

# Patent box regimes: Evaluation of *ex post* tax incentives effects on innovating activity

## Abstract in English

The aim of this thesis is to compare the impacts of patent box introduction on R&D and patenting activity with impacts generated by equivalent change in corporate income tax rate in order to evaluate whether the patent boxes in general succeed in targeting the tax benefit efficiently on the R&D fostering. Using OECD country-level data panel consolidated from various sources, incl. the PATSTAT database, three different metrics that altogether capture the overall R&D (i.e. actual innovation generating activity) and patenting (i.e. intangible asset generating activity) situation were defined and computed. The SURE (*Seemingly unrelated regression equations*) estimation method is then used to study those metrics in the context of relevant macroeconomic, R&D and tax indicators, concluding that both, the patent box regime and the statutory corporate income tax rate decline have positive impact on R&D and patenting activity, while the effect issued from a patent box introduction tends to be moderated. Despite a special attention given to the comparison of magnitudes of the actual innovation fostering effect and the patent shifting effect associated with the policy change, the analysis was partially inconclusive on this point. In case of patent box regime, the patent shifting effect seems to be dominant, while in case of statutory corporate income tax rate reduction, the result is ambiguous.

## Key words

IP-box regime / intangible assets / patent / PATSTAT / BEPS / OECD / profit shifting / corporate income tax / R&D / innovation