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# Taxing the Digital Economy in the EU

Since the start of the year, the European Commission has once again been working on introducing a digital levy. As stressed by researchers at ZEW and the University of Mannheim in a new position paper, it is no doubt important to adapt the fiscal framework to the digital economy and new business models. However, they suggest considering the value-added tax for digital services rather than introducing measures that will distort competition.

In 2018, the EU Commission wanted to adopt a unified position in favour of a digital levy in order to overcome the challenges of taxing the digital economy. A consensus on this issue has not been reached to date. Since 2018, several EU Member States have used the proposal as a template for national reforms. At the beginning of 2021, the EU Commission once again took up the process to develop a stable regulatory and fiscal framework, proposing three options for taxing digital enterprises.

#### Revival of the digital levy

The EU Commission is currently considering a digital levy, that is, a tax on income gained from certain digital activities in the EU. This kind of tax on gross profits could increase the complexity of the tax system, distort competition, and impair the position of EU Member States in international tax competition. In addition, it is questionable whether a digital levy would contribute to sustainable public finances. The estimated annual additional tax income from the digital levy in the amount of about 3.9 to 5 billion euros would be a drop in the bucket compared to the total 2019 tax income in all 28 EU Member States of more than 6.6 trillion euros. According to the EU Commission, the digital levy will be concentrated on activities "where there is a large gap between the value created and Member States' ability to tax it." However, such selectivity will impair the development of innovative business models and deter firms from new forms of value creation.

The European Commission has also proposed a surcharge on the corporate income tax of all firms that conduct digital activi-

ties in the European Union. Such a surcharge would do little to ensure sustainable tax revenues in the EU. Furthermore, it would contradict current incentives for innovative activities. This is because an increase in the corporate tax rate would only be effective if it were assessed at the place of value creation. However, one of the greatest challenges in the digital economy is that taxes are paid in jurisdictions divergent from the place of value creation. Currently, only a small portion of the profits are declared by EU subsidiaries. Many EU Member States offer incentives for research and development activities by taxing profits from innovative activities at a lower rate, such as revenue from patents or licensing fees. Any increase in the corporate tax rate would reverse the impact of the patent-box regime.

Yet a third proposal by the European Commission is to tax digital transactions between firms inside the EU. However, differentiating transactions according to business partner, consumer, or firm would increase the complexity of corporate tax system while also raising the cost of digital services. In addition, a tax on digital transactions would resemble the digital levy if it is applied to the gross transaction price. Consequently, firms will try to avoid it by leaving the EU and serving European consumers from outside Europe. All three proposals are currently on hold as G20 members have reached agreement on global tax reform.

#### Alternatives to secure tax income from digital services

Notably, the value-added tax has been largely ignored in the current discussion as a means of taxation. Yet billions in tax revenues are at stake if excise taxes are improperly levied. In this way, an adjustment of the value-added tax framework and the application of the value-added tax to digital services could be a crucial factor for generating and ensuring tax revenues in EU Member States.

The ZEW policy brief can be downloaded at: www.zew.de/PU82588-1

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## Q&A: Is Climate Neutrality Possible Based on Carbon Pricing? **"Carbon Pricing Has the Potential to Influence Economic Behaviour"**

Fighting climate change is an enormous challenge. To avert potentially catastrophic global warming the EU intends to become climate neutral by 2050. Among other measures, carbon pricing is anticipated to play a key role. In this interview, Professor Sebastian Rausch, head of the ZEW Research Department "Environmental and Ressource Economics, Environmental Management", explains how greenhouse gas emissions can be reduced in market economies.

#### What is the potential impact of carbon pricing?

In market economies, prices have important coordinating and incentive functions. Prices provide information about scarcity and the value of goods and services. In the same way as any price, a carbon price has the potential to influence economic behaviour and guide decision-making. Carbon prices remind economic actors that the atmosphere is a scarce commodity, and they influence market behaviour accordingly.

### How well does the current European Emissions Trading System (ETS) function?

Seen solely from the perspective of emissions reductions, the ETS has been a success story to date. The objectives set for reducing emission have been met and the cost burden for firms has stayed relatively small. From a long-term perspective, however, low certificate prices have been a target of criticism. To date, price levels have not been high enough to stimulate innovation and investment, which are necessary to meet long-term objectives. In the second trading phase, for example, prices remained quite low over many years. As a result, reforms were implemented to increase certificate prices. The current phase includes a Market Stability Reserve that uses a rules-based approach to keep the volume of emissions certificates within a predetermined range. This mechanism will need to be further developed in the future. Clearly, an emissions trading system must be able to respond to changing market conditions while also offering reliable price signals and a sound basis for longterm planning.

#### What is the aim of the carbon border adjustment?

Free trade between countries can thwart the effectiveness of ambitious climate policy if measures are only implemented in certain countries or regions. If the EU proceeds with climate protection and levies a high carbon price on European firms, in the long term, these firms will shift production to locations where emissions cost nothing.

