

A Progressive Excess Profits Tax for the European Union

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Executive Summary

- This report proposes a new progressive excess profit tax (PEPT) for the European Union. Our proposal taxes excess profits at:
 - an additional 20% rate for 'base' excess profits – profits between a rate of return of 10% and 15%
 - and an additional 40% rate for 'super' excess profits – profits above a rate of return of 15%
- This PEPT design would raise an additional €126 billion in 2022 on top of existing corporate tax revenues. This is equivalent to roughly 0.8% of the EU's GDP or about 1.6% of total government expenditure by EU member states. This translates to €280 for every EU citizen.
- EU member states could levy the PEPT as they have the necessary tools, information and legal authority to collect taxes, with coordination at the European level.
- Our proposal limits tax avoidance: firms are taxed based on where they generate sales, not where they are legally registered, limiting their ability to shift profits to low-tax jurisdictions to avoid the tax.
- Our proposal should not reduce investment as firms can still make 10% returns on their assets without facing any extra taxes.
- Even if global coordination is not possible, we show that a PEPT can be unilaterally implemented by the EU.

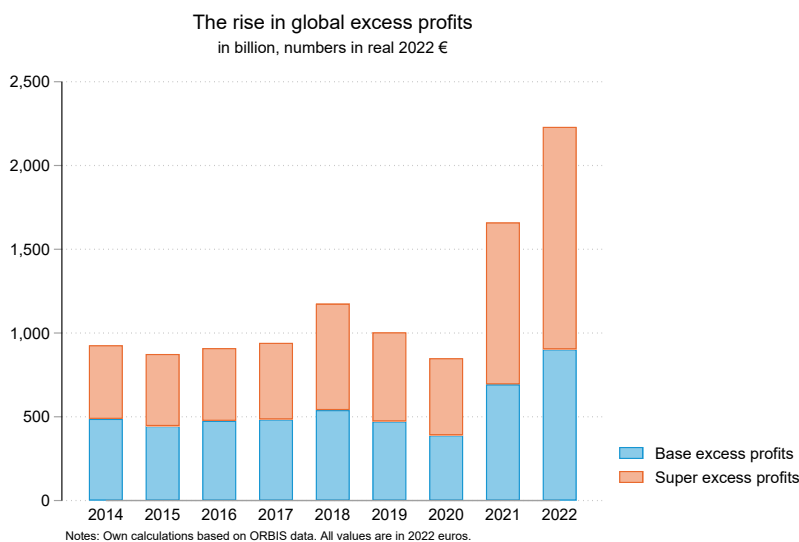
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1 Introduction

Excess profits are currently at historically high levels. In 2014, global excess profits were just under €1 trillion (see figure 1). Following the COVID-19 pandemic and the Russian invasion of Ukraine, excess profits had more than doubled to over €2 trillion in 2022. Such a boom will exacerbate wealth inequality, given that the top 10% own more than 86% of total net financial assets (Allianz Group Economic Research, 2022). Moreover, Europe currently faces an interlocking and cascading series of crises, from the climate emergency to an ageing population, all of which require increased investment. For example, an additional €620 billion of investments annually will be needed to hit green transition targets between 2023 and 2030 according to the EU Commission (Reuters, 2023), with further investments necessary to fund the demographic transition and elevate social infrastructure (see similar proposals by Onaran, Oyvat, and Fotopoulou, 2023; Oyvat and Onaran, 2022; Onaran, Oyvat, and Fotopoulou, 2022). This report proposes a new progressive excess profit tax (PEPT) to meet both these challenges, raising funding for public investment alongside tackling rising inequality.

Figure 1: Global excess profits 2014-2020. Base excess profits are returns between 10% and 15% of total assets. Super excess profits are profits above 15% return on total assets.



Throughout history, excess profit taxes have played a major part in tackling crises, for instance during the First and Second World Wars (Hebous, Vernon, and Prihardini, 2022). In 1941, the US raised as much as 22% of their total tax revenues from excess profit taxes to fund the war effort, with tax rates reaching 95% to limit inequality. While ad hoc windfall taxes are being implemented across the continent today (Enache, 2023), this report looks back to this history of excess profit taxes to set out a new, progressive and comprehensive

proposal.

We argue that excess profits across all sectors of the economy should be taxed progressively, i.e. the more profits a firm makes, the higher the tax rate it has to pay. This idea is very common in income taxation: most countries tax wages – labour income – progressively, but do not tax corporate profits the same way. Our proposal is to abandon this unequal treatment and introduce three tax bands for profits: the existing corporate tax rate for ‘normal’ profits, an additional 20% for ‘base’ excess profits and an additional 40% for ‘super’ excess profits. We define excess profits as profits above a normal rate of return on total assets (above 10%). Base excess profits are profits between a rate of return of 10% and 15% and super excess profits are profits above a rate of return of 15%. These excess profits, both base and super, would be taxed in addition to existing corporate taxes.

In line with EU legislation, we suggest that member states should levy the tax, but the implementation should be coordinated and consolidated at the EU level. The proposal applies a destination-based principle which means that member states tax profits where sales are generated. Our estimations are based on firm-level data which cover both listed and unlisted firms worldwide with an operating revenue above €80 million.

This PEPT design would raise an additional €126 billion in 2022 on top of existing corporate tax revenues. This is equivalent to roughly 0.8% of the EU’s GDP or about 1.6% of total government expenditure by EU member states. This translates to €280 for every EU citizen.

There are three key benefits to this proposal. Firstly, to our knowledge, it is the first excess profit tax proposal to argue for progressive tax rates in the EU. As can be seen in figure 1, much of the increase in excess profits that we see over the last two years is due to an increase in super excess profits, i.e. returns above 15% of total assets. Introducing a progressive tax is one way to redistribute this. Secondly, it tackles tax avoidance. Firms will not be incentivised to leave the EU or shift profits to subsidiaries in low-tax jurisdictions, as all firms, regardless of where they are located, are taxed according to the destination-based principle. Lastly, the effect of the tax on investment is also likely to be limited, given that firms can make substantial returns (up to 10%) without facing any extra tax burden - well above most other opportunities available to investors.

This report is structured as follows: in section 2, excess profits, our PEPT proposal and the destination-based principle are explained. Section 3 covers data and measurement issues. In section 4, we present the revenue estimations and discuss how the tax burden is distributed geographically and across sectors. Section 5 discusses some practical concerns of implementing a PEPT and section 6 concludes.

