

C. Antonelli, A. Gehringer: The cost of knowledge and productivity dynamics: An empirical investigation on a panel of OECD countries

The cost of knowledge differs widely across countries, regions, industries and time. Besides R&D activities and the internal stocks of knowledge, the access and use of external knowledge is a necessary and complementary input into the recombinant generation of new technological knowledge. The access to the external stocks of knowledge occurs at costs below the social value of knowledge. This implies that firms benefit from relevant pecuniary knowledge externalities and have incentive to introduce productivity enhancing innovations. The empirical evidence on 20 OECD countries across the years 1985-2010 confirms that the increase of total factor productivity levels is significantly and negatively associated with the costs of knowledge. Total factor productivity levels thus increase faster where and when the costs of knowledge are lower.