FACULTEIT ECONOMIE EN BEDRIJFSKUNDE

UNIVERSITEIT GENT

Invitation

You are cordially invited to the public defence to obtain the academic degree of

DOCTOR OF BUSINESS ECONOMICS

by Erik Gjymshana

The effects of tax incentives on corporate innovation: Empirical analyses

Supervisors:
Prof. Dr. Annelies Roggeman
Prof. Dr. Isabelle Verleyen

Friday, 5 September 2025 at 16h00
In the Faculty Board Room, Tweekerkenstraat 2, Campus Tweekerken
Please confirm your attendance no later than 25 August 2025 via erik.gjymshana@ugent.be

EXAMINATION BOARD

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Abstract

There is an established view that R&D leads to technological progress, which in turn stimulates economic growth. Governments around the world have utilized tax policy to promote business R&D for several decades. At first, governments were focused on providing public support primarily through subsidies. Later on, governments of most Western nations have introduced R&D tax incentives such as super deductions for R&D investments, R&D tax credits and intellectual property boxes, also known as patent boxes, designed to complement subsidies. R&D tax incentives have experienced a rise in popularity and a growth in economic literature over the last two decades. The aim of our research is to investigate whether recently introduced R&D tax incentives in OECD countries are successful at promoting business R&D.

In the first study (**chapter 2**) we investigate if the implementation of the nexus element in a country's patent box regime leads to an increase in the level of business R&D. We examine Belgian and French firms within a comparative interrupted time series framework and find that business R&D increases in Belgium, relative to France, after the implementation of the required nexus element in Belgium's patent box regime. This positive effect was more pronounced for MNEs, which seemed to be driving our global results. These findings provide empirical rationale for the OECD's nexus approach as the nexus element helps mitigate harmful tax competition and stimulate local business R&D.

In the second study (**chapter 3**) we explore whether the French R&D tax credit targeted at SMEs is successful at promoting business R&D for this particular subgroup of firms. We investigate its impact by implementing a fuzzy regression discontinuity design and by comparing the level of business R&D of French SMEs with that of larger firms which do not have access to this specific R&D tax credit. The results demonstrate the positive effect on the level of business R&D of French SMEs, which was more pronounced for French SMEs in their growth stage. This positive effect, however, was not sustained throughout the entire sample period.

In the third study (**chapter 4**) we examine the determinants of the choice of input-based tax incentives for R&D in Belgium and investigate the impact of offering multiple input-based tax incentives for R&D on corporate investment in OECD countries. By employing a variety of binary choice models, we find that larger firms, firms with a higher leverage ratio and firms with more cashflow tend to opt for the R&D tax credit. By contrast, more profitable firms tend to opt for the super deduction for R&D investments. Furthermore, we find that offering firms a (mutually exclusive) choice, a combination of two input-based tax incentives for R&D or, surprisingly, no input-based tax incentive for R&D lead to a higher level of corporate investment.

The studies in this doctoral dissertation add to the economic literature on the impact of R&D tax incentives on corporate innovation and contain important policy implications with regard to super deductions for R&D investments, R&D tax credits and patent box regimes.

Curriculum vitae

Erik Gjymshana (°1990) obtained his Master's degree in Business Administration, with a specialisation in Accountancy, from the Catholic University of Leuven (KU Leuven). Prior to the start of his PhD journey, he worked for a number of years as an accountant and an economist. In 2018, he joined the Department of Accounting, Corporate Finance and Taxation at Ghent University (Faculty of Economics and Business Administration) as a PhD student and teaching assistant. The first and second studies of his dissertation have received revise and resubmit decisions by peer-reviewed scientific journals. Erik has presented his research at several (inter)national conferences, including the 43rd, 45th and 47th Annual Congress(es) of the European Accounting Association (2021, 2023 and 2025) and the 9th edition of the Annual Mannheim Taxation Conference (2022).