2 Taxing excess profits progressively - our proposal

2.1 What are excess profits?

In our current economic system, firms make profits as a return on their investment in capital. In most cases, firms do not receive the same profits year after year: profits tend to vary, depending on industry, macroeconomic and policy environment and demand for a firm's products or services. For this report, we define excess profits as the returns that a company makes over and above a normal 10% return on its assets following a recent study by the International Monetary Fund (Hebous, Vernon, and Prihardini, 2022):

$$\Pi_{\text{excess}} = \Pi_{\text{total}} - \Pi_{\text{normal}} \quad \text{if } \Pi_{\text{total}} \geq \Pi_{\text{normal}} \quad (1)$$

where Π_{excess} are excess profits, Π_{total} are total profits and Π_{normal} are normal profits. This equation only holds if a firm actually has excess profits, i.e. $\Pi_{\text{total}} \geq \Pi_{\text{normal}}$. If normal profits are smaller than our definition of excess profits, then a firm does not generate excess profits. By definition, equation 1 is the same as

$$\Pi_{\text{excess}} = \Pi_{\text{total}} - 0.1 * A_{\text{total}} \quad \text{if } \Pi_{\text{total}} \geq 0.1 * A_{\text{total}} \quad (2)$$

where 0.1 is the 10% threshold for a 'normal' rate of return and A_{total} are total assets, i.e. all assets a company lists on its balance sheet. This includes all assets, regardless of whether they are funded by debt or equity. Assets are relevant for the creation of profits since, economically, an asset is a resource or item, tangible or intangible, that is expected to generate a benefit for its owner. In our case, we assume assets are generating income (profits) for the firm as the owner.

We assume profits as normal up until 10% of total assets, following the allowance definition of Hebous, Vernon, and Prihardini, 2022. While setting a normal rate of return is always a normative and to some extent political question, we choose the 10% rate given that it is relatively high compared to the definitions historical excess profit taxes were based on, for example, 6% in Germany and 8% in Italy in 1915 (*ibid.*). A 10% normal return is also generous compared to 5% rate of return on Foreign Direct Investment in the EU (Eurostat, 2023); the current yields on government bonds in the Eurozone; and the roughly 7% cost of capital as defined by Barkai, 2020.¹

Some firms may generate extremely high returns that warrant particular consideration. We define these very high returns as *super* excess profits. Again, choosing a cutoff for this is a normative and political question, but for the sake of this report, we define super excess profits as returns above 15% to total assets. This effectively decomposes excess profits into

¹The cost of capital is the weighted average of the debt cost of capital and the equity cost of capital, weighted by market value of debts and equities of the economy. It aims to capture the true costs of investing, including opportunity costs. Barkai, 2020 estimates are for the US but similar estimates should apply to the EU

two parts: super excess profits (above a 15% return) and base excess profits (between a 10% and 15% return):

$$\Pi_{\text{excess}} = \Pi_{\text{base excess}} + \Pi_{\text{super excess}} \quad \text{if } \Pi_{\text{total}} \geq \Pi_{\text{normal}} \quad (3)$$

To better understand these definitions, consider an example of a firm with €500 million in total profits and €1,000 million in total assets. Following equation 2, the firm makes €400m in excess profits as:

$$\Pi_{\text{excess}} = 500m - 0.1 * 1000m = 500m - 100m = 400m$$

which can be decomposed into €350 million of super excess profits, i.e. where profits are above 15% of total assets:

$$\Pi_{\text{super excess}} = 500m - 0.15 * 1000m = 350m$$

and €50 million of base excess profits, i.e. where returns are between 10 and 15% to total assets:

$$\Pi_{\text{base excess}} = \Pi_{\text{excess}} - \Pi_{\text{super excess}} = 400m - 350m = 50m$$

2.2 What is a progressive excess profit tax?

Our progressive excess profit tax (PEPT) proposal taxes excess profits at increasingly progressive rates, similar to existing income tax systems. We propose two tax rates for base and super excess profits in addition to existing corporate taxation:

- Base excess profits are taxed at an additional 20%
- Super excess profits are taxed at an additional 40%

More formally, under a new PEPT a firm would face the following tax bill

$$T = \underbrace{\Pi_{\text{total}} \times t_c}_{\text{corporate tax}} + \underbrace{s_{EU}(\Pi_{\text{base excess}} \times 0.2 + \Pi_{\text{super excess}} \times 0.4)}_{\text{additional PEPT}} \quad (4)$$

where T is a firm's tax bill, Π_{total} are the total global profits of the firm, $\Pi_{\text{base excess}}$ are the global base excess profits made between 10% and 15% returns, $\Pi_{\text{super excess}}$ are the global super excess profits made above 15% returns, s_{EU} is the share of global sales that a company

makes in the EU and t_c is the current corporate tax rate of the country where the firm is headquartered.²

There are two crucial features of this PEPT. First, the PEPT is applied in addition to existing corporate taxes. The reason for this is to not infringe on the autonomy of member states to decide their own corporate tax rates. The ‘corporate tax’ part of the equation is what the firm currently pays on its total profits under the existing system while the ‘additional PEPT’ is the extra tax the firm will pay due to the PEPT. This means that a firm’s base and super excess profits will be taxed at both the existing corporate tax rate plus the additional PEPT rates. For example, if current corporate tax rates are 20% ($t_c = 0.2$), the firm will pay a total rate of 40% on its base excess profits (20% + 20%) and a total rate of 60% on its super excess profits (20% + 40%). This is why we refer to PEPTs as an additional tax throughout this report. Second, the PEPT is applied to all firms with excess profits, regardless of whether they are located in the EU or not. However, the share of global sales s_{EU} generated in the EU determines the portion of global excess profits that is being taxed, as discussed in more detail in section 2.3.

To see how the PEPT works, consider again the above example where a firm with €1,000 million in total assets makes €500 million in total profits, of which €350 million are super excess profits and €50 million are base excess profits. Assume that the firm is headquartered in Spain, which in 2022 had a corporate tax rate of 25% ($t_c = 0.25$). Furthermore, assume that 80% of the company’s global sales are made in the EU ($s_{EU} = 0.8$). Following equation 4, the firm faces a total tax bill of €245 million, of which €125 million comes from existing corporate taxes, and €120 million from the additional PEPT:

$$245m = \underbrace{500m * 0.25}_{\text{corporate tax}=125m} + \underbrace{0.8(50m * 0.2 + 350m * 0.4)}_{\text{additional PEPT}=120m}$$

Spain levies the tax for the entire share of profits apportioned to the EU since the firm is already being taxed in Spain anyway. This is to reduce bureaucracy and to create clear guidelines for firms. Non-EU firms are taxed by each EU member state according to the share of their sales in that member state.

