Closing the gap is no free lunch

This article focuses on innovation, human capital, technology transfers and competition as potential sources of productivity growth for firms. It analyses which determinants are most relevant for firms to close the gap with the global productivity frontier. The underlying model integrates the views of existing literature such as the two faces of R&D, the convergence debate and the heterogeneity in productivity levels across firms. It adds two related but important issues to this literature. It explicitly distinguishes convergence to the national frontier from convergence to the global frontier. Moreover, it investigates the impact of competition on productivity growth. Using firm-level data of 127 industries in the Netherlands, the estimated results of our model reveal that technology transfers matter, predominantly from the national frontier. Particularly, investments in own R&D encourages productivity growth through technology transfers from the national frontier. This finding suggests that closing the gap is no free lunch. Competition on Dutch markets plays a role in productivity growth as well, as it encourages firms to produce efficiently and stimulates lagging firms to catch up to the national frontier.

Henry van der Wiel (CPB)[*], Harold Creusen (CPB) and George van Leeuwen (CBS)

Corresponding author: H.P. van der Wiel, CPB Netherlands Bureau for Economic Policy Analysis, email: hvdw@cpb.nl