AARO HAZAK

Tallinn University of Technology, Estonia

RAUL RUUBEL

Tallinn University of Technology, Estonia

CONTRIBUTION OF R&D SERVICES TO ADDED ECONOMIC VALUE IN ESTONIA

Abstract:

The role and intensity of knowledge within an economy remains a key success factor for long-term economic growth, increased productivity, competitiveness and socio-economic sustainability. These challenges are particularly important for emerging economies that are yet to catch up frontier knowledge economies. This paper seeks to understand the contribution that R&D services have through added economic value to the GDP in Estonia. Based on the most recent supply and use matrices on the data from year 2009, prepared under the input-output framework of Estonian national accounts, we identify to which extent do the R&D services used in the Estonian economy originate from domestic industries and imports, and how the supplies of R&D services are allocated between intermediate and final uses, including exports. As an output of that analysis we identify the direct contribution of R&D services to added economic value in the Estonian economy to be 0.5% and their primary indirect contribution to be 0.4%. Further indirect effects however exist which need to be quantified under our following studies. Vast majority (93%) of the R&D services used in the Estonian economy appear to be of local origin, generated primarily by companies specialising in R&D services. Export capacity of Estonian R&D services appears to be very limited, contributing 0.2% of Estonian total exports. Overall, we identify that a significant progress is yet to be made to catch up with knowledge frontier countries.

Keywords:

R&D services, GDP, supply and use tables, input-output modelling

JEL Classification: L80, C67