2.3 Avoiding tax avoidance

One potential issue with implementing a new PEPT is the risk of tax avoidance. Since the 1970s, multinational corporations have increasingly shifted a large share of their profits to low-tax jurisdictions (Wier and Zucman, 2022). Tørsløv, Wier, and Zucman, 2023 estimate that 36% of the profits of multinationals are shifted to tax havens globally under the current corporate tax system.

²We define ‘headquartered’ as the jurisdiction where a firm is incorporated or registered, and, consequently, where it books its profits.

We tackle the issue of tax avoidance with a destination-based principle to taxation, following the approaches of François et al., [2022](#) and Hebous, Vernon, and Prihardini, [2022](#). The destination-based principle apportions a share of global excess profits of non-EU headquartered firms to the EU, based on the firm's share of global sales to the EU. For instance, under our PEPT proposal, if a UK energy firm has 15% of its sales in the EU, then EU member states would tax 15% of the excess profits of this firm. If the firm generates 5% in sales in Romania and the remaining 10% in Bulgaria, Romanian and Bulgarian authorities tax 5% and 10% of excess profits, respectively. This differs from the current system of corporate taxation which generally taxes profits based on the legal residence of a firm. However, destination-based principles of taxing corporate profits are shown to significantly limit tax avoidance (Auerbach, Keen, and Vella, [2017](#); Devereux, Auerbach, et al., [2020](#)). A similar destination-based principle to taxing corporate profits has been adopted by the OECD in Pillar I of its 2021 Inclusive Framework agreement, which was reached by 137 countries (OECD, [2022](#)).

A PEPT with a destination-based principle can be implemented by the EU unilaterally, with member states collecting the tax (see section [5.5](#)). Introducing a PEPT unilaterally, the EU might create incentives for other countries to adopt such a tax themselves (see section [5.4](#) for further details).

Crucially, our PEPT proposal overcomes the debt bias that currently exists in many corporate tax systems (De Mooij, [2012](#)). Most countries allow corporate income tax deductions for interest expenses but do not implement similar deductions for equity, thereby favouring debt-financed over equity-financed investments. Assume our firm from above invests €100 million in additional production capacity. Under current corporate tax regimes, the firm would be better off financing this investment by taking out additional debt and paying interest for it, say 10% p.a. Most countries would allow for the €10 million interest expenses, or a portion of that, to be deducted from the corporate tax base. However, if the €100 million investment is financed via equity, no similar deductions are usually applied. Therefore, our firm has an incentive to finance investment with additional debt. Not only could this be considered undesirable for efficiency reasons, but incentivising corporate debt also comes at the cost of increased financial risk and instability. Our PEPT proposal considers the total assets of a firm (financed by either debt or equity) when computing tax allowances as shown in our example above. Consequently, there is no incentive for firms to use debt over equity to increase their tax allowance. Models similar to the one proposed here are sometimes aptly referred to as 'allowance for corporate capital' (ACC) models since they allow for a normal rate of return on total assets (De Mooij, [2012](#); Hebous, Vernon, and Prihardini, [2022](#)).

3 Data and measurement

The main data set for this report consists of firm-level data from ORBIS (Bureau van Dijk), downloaded on 11 October 2023. ORBIS is a database covering listed and unlisted firms globally. ORBIS includes information from firms' balance sheets and annual reports. We include listed and unlisted firms from around the world with an operating revenue (turnover)

of €80 million (roughly \$100 million) in any of the years between 2014 and 2022 for our PEPT revenue estimations.³ For 2022, this includes 46,538 firms, of which 14,230 made excess profits. From ORBIS, we use the following variables in this report: *Operating Profit (Loss)/Earnings Before Interest and Taxes (EBIT)* as the profit variable, *Total Assets*, and *Operating Revenue (Turnover)* as the sales variable. We exclude firms with mainly missing observations. This limits the number of observations and results in conservative figures for our revenue estimations.

In addition, we use OECD Country-by-Country (CbC) reports to allocate the share of sales of foreign-headquartered firms to a country destination. As discussed in section 2.3, our PEPT proposal adopts a destination-based principle, whereby firms are taxed at their sales destination. However, allocating sales using the consolidated firm data from ORBIS is not possible. A viable workaround involves using OECD CbC reports, which enable us to allocate the share of sales of multinational firms to a country destination. These reports are currently available for the years 2016-2018 and we use 2018 as the base year for the destination-based allocation.⁴ Drawing on country-level data from the CbC reports, we can apportion firm profits to sales destinations.

The CbC database covers 47 domicile countries (where multinationals are registered). If data for a domicile country outside of the EU are missing, we allocate 10% of sales to the EU following a recent study by EU Tax Observatory (François et al., 2022). If we do not have data for a domicile country inside the EU, we assume it makes 70% of its sales within the EU. This is the average share of sales to the EU by an EU country).⁵ Figure 5 in the appendix shows EU headquarter countries and breaks down the share of sales from these countries' firms in the EU. Figure 6 shows the shares of sales from non-EU headquartered firms to the EU.

4 Revenue potential of a PEPT

This section presents revenue estimations for a PEPT model which taxes base excess profits at 20% and super excess profits at 40%. Super excess profits are profits above a 15% return to total assets. Base excess profits are profits between a 10% and 15% return.

³Excluding firms below an operating revenue of €80 million does not substantially alter revenue estimations. We found that the data quality for many of these smaller firms was poor and therefore excluded them from our analysis.

⁴Under BEPS Action 13, all large multinational enterprises (MNEs) are mandated to prepare a CbC report, supplying data on their global allocation of income, profit, taxes paid, and economic activity among the tax jurisdictions in which they operate. Essentially, every multinational company with a consolidated group revenue of at least €750 million is already obliged to file a CbC report. The most recent set of aggregated and anonymised data from CbC reports was released in November 2022 and includes information on the global tax and economic activities of around 7,000 multinational companies, headquartered across 47 jurisdictions and operating across more than 100 jurisdictions worldwide.

