into our model, we find government funding is significant only for low-tech R&D. Skilled labour and foreign R&D matter only in high-tech sectors.

JEL classification: F2, H3, L6, O3

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