

FISC Committee of the European Parliament: “The role of tax incentives and exemptions in the framework of the reform of corporate taxation and in the promotion of European economies competitiveness” - Introductory Statement

What do we know about the economic and fiscal effects of tax incentives? Are they effective in raising national and global economic activity? How do they impact tax revenue collection? How does minimum taxation under Pillar 2 impact the effectiveness of tax incentives?

Tax incentives are tax provisions granted to qualified investment projects or firms. They offer a favorable deviation from the general tax code and are provided by national – or in some instances also by subnational – governments. They come in different forms: tax holidays, preferential tax rates, special tax deductions or tax credits. Their goal is either to foster the emergence of economic activity more broadly or to serve specific policy goals, e.g. to foster the green transition. Tax incentives are commonly justified along two lines.

The first is that they correct for market failures. Prime examples are tax incentives for R&D activity and green investments. When companies decide how much to invest in R&D, they plausibly ignore the positive impact that these investments have on society as a whole - through knowledge spillovers to other firms and individuals in the economy. Many companies, especially smaller ones, moreover, have trouble accessing funds for R&D projects as future income does not serve as a collateral and asymmetric information on project success may shy off investors. For both reasons, private sector innovation investments can be inefficiently small from a social perspective.

A similar line of arguments applies for “green” investments. Environmental pollution harms society as a whole, and this negative externality is not accounted for by the polluting firms and households.

R&D tax incentives can rectify corporate underinvestment in R&D by reducing firms’ effective tax costs and increasing liquidity. Tax incentives for green investments, analogously, foster the transition to green production technologies and help economies to achieve their ambitious goals to reduce CO₂ emissions in the years to come.

Next to correcting for market failures, tax incentives also serve the goal to attract internationally mobile firms, capital investments and workers. A broad literature

documents that capital is internationally highly mobile; recent studies show that the same, to an increasing extent, holds true for high-skilled workers.

Are tax incentives effective in fostering economic activity? Which type of activity is attracted? The answer, to some extent, depends on the design of the tax incentive schemes. Targeted tax incentives that grant special deductions or tax credits – e.g. for capital investment, R&D or environmentally friendly production technologies – offer several advantages: They directly incentivize the desired activity; the tax benefit is only granted when firms invest in capital, R&D or environmentally friendly production technologies respectively. And they foster investment when companies are credit-constrained. Tax holidays are fiscally more costly but provide particularly strong investment location incentives for - not liquidity constrained - highly profitable (multinational) firms.

Empirical evidence supports these considerations. Tax holidays and income tax exemptions are costly means to attract investment. Their bang-for-the-buck of tax credits and accelerated depreciation allowance tend to be substantially higher. International organizations like the IMF thus recommend developing countries to rely on the latter schemes and to gear incentives toward export-oriented sectors and mobile capital. In general, tax incentives do not work in each and every context. Their impact is stronger if less developed countries offer stable institutions, good governance structures and infrastructure. See e.g. IMF (2015). Recent studies e.g. find that special economic zones (targeted at the export industry) tend to be effective means to foster local economic development (see e.g. Galle et al. 2022).

Along similar lines, a growing empirical literature documents that R&D tax incentives significantly increase firms' R&D spending. A recent survey paper by Nick Bloom, John von Reenen and Heidi Williams summarizes existing estimates to suggest that a tax-induced drop in the price of R&D by 10 percent results in at least a 10 percent increase in R&D in the long run (Bloom et al. 2019). Patenting, productivity, and jobs also increase when the scope of R&D tax subsidy schemes becomes larger. The latter responses emerge with a lag.

There are a number of caveats to keep in mind and to possibly address in the design of the schemes if feasible. The first is that tax incentives come with windfall gains to economic agents. Firms also obtain a tax break on so-called inframarginal investment, i.e. on investment that they would have undertaken anyway. What is more, there are incentives by agents to relabel activity such that it becomes eligible for the tax incentive. Firms may e.g. relabel spending as R&D in order to make it eligible for R&D tax incentives. Estimates on the quantitative importance of such relabeling are still rare. A recent paper on an R&D tax subsidy in China suggests that, on average, relabeling accounts for 24.2% of the reported R&D (see Chen et al. 2022).