⁵CbC reports are not available for Bulgaria, Cyprus, Czechia, Estonia, Croatia, Hungary, Ireland, Malta, Portugal, Slovakia.

Table 1: Revenue estimates for a progressive EPT

EPT revenue	Progressive model
€ Billion	126
% of EU GDP	.8
% of Total Gov. Expenditure	1.6
Per EU Citizen	282

Notes: This model has a progressive design with a 20% tax rate on excess profits between 10 and 15% of firm assets and a 40% tax rate for excess profits above 15%.

Table 2: Where are firms subject to the PEPT domiciled?

Residence of firms	Contribution to EPT, in € bn	Contribution to EPT, in %
United States	21.2	16.8
France	13.4	10.6
Luxembourg	12.5	9.9
Denmark	7.1	5.6
United Kingdom	7.1	5.6
Netherlands	6.6	5.2
Norway	6.4	5.1
Germany	5.7	4.5
Poland	4.5	3.5
Italy	4.3	3.4
Other countries	37.4	29.7

Own calculation based on OECD CbC Report 2018 and ORBIS.

4.1 How much could a PEPT raise?

In 2022, the proposed PEPT model generates €126 billion, i.e. roughly 0.8% of EU GDP or about 1.6% of total government expenditure by EU member states. This translates to €280 for every EU inhabitant if the revenues from the tax were fully and equally redistributed to households. Table 1 presents the revenue estimations for the PEPT.

4.2 Which countries pay the PEPT?

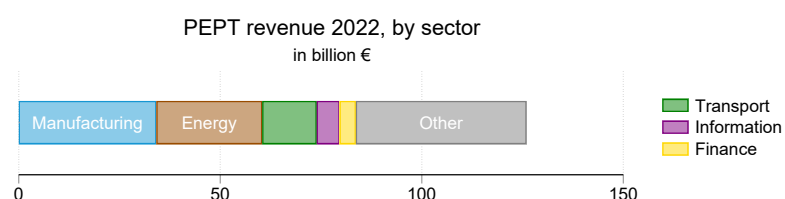
While the majority of revenues in our proposal are generated from EU firms (56.2%), a significant amount of revenues come from non-EU firms including US firms (16.8%) or UK firms (5.6%). Looking at excess profits, table 2 breaks down the distribution of sales, and hence excess profits, by firms' country of residence. This comes from the destination-based principle of taxation as discussed in section 2.3.

If the tax was only implemented for EU-domiciled firms, taxing 100% of their excess profits but 0% of non-EU domiciled firms, the PEPT would raise €118 billion, a similar number as our destination-based PEPT (see table 1). However, this figure disregards potential response behaviours. Since such a design would incentivise firms to change their domicile country, the destination-based principle is likely to raise more revenues for the EU.

4.3 Which sectors pay the PEPT?

A sector-level analysis shows that the bulk of PEPT revenues in 2022 come from firms in the energy and manufacturing sectors (see figure 2). The manufacturing sector accounts for 27.1% of PEPT revenues in the EU, and energy for 18%. Notably, the transport sector accounts for 10.7%, the information and communication sector accounts for 4.5%, and finance for 3.2%, with the remaining 36.4% spread out across an array of sectors. We provide details on sector-specific PEPT revenues across our three models in table 3 in the appendix.

Figure 2: The bulk of EU excess profits come from manufacturing and energy



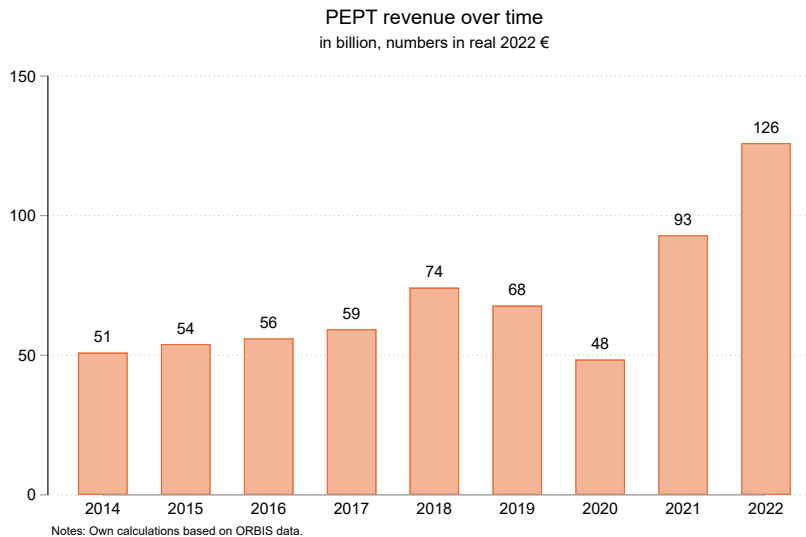
4.4 How do PEPT revenues change over time?

As discussed in the introduction, the last few years have seen relatively high excess profits in the energy sector, due to the COVID-19 pandemic, the Russian invasion of Ukraine and rising interest rates. On the one hand, this makes a PEPT more important than ever to prevent these excess profits from exacerbating existing inequalities. On the other hand, the revenues generated in 2022 may not be as high in the future – depending on potential future shocks.

Figure 3 demonstrates the development of potential PEPT revenues since 2014 had they been implemented in the past. While, clearly, the 2022 revenue is extraordinarily high, most previous years would have resulted in substantial EU-level tax revenues, too. This closely corresponds to the pattern we can see in figure 1: both base and super excess profits were lower in 2020 than in previous years, resulting in a lower potential tax revenue for the first COVID-19 year. Super excess profits were particularly high in 2022, generating an extraordinarily large tax revenue potential.

Furthermore, the distribution of excess profits across sectors also fluctuates over time as can be seen in figure 4. While various sectors, in particular the energy sector, had a substantial increase in excess profits in 2022, high excess profits in manufacturing and finance persist in all periods.

