EXECUTIVE SUMMARY

Requested by the FISC subcommittee

European Parliament

Tax incentives and investments in the EU

Best practices and ways to stimulate private investments and prevent harmful tax practices

Policy Department for Economy and Growth
Authors: Jost Henrich HECKEMEYER, Katharina NICOLAY, Christoph SPENGEL, Daniela STEINBRENNER, and Sophia WICKEL
Directorate-General for Economy, Transformation and Industry
PE 772.636 – May 2025

ABSTRACT

This study evaluates the effectiveness of tax incentives, with a particular focus on incentives for research and development (R&D). It analyses different design options for tax incentives and shows that input-based R&D tax incentives appear to be the most effective in stimulating additional R&D investment. Taking into account the lessons learnt from empirical evaluations and the restrictions imposed by Pillar Two, refundable, volume-based tax credits with a broad scope remain a convincing way forward for R&D tax incentives.

The present document is the executive summary of the study on "Tax incentives and investments in the EU: Best practices and ways to stimulate private investments and prevent harmful tax practices". The full study can soon be downloaded at:

https://www.europarl.europa.eu/committees/en/fisc/supporting-analyses/latest-documents

Background

Governments offer tax incentives to correct market failures and promote economic growth through increased innovation, investment, and employment. Moreover, tax incentives are strategically used to attract mobile capital in a competitive international environment while maintaining higher taxes on less mobile factors, thus safeguarding domestic tax revenues. Despite the intended positive impacts on economic activity, tax incentives may also have undesirable consequences, especially in an integrated market like the European Union (EU). Rather than stimulating overall economic activity, tax incentives may reflect a beggar-thy-neighbour policy, designed to induce the relocation of mobile economic activity and/or income rather than to increase overall levels of investment. Boundaries for the design of tax incentives are therefore set by regulations addressing harmful tax practices as well as by the global minimum tax.

Aim

The study aims to evaluate the effectiveness of tax incentives within the EU, focusing particularly on incentives for research and development (R&D). The scope of the study covers an extensive analysis of both input-based incentives, such as tax credits and super deductions, and output-based incentives, including intellectual property (IP) box regimes. Its main objectives include assessing the impact of these incentives on private investment decisions, innovative activity in particular, as well as examining their compatibility with international tax regulations, specifically the OECD's global minimum tax rules under Pillar Two. On that basis, the study identifies best practices in designing and implementing these incentives to effectively stimulate private investment while minimizing risks such as aggressive tax planning and harmful tax competition.

Key Findings

1 The empirical literature provides robust evidence that input-based R&D tax incentives (e.g. tax credits, super deductions) effectively stimulate additional R&D investment by reducing after-tax costs. More specifically, a 10% decrease in the cost of R&D through input-based tax incentives can increase R&D spending by approximately up to 10% in the long-term. The impact is particularly strong when incentives are refundable or specifically accessible to small and medium-sized enterprises (SMEs) and start-ups, primarily due to their tighter financial constraints. On the other hand, the empirical evidence on the effectiveness of output-based R&D tax incentives in the form of so-called Intellectual Property (IP) box regimes is mixed. While they were originally criticised for encouraging profit shifting and providing limited additional R&D stimulus, recent evidence highlights the potential of well-designed IP boxes under the modified nexus approach to retain high-value IP, encourage commercialisation, and support domestic innovation ecosystems. Still, concerns about their effectiveness remain as potential benefits tend to be concentrated among large multinational enterprises (MNEs) and increases in patent applications may be accompanied by a decrease in patent quality.

2 Despite generous policy frameworks, incomplete uptake of R&D tax incentives remains a key challenge. Even in countries with mature R&D tax systems, many eligible firms, particularly SMEs, fail to claim available support, moderating the overall effectiveness of these incentives. Addressing awareness and accessibility barriers should therefore be a priority for policymakers seeking to maximise the impact of (input-based) R&D tax incentives.

3 With the introduction of the global minimum tax (Pillar Two), policymakers must carefully assess how the various R&D tax incentives interact with this complex legal framework. Since Pillar Two imposes a 15% minimum effective tax rate (ETR) on large companies, tax incentives risk being neutralised or even reversed by top-up taxes as soon as the critical ETR is undercut. An important criterion in the impact analysis is therefore the extent to which the advantage conferred by a tax incentive affects the ETR. It turns out that output-based incentives (IP boxes), which have full impact on the ETR due to the implied tax rate reductions, are at a high risk of being neutralised by Pillar Two. Meanwhile, the effectiveness of input-based incentives depends strongly on their specific design. Refundable, volume-based tax credits are more robust and likely to remain effective under Pillar Two.

4 Against this background, it is essential to examine best practices for designing compelling and sustainable R&D tax incentives under Pillar Two. To maximise their effectiveness, R&D tax incentives should be targeted at fostering activities associated with positive spillovers and additionality while minimising windfall gains. A well-balanced incentive design should incorporate broad eligibility, targeted scope, simplicity, timely liquidity, and streamlined administration to maximise its impact. Among the available instruments, volume-based R&D tax credits are regarded as best practice for delivering input-based support, as they directly reduce the tax liability based on qualifying R&D expenditure while minimising uncertainty and administrative burdens for taxpayers. To grant liquidity to taxpayers as directly as possible, tax credits that may be credited against payroll withholding taxes (PWHT) or social security contributions (SSC) are highly effective. Even under Pillar Two, volume-based tax credits that are refundable within four years and have a broad scope remain a best practice.

5 Interestingly, a comparison of R&D tax incentives across EU Member States reveals that no single country fully meets all identified best practice criteria. However, several countries have adopted key elements that serve as models. To enhance the effectiveness of R&D tax incentives while ensuring fairness, efficiency, and alignment with international frameworks like Pillar Two, governments should strive to incorporate these best practices into their policy design.

6 Despite the positive impact on R&D activity, R&D tax incentives can have unintended consequences, especially in an integrated region like the EU. Rather than increasing global R&D investment, R&D tax incentives can increase the risk of beggar-thy-neighbour policies, i.e. shifting R&D activities across borders rather than expanding the overall level of global R&D investment. These cross-border distortions are particularly pronounced among MNEs operating in geographically proximate countries. Larger MNEs with significant R&D operations are especially responsive, as the benefits of tax planning scale with firm size, while implementation costs remain relatively fixed.

Disclaimer and copyright. The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament. Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy. © European Union, 2025.
© Image on cover page used under licence from Adobe Stock.
Administrator responsible: Jost ANGERER Editorial assistant: Mina DRAGANSKA
Contact: ecti-poldep-a@europarl.europa.eu

This document will soon be available on the internet at: www.europarl.europa.eu/supporting-analyses
IP/A/FISC/2024-58
Print ISBN 978-92-848-2705-3 | doi:10.2861/2337592 | QA-01-25-090-EN-C
PDF ISBN 978-92-848-2704-6 | doi:10.2861/2233489 | QA-01-25-090-EN-N