Another complication is that we live in a global world and part of the social benefits related to the corporate activity for which the tax incentive is granted – e.g. research and development investment or the transition to green production technologies – does not accrue domestically but abroad. If R&D tax incentives are set at the national level – or subnational –level, the generosity of the tax credit is inefficiently small from a global perspective as each government ignores the positive spillovers of its incentives on other jurisdictions. Work in progress by Raabe et al. (2022) documents that these externalities are quantitatively relevant.

Complementarily note that tax incentives, to the extent that they attract internationally mobile activities, are beggar-thy-neighbor instruments. Even if the incentives are instrumental in raising firm investments in the policy-changing country, this increase in investment activity may come at the expense of foreign jurisdictions when economic activity

is simply relocated across borders. Countries then have incentives to retaliate and the resulting tax competition erodes countries' ability to tax the mobile base.

Note that, in recent years, tax competition has also emerged in tax bases other than the corporate tax. Most prominently, more and more countries have recently enacted tax incentives in the context of the personal income tax, which grant special low tax rates to high-skilled and/or high-income foreigners that migrate to a country. Recent empirical evidence suggests that the location choice of corporates and high-skilled individuals responds sensitively to taxes, see, for example, Akcigit et al. (2016), Akcigit et al. (2018), Knoll et al. (2021).

The fiscal externalities on other countries induced by these tax provisions, in fact, make a strong case for coordinating tax policy at the supra-national level. Joint decisions of governments on tax incentives would account for policy spillovers across countries and thereby allow policymakers to implement socially optimal tax incentives.

The OECD's Pillar 2 provision is a notable step in the direction of international tax coordination. If the Pillar 2 agreement effectively constrains detrimental tax competition behavior is not clear though. First of all, we do not know yet, which countries will eventually adopt Pillar 2. The provisions are only a common approach - that means, countries committed to using the Pillar 2 rules if they opt for a minimum tax.

Even if Pillar 2 rules should be broadly adopted, it does not apply to all firms and all income. For firms within the scope of the regulations, there are substance-based income exclusion rules, that is only *excess profits* are subject to the minimum tax. Given that firm activity in less developed countries is often of low-productivity nature, I would expect that rather little of their income is above the excess profit threshold. As, moreover, only large companies fall within the scope of Pillar 2 in first place, countries, even with Pillar 2, have incentives to engage in tax competition to attract out-of-scope income and businesses to their borders.

The Pillar 2 provisions, moreover, also explicitly allow for tax competition in certain dimensions. If countries grant "qualified refundable tax credits", e.g. tax credits for R&D or green investments, the calculation of the effective tax rate under the Pillar 2 provisions is adjusted such that the tax credit does not result in top-up taxation. Tax incentives that shift the timing of tax payments, e.g. accelerated tax depreciation allowances, also trigger no top-up taxation, as the rules apply deferred tax accounting, so additional taxes in the future are accounted for in the calculation of companies' effective tax burden.

One can look upon these exemptions in two ways: The first follows the OECD, which argues that these exemptions are important as they allow countries to incentivize desired economic activity like R&D or green investments or to use accelerated tax depreciation for fiscal stabilization in economic downturns. The other perspective is that these rules leave room for countries to engage in detrimental competition for internationally mobile investments and low effective tax burdens on corporate income will prevail.

Summarizing, the economic and fiscal effects of tax incentives are complex. Understanding these effects is of key importance for policymakers to make informed decisions on policy options. This requires sound empirical evaluations by independent academic researchers. In many countries, including my own home country Germany, access to administrative firm level data is still incomplete. The same holds true for many other countries, in particular in the less developed world. Evidence-based decision-making requires providing external researchers access to tax administrative data and build the analytical tools and skills for researchers - also in the global South - to engage in effective policy evaluation.

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