Figure 3: Progressive excess profits tax revenue over time



5 Discussion and practical concerns

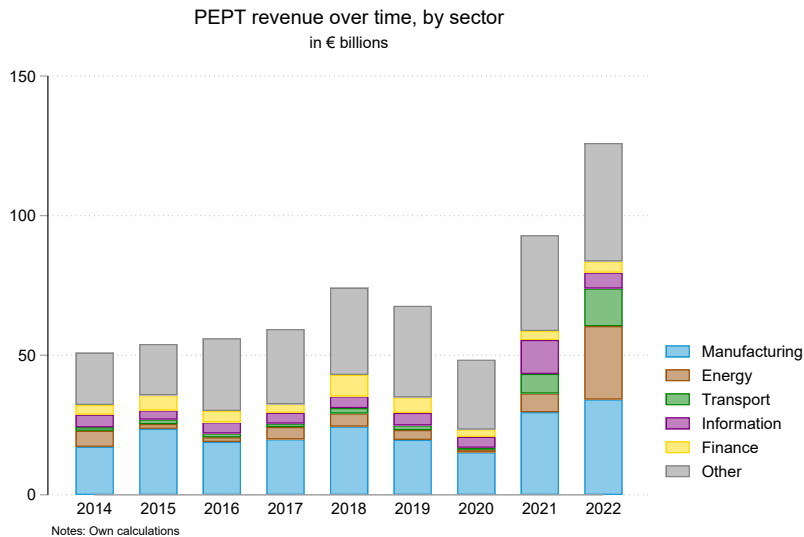
Taxing excess profits frequently sparks debate and is often viewed as infeasible. In this section, we address some practical concerns of implementing a PEPT.

5.1 Limited overall effects on investment

A central concern about PEPTs is how they might alter investment behaviour. However, our proposal should have a limited effect on overall investment for four reasons.

First, firms can make substantial returns (10%) without facing any extra tax and face a reduced additional tax rate of 20% for base excess profits between 10% and 15% returns to total assets. Only extreme super excess profits above 15% returns to total assets are taxed at a higher additional 40% rate compared to traditional corporate taxation. As discussed in section 2.1, 10% is well above the returns that investors could otherwise make in the market, i.e. their opportunity cost. Under neoclassical economic assumptions, firms invest if the marginal return of a new investment project exceeds the economic costs of the project, including the opportunity cost. As long as the normal rate of return is above the opportunity cost to the firm, the PEPT should not influence the firm's investment decision. Put another way, an investor would still invest in a project with guaranteed returns of 10% despite the PEPT, because 10% is a relatively high return on investments compared to other opportunities. This point has been made in various leading theoretical and empirical contributions including Boadway and Bruce, 1984; Devereux and Freeman, 1991; Hebous and Ruf, 2017; Keen and King, 2005; International Monetary Fund, 2016; Mirrlees et al., 2011. Moreover,

Figure 4: PEPT revenue over time, by sector



as a firm's allowance increases with the accumulation of new assets, the PEPT should not limit a firm's growth.

Second, while microeconomic evidence on the impact of excess profit taxes on investment is limited, funding public investment with a PEPT is likely to expand both output and employment at the macroeconomic level. Recent research shows that public investment in the green and the care sectors increases output and employment (Onaran, Oyvat, and Fotopoulou, 2023). At the same time, raising corporate taxes has been shown to have an inconclusive impact on growth (Gechert and Heimberger, 2022). Taking these together, the overall impact is likely to be expansionary. Moreover, a PEPT can reduce inflation if revenues are transferred to workers to stabilise their disposable income, thereby reducing wage-push pressures on prices (Wildauer et al., 2023).

Third, certain sectors with positive spillovers, for example, research and development initiatives or green investments, could receive cost-based tax incentives (including accelerated depreciation allowances and income tax credits) should there be any concern about declining investments. While we expect the 10% normal allowance to be sufficiently high to maintain viable investments in most sectors, cost-based tax incentives can be easily implemented. The literature suggests that these incentives are more effective and efficient compared to simply reducing corporate tax rates or granting exemptions from the PEPT (Alstadsæter et al., 2018; European Commission, 2014).

Fourth, our PEPT proposal is not biased towards debt-financed over equity-financed investments. Existing corporate taxes provide tax deductions for interest expenses but do not provide similar benefits for equity-funded assets (De Mooij, 2012; Hebous, Vernon, and

Prihardini, 2022). This incentive for firms to accumulate high corporate debt might be conducive to systemic risk and instability in financial markets (Minsky, 1975). Our proposal overcomes the debt bias inherent to most corporate tax systems as total assets are treated the same in determining each firm's excess profits, regardless of whether assets are funded by equity or debt.

5.2 Excess profit taxes can be permanent

One of the benefits of this PEPT proposal is that it can be implemented reliably on a more permanent basis, as it is based on a stable and predictable definition of excess profits. This definition differs, for instance, from the proposal by European Commission, 2022, which defines excess profits as those surpassing average firm profits over the past four years. Such a definition will be greatly impacted by business cycle dynamics. Following a boom, very high profits may not be seen as excess profits, as the boom brings up the average profit of the last four years. The inverse is true for recessions. The timing and choice of the definition can therefore have a significant impact on which firms would have to pay the tax, in a way that is hard to predict. Such uncertainty may potentially disrupt investment decisions, particularly when the sectors covered by these taxes are decided on an ad hoc basis (European Commission, 2023).

A permanent, comprehensive PEPT across all sectors does not require politicians and policymakers to identify profitable sectors or firms episodically in response to crises. Given the frequency of global economic disruptions, which is likely to rise with increasing climate breakdown, windfall profits may continue. It is therefore crucial for policymakers to establish a transparent strategy on how these profits will be taxed, ensuring greater transparency and predictability. If permanently implemented, our proposal reduces financial unpredictability for firms.

Temporary PEPTs also suffer from what is known as 'gold-plating' (International Monetary Fund, 2012; Hebous, Vernon, and Prihardini, 2022). If a firm expects a temporary PEPT to end on a given date, it has an incentive to bring forward as much of its investment as possible, thereby reducing its profits and increasing its allowance during the PEPT period. While this may increase investment today, it could lead to a reduction of investment in the future and reduce tax revenues due to intertemporal profit shifting.

5.3 Excess profit taxes should be progressive

Our proposal suggests taxing excess profits progressively, i.e. the higher the profits of a firm compared to its total assets, the higher the additional tax rate it has to pay. Progressive corporate taxation is not very widespread in most industrialised countries, with the exception of the United States. The US levied progressive corporate income taxes until it was abolished by the 2017 Tax Cuts and Jobs Act.

There are two reasons to aim for a progressive taxation of excess profits and corporate income more generally.

