Business-Financed R&D verses Government-Financed R&D in OECD Countries

Hao Tran

Both private and public sector in the economy finance R&D activities. This paper will empirically investigate private R&D determinants, particularly the role of international trade as one of the driving forces for innovations in a country. Previous studies often aggregate private and public sector R&D together which may introduce aggregation bias.

I use a fixed effects panel model for 33 OECD countries over the period 1996-2009. The findings show a significant and positive effect of public R&D expenditures on private R&D expenditure with an average elasticity. This is the largest effect among other factors determining private R&D. Exports of manufacturing goods increase private R&D while imports of machine and equipment decrease private R&D. The magnitude of the latter is larger than the former. Hence the evidence shows that technology inflows replace the R&D activities in a recipient OECD country.