For this reason, the European Union is considering underpinning its climate protection policy through a carbon border adjustment. The idea is that the EU could soon impose a carbon tax on the importation of certain goods to its economic area, specifically targeting importation from countries with less stringent climate policy standards.

Does introducing a border adjustment entail any problems?

On the one hand, a border adjustment only combats one part of the 'carbon leakage' problem that results from companies shifting their production of carbon-intensive goods abroad. Another shift in emissions occurs through changes in prices and the demand for fossil fuels in the global energy markets. If a large region reduces its demand for oil, gas, and coal, this lowers prices in global markets. Lower prices make it cheaper for other countries to burn fossil fuels. The resultant rise in foreign emissions may eat up any reductions in domestic emissions.

Another problem is that a carbon border adjustment must include a consideration of the differences in CO<sub>2</sub> prices between different countries that already have carbon pricing. Otherwise, there is the risk of assigning different prices to imported and domestic emissions. Differences of this kind would create disincentives for foreign firms while also distorting competition. A fundamental problem is that a carbon border adjustment would only reflect national differences in carbon pricing. As we know, climate policy is much more wide-ranging: even an optimally designed border adjustment mechanism would be incapable of levelling distortions to competition that might result from regulatory interventions, such as standards for renewable energy in the power sector.



#### Prof. Dr. Sebastian Rausch

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focuses on the evaluation of economic policy measures and the design of emissions and energy markets to mitigate climate change and design sustainable energy systems. Rausch conducts research at the interface of environmental and energy economics, public economics, and computational economics, with interdisciplinary links to technology-oriented energy system analysis and environmental sciences. sebastian.rausch@zew.de

# How Can Corporate Tax Burdens Be Compared Internationally?

Public debt levels have skyrocketed as a result of the COVID-19 crisis. In order to bridge the massive financing gaps in public budgets, policymakers are shifting their focus of attention on corporate taxation. However, corporate tax rates differ greatly in international comparison. In this interview, Daniela Steinbrenner explains how the Mannheim Tax Index can be used to determine and compare the effective tax burden for companies across countries.

### What does the Mannheim Tax Index do?

The Mannheim Tax Index is an indicator for the effective tax burden at company level. More specifically, it benchmarks various countries from a tax perspective. In doing so, it provides a comprehensive overview of the tax landscape by tracking two general strands, i.e. the taxation of domestic companies along with their shareholders, and cross-border corporate investment. Analysing the tax burden for companies is a traditional way of comparing the fiscal attractiveness of regions that compete with one another internationally. The Mannheim Tax Index includes all European Member States, the United Kingdom, Norway, Northern Macedonia, Turkey, Switzerland, Canada, the USA, and Japan. However, the index does not focus on a specific industry, but maps the country-specific tax burden for a model company whose fixed assets consist equally of industrial buildings, acquired intangible assets (patents), machinery, financial assets, and inventories.

#### How is the index calculated?

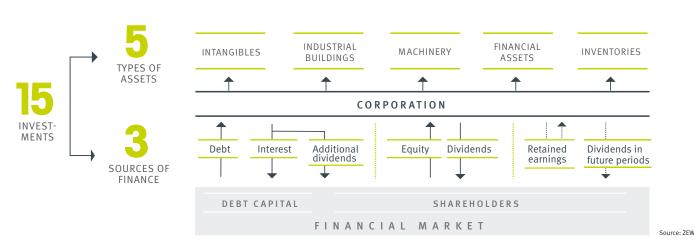
The Mannheim Tax Index maps the effective tax burden of a company for a hypothetical investment project, based on current tax regulations. Thereby, we take into account the most important national regulations that apply to the taxation of corpo-

rate profits in the respective location. In addition to the statutory corporate tax rates and their surcharges as well as special rates for certain types of income and expenses, these also include the most important types of taxes on assets, e.g. property taxes. The most important rules for determining the tax base, such as regulations on tax depreciations, the valuation of inventories as well as the deductibility of interest in the case of debt financing are also taken into account. At ZEW we have experts for the respective tax systems of each country and match our research with the auditing firm PWC. To obtain country-specific details, we send a questionnaire to all local PWC offices in the countries we map. Finally, all data are entered into a database and software developed at ZEW to calculate the results.

#### What are the key results of the latest index?

Germany as one of the most important European countries for foreign direct investment continues to lose ground in international tax competition. A comparison with France, Italy, the United Kingdom and the EU average shows that the tax burden for companies in Germany is relatively high. Only France has a slightly higher tax burden. However, if we take into account the tax reforms announced by its direct competitors, Germany will soon take over the top position in terms of taxing corporate profits. If tax reforms fail to materialise, this could exacerbate the persistently high burden on investments in Germany in the coming years and jeopardise its current midfield position in the ranking of tax burdens among comparable large industrialised nations, provided they continue to actively participate in tax competition.

Further information on the index: www.zew.de/WS1475-1 Daniela Steinbrenner, daniela.steinbrenner@zew.de



#### A MODEL ENTERPRISE AND INVESTMENT PROJECT ALLOWS FOR COUNTRY COMPARISONS