Firstly, a PEPT can help limit rising inequality. Asset ownership is highly concentrated amongst the very wealthiest in society as discussed in the introduction. Taxing corporate income progressively, e.g. via a PEPT, targets this concentration. Given the rising super excess profits over the last two years, a PEPT would tackle this effect on wealth inequality more effectively than a simple excess profit tax. Firms however may respond to a PEPT not by reducing payouts to shareholders, but by suppressing wages. Yet recent research by Gale and Thorpe, [2022](#) shows that, even if a part is indirectly rolled over to workers, excess profit taxes tends to target high income workers above low income ones. A PEPT will therefore likely still limit inequality even when it is passed on to workers.

Secondly, corporations can be used by individuals to avoid personal income and wealth taxes. For example, a very wealthy person whose wealth is tied up in a company can decide to forego dividends and therefore limit their tax bill, despite the fact that the person has control over these economic resources and derives benefits and well-being from it. As Warren Buffett famously stated, this is why he pays a lower tax rate than his secretary despite being one of the wealthiest people in the world (CNN, [2013](#)). A PEPT is one way to tax this income – an alternative option would be to tax directly the wealth of individuals with a progressive wealth tax (Tippet, Wildauer, and Onaran, [2021](#)).

5.4 The EU could do it alone

In an ideal world, an excess profit tax framework like the one proposed in this report would be globally coordinated, for example, as is being negotiated within the OECD's Pillar 1 of the mentioned 2021 Inclusive Framework (OECD, [2022](#)). However, it is possible for the EU to unilaterally impose a PEPT on all global firms that sell in the EU, regardless of their legal residence or headquarters. In fact, by introducing a PEPT unilaterally, the EU might create incentives for other countries to adopt such a tax themselves. As Saez and Zucman, [2022](#) point out, the destination-based approach is one way to encourage other countries to introduce a similar tax themselves: If a Japanese firm with €400 million of global excess profits generates 20% of its sales in the EU, and the EU accordingly determines the tax base at €80 million, Japan might be incentivised to adopt a PEPT itself on EU firms, rather than allowing EU countries to be the sole benefactors of PEPTs (Saez and Zucman, [2022](#); Saez and Zucman, [2019](#)). A unilateral implementation of the destination-based principle proposed in this report might, however, not be in accordance with tax treaties. A tax would therefore have to be carefully designed in order to comply with existing legislation (Hebous, Vernon, and Prihardini, [2022](#)) or require an adaptation of the latter.

5.5 Member states levy the tax

This report proposes a PEPT for the EU as a big internal market. Nonetheless, the EU as a political union of 27 member states and its institutions cannot impose nor collect taxes, neither legally nor practically. Member states are politically independent and can determine their own taxation of corporate income. However, taxation or similar frameworks can be agreed upon and facilitated at the EU level even if they are being collected by the member states. For example, the solidarity contribution of the energy sector was recently agreed upon at the EU level (Council of the European Union, 2022) and the European Commission is currently proposing the Business in Europe: Framework for Income Taxation (BEFIT) to harmonise the taxable base for multinational companies across the EU (European Commission, 2023). Furthermore, the tax could be facilitated and coordinated via an EU directive (following Article 115 of the Treaty on the Functioning of the European Union). In that case, member states would implement the PEPT through national legislation but are bound by the directive.

Effectively, the PEPT will be collected by the tax authorities of the member states. All the information to administer the tax is already being collected, allowing tax authorities (and firms) to calculate the PEPT without great additional resource requirements. Most firms above a certain size file annual balance sheets where total assets are listed. National tax authorities should also have access to the necessary sales information of firms in order to apportion excess profits to domestic revenues. This follows the spirit of François et al., 2022 and should become even clearer should the currently proposed BEFIT framework be adopted (European Commission, 2023).

6 Conclusion

Based on the findings of this report, we recommend that the EU implement a progressive excess profit tax (PEPT). Excess profits should be taxed progressively just like income is taxed progressively in most countries. To do this, we propose three corporate tax bands and rates:

- the existing corporate tax rate for 'normal' profits – profits for normal rates of return of up to 10% of total assets
- an additional 20% for 'base' excess profits – profits between a rate of return of 10% and 15%
- and an additional 40% for 'super' excess profits – profits above a rate of return of 15%

This PEPT design would raise an additional €126 billion in 2022 on top of existing corporate tax revenues. This is equivalent to roughly 0.8% of the EU's GDP or about 1.6% of total government expenditure by EU member states. This translates to about €280 for every EU citizen.

The proposal applies a destination-based principle that apportions profits from both EU and

non-EU firms according to sales made in the EU. Even if global coordination is not possible, we show that the PEPT can be unilaterally implemented by the EU. Member states should coordinate implementation and the European Commission could assist that, e.g. by proposing a directive under article 115 of the Treaty on the Functioning of the EU.

Our proposal addresses two major concerns with excess profit taxes: tax avoidance due to profit shifting and negative impacts on investment. By using a destination-based principle, firms will be less able to shift profits to low-tax jurisdictions to avoid the tax. Regarding the effects on investment, firms' willingness to invest should not be affected as they can make up to 10% returns before the PEPT kicks in, particularly as 10% is well above the returns that could otherwise be made in the market. Moreover, the overall impact of a PEPT, combined with extra public investment, is likely to expand both output and employment.

We see several avenues for further research and policy work. Firstly, collecting comprehensive data on beneficial ownership, in the form of a wealth register, would provide policymakers with the toolkit to understand who ultimately pays the PEPT (i.e. the tax incidence) to help administer and understand the impacts of the tax. Secondly, further work should evaluate the treatment of firms generating negative excess profits, i.e. losses. In order to remain truly neutral to investment decisions, a PEPT would need an uplift equal to the normal rate of return or a refund of the tax value of losses/profits over time. Such a feature has yet to be implemented in the proposed models but should be considered in future work.

If faced with political inertia, the recent explosion of excess profits will inevitably lead to a rise in wealth inequality across Europe. Given the already extreme concentration of financial assets, excess profits will end up in the pockets of the very wealthiest Europeans. At a time when we require ever greater investment to address the climate emergency and the crisis in our care systems, our PEPT proposal puts forward a feasible and necessary path for a fairer, more resilient and equitable Europe.

