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## The Transatlantic Productivity Gap: Is R&D the Main Culprit?

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### Abstract:

The literature has pointed to different causes to explain the productivity gap between Europe and United States in the last decades. This paper tests the hypothesis that the lower European productivity performance in comparison with the US can be explained not only by a lower level of corporate R&D investment, but also by a lower capacity to translate R&D investment into productivity gains. The proposed microeconomic estimates are based on a unique longitudinal database covering the period 1990-2008 and comprising 1,809 US and European companies for a total of 16,079 observations. Consistent with previous literature, we find robust evidence of a significant impact of R&D on productivity; however – using different estimation techniques – the R&D coefficients for the US firms always turn out to be significantly higher. To see to what extent these transatlantic differences may be related to the different sectoral structures in the US and the EU, we differentiated the analysis by sectors. The result is that both in manufacturing, services and high-tech sectors US firms are more efficient in translating their R&D investments into productivity increases.

**Text:** See [Discussion Paper No. 5586](#)



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