References

- Allianz Group Economic Research (2022). *The last hurrah. Allianz Global Wealth Report*. Tech. rep. Allianz Group.
- Alstadsæter, Annette et al. (Jan. 2018). "Patent boxes design, patents location, and local R & D". In: *Economic Policy* 33.93, pp. 131–177. ISSN: 0266-4658. DOI: [10.1093/epolic/eix021](https://doi.org/10.1093/epolic/eix021). eprint: <https://academic.oup.com/economicpolicy/article-pdf/33/93/131/23744629/eix021.pdf>. URL: <https://doi.org/10.1093/epolic/eix021>.
- Auerbach, Alan J., Michael Keen, and John Vella (2017). "Destination-based cash flow taxation". en. In: *SSRN Electron. J.*
- Barkai, Simcha (2020). "Declining Labor and Capital Shares". In: *The Journal of Finance* 75.5, pp. 2421–2463. ISSN: 1540-6261. DOI: [10.1111/jofi.12909](https://doi.org/10.1111/jofi.12909). (Visited on 09/19/2023).
- Boadway, Robin and Neil Bruce (1984). "A general proposition on the design of a neutral business tax". In: *Journal of Public Economics* 24.2, pp. 231–239. ISSN: 0047-2727. DOI: [https://doi.org/10.1016/0047-2727\(84\)90026-4](https://doi.org/10.1016/0047-2727(84)90026-4). URL: <https://www.sciencedirect.com/science/article/pii/0047272784900264>.
- CNN (2013). *EBuffett says he's still paying lower tax rate than his secretary*. URL: <https://money.cnn.com/2013/03/04/news/economy/buffett-secretary-taxes/index.html>.
- Council of the European Union (2022). *COUNCIL REGULATION (EU) 2022/1854 of 6 October 2022 on an emergency intervention to address high energy prices*. URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R1854> (visited on 09/25/2023).
- De Mooij, Ruud (2012). "Tax Biases to Debt Finance: Assessing the Problem, Finding Solutions". In: *Fiscal Studies* 33.4, pp. 489–512. ISSN: 01435671, 14755890. URL: <http://www.jstor.org/stable/24440192> (visited on 09/30/2023).
- Devereux, Michael P., Alan J. Auerbach, et al. (2020). *Taxing Profit in a Global Economy*. Oxford University Press.
- Devereux, Michael P. and Harold Freeman (Aug. 1991). "A general neutral profits tax". en. In: *Fiscal Studies* 12.3, pp. 1–15.
- Enache, Cristina (2023). *What European Countries Are Doing about Windfall Profit Taxes*. Windfall taxes collection. URL: <https://taxfoundation.org/data/all/eu/windfall-tax-europe-2023/>.
- European Commission (2014). *A Study on RD Tax Incentives. Final report*. Tech. rep. European Commission. URL: https://ec.europa.eu/futurium/en/system/files/ged/28-taxud-study_on_rnd_tax_incentives_-_2014.pdf.
- (2022). *Proposal for a Council Regulation on an emergency intervention to address high energy prices*. Tech. rep. European Council. URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2022:473:FIN>.
- (2023). *REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the review of emergency interventions to address high energy prices in accordance with Council Regulation (EU) 2022/1854*. Tech. rep. European Commission. URL: https://energy.ec.europa.eu/system/files/2023-06/COM_2023_302_1_EN_ACT_part1_v2.pdf.

- Eurostat (July 2023). *Globalisation patterns in EU trade and investment*. URL: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Foreign_direct_investment_-_rates_of_return.
- François, Manon et al. (2022). *A Modern Excess Profit Tax*. Tech. rep. EU Tax Observatory. URL: https://www.taxobservatory.eu/wp-content/uploads/2022/11/EU-Tax-Observatory_Note_A-Modern-Excess-Profit-Tax_November-2022-2.pdf.
- Gale, William G. and Samuel I. Thorpe (2022). "RETHINKING THE CORPORATE INCOME TAX: THE ROLE OF RENT SHARING". In: *Tax Policy Center (Urban Institute & Brookings Institution)*. URL: <https://www.brookings.edu/wp-content/uploads/2022/05/Rethinking-the-Corporate-Income-Tax-Formatted.pdf>.
- Gechert, Sebastian and Philipp Heimberger (2022). "Do corporate tax cuts boost economic growth?" In: *European Economic Review* 147, p. 104157. ISSN: 0014-2921. DOI: <https://doi.org/10.1016/j.eurocorev.2022.104157>. URL: <https://www.sciencedirect.com/science/article/pii/S0014292122000885>.
- Hebous, Shafik and Martin Ruf (Dec. 2017). "Evaluating the effects of ACE systems on multinational debt financing and investment". In: *Journal of Public Economics* 156, pp. 131–149.
- Hebous, Shafik, Nate Vernon, and Dinar Prihardini (Sept. 2022). "Excess Profit Taxes: Historical Perspective and Contemporary Relevance". In: *IMF Working Papers* 2022.187, p. 1. ISSN: 1018-5941. DOI: [10.5089/9798400221729.001](https://doi.org/10.5089/9798400221729.001). (Visited on 08/14/2023).
- International Monetary Fund (2012). *Fiscal Regimes for Extractive Industries—Design and Implementation*. Tech. rep. IMF Policy Paper. URL: <https://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Fiscal-Regimes-for-Extractive-Industries-Design-and-Implementation-PP4701>.
- (2016). *Tax Policy, Leverage and Macroeconomic Stability*. IMF Policy Paper. Tech. rep. International Monetary Fund. URL: <https://www.imf.org/external/np/pp/eng/2016/100716.pdf>.
- Keen, Michael and John King (Feb. 2005). "The Croatian profit tax: an ACE in practice". en. In: *Fiscal Studies* 23.3, pp. 401–418.
- Minsky, Hyman P. (1975). *John Maynard Keynes*. Columbia University Press.
- Mirrlees, James et al. (2011). *Tax by Design. The Mirrlees Review*. Oxford University Press.
- OECD (2022). *OECD/G20 Inclusive Framework on BEPS. Progress report. September 2021 – September 2022*. Tech. rep. Organisation for Economic Co-operation and Development. URL: <https://www.oecd.org/tax/beps/oecd-g20-inclusive-framework-on-beps-progress-report-september-2021-september-2022.pdf>.
- Onaran, Özlem, Cem Oyvatt, and Eurydice Fotopoulou (2022). "A Macroeconomic Analysis of the Effects of Gender Inequality, Wages, and Public Social Infrastructure: The Case of the UK". In: *Feminist Economics* 28.2, pp. 152–188. DOI: [10.1080/13545701.2022.2044498](https://doi.org/10.1080/13545701.2022.2044498). eprint: <https://doi.org/10.1080/13545701.2022.2044498>. URL: <https://doi.org/10.1080/13545701.2022.2044498>.
- (Aug. 2023). "Can wealth taxation fund public investment in a caring and sustainable economy? The case of the UK". In: *Cambridge Journal of Economics* 47.4, pp. 703–724. ISSN: 0309-166X. DOI: [10.1093/cje/bead026](https://doi.org/10.1093/cje/bead026). eprint: <https://academic.oup.com/cje/>

- [article-pdf/47/4/703/51333455/bead026.pdf](#). URL: <https://doi.org/10.1093/cje/bead026>.
- Oyvatt, Cem and Özlem Onaran (2022). “The effects of social infrastructure and gender equality on output and employment: The case of South Korea”. In: *World Development* 158, p. 105987. ISSN: 0305-750X. DOI: <https://doi.org/10.1016/j.worlddev.2022.105987>. URL: <https://www.sciencedirect.com/science/article/pii/S0305750X22001772>.
- Reuters (2023). *EU needs over 760bln/yrtohitgreentransitiontargets – Commission*. URL: <https://www.reuters.com/sustainability/climate-energy/eu-needs-over-760-blnyr-hit-green-transition-targets-commission-2023-07-06/#:~:text=%22Overall%2C%20additional%20investments%20of%20about,said%20in%20a%20statement%20on>.
- Saez, Emmanuel and Gabriel Zucman (2019). *The triumph of injustice: How the rich dodge taxes and how to make them pay*. WW Norton & Company.
- (Aug. 2022). “A Wealth Tax on Corporations’ Stock”. In: *Economic Policy* 37.110, pp. 213–227. ISSN: 0266-4658, 1468-0327. DOI: [10.1093/epolic/eiac026](https://doi.org/10.1093/epolic/eiac026). (Visited on 08/16/2023).
- Tippet, Ben, Rafael Wildauer, and Özlem Onaran (Aug. 2021). “The case for a progressive annual wealth tax in the UK”. In: *Greenwich Papers in Political Economy*. (Visited on 08/14/2023).
- Tørsløv, Thomas, Ludvig Wier, and Gabriel Zucman (May 2023). “The Missing Profits of Nations”. In: *The Review of Economic Studies* 90.3, pp. 1499–1534. ISSN: 0034-6527, 1467-937X. DOI: [10.1093/restud/rdac049](https://doi.org/10.1093/restud/rdac049). (Visited on 08/14/2023).
- Wier, Ludvig and Gabriel Zucman (Nov. 2022). *Global Profit Shifting, 1975-2019*. Tech. rep. Cambridge, MA.
- Wildauer, Rafael et al. (2023). “Energy price shocks, conflict inflation, and income distribution in a three-sector model”. In: *Energy Economics* 127, p. 106982. ISSN: 0140-9883. DOI: <https://doi.org/10.1016/j.eneco.2023.106982>. URL: <https://www.sciencedirect.com/science/article/pii/S0140988323004802>.

Appendix

Figure 5: What percentage of sales by multinationals domiciled in the EU occurs within the EU?

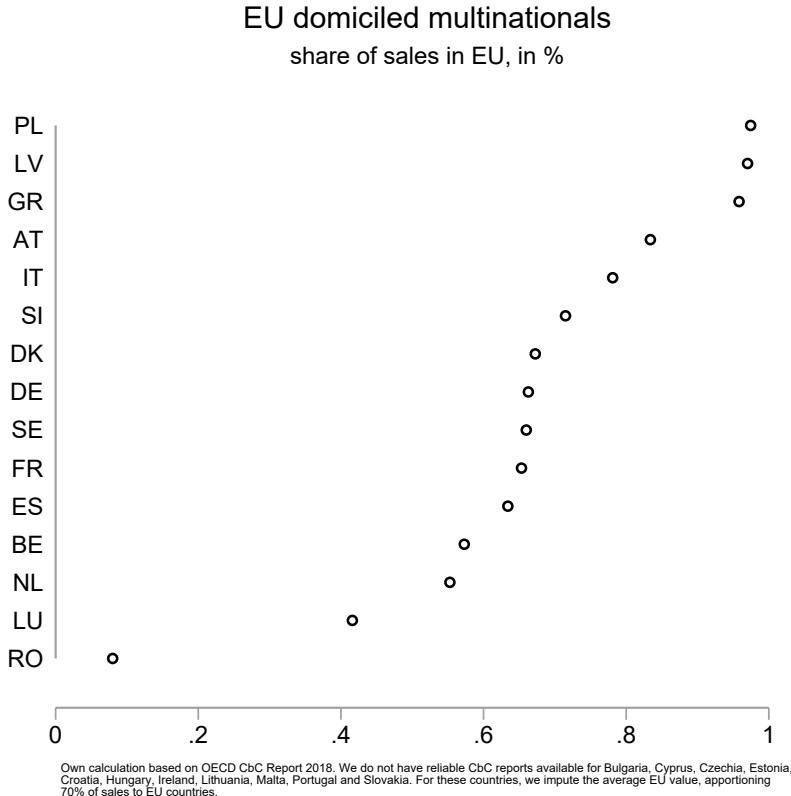


Table 3: PEPT revenue by sector, 2022

Sector	Excess profits in EU, in € bn	PEPT revenue, in € bn	Share of total PEPT revenue, in %
Manufacturing	114.62	34.15	27.1
Energy	75.18	22.71	18
Transport	38.76	13.51	10.7
IT/communication	18.92	5.68	4.5
Finance	11.8	4.03	3.2
Other	137.74	45.91	36.4
Total	397.02	125.99	100

Table 4: What level of revenue could the PEPT generate when applied to firms with the highest profits?

Company	EPT revenue, in €bn	Domicile	Sector
AMAZON EU S.A R.L.	5	LU	Other
A P MOLLER-MAERSK A/S	4.8	DK	Other
CMA CGM	4	FR	Transport
EQUINOR ENERGY AS	3.5	NO	Energy
HAPAG-LLOYD AG	3.3	DE	Transport
APPLE INC.	2.9	US	Manufacturing
ARCELORMITTAL FLAT CARBON EUROPE S.A.	2.5	LU	Other
TOTALENERGIES SE	2.3	FR	Energy
UNITED STATES POSTAL SERVICE	1.9	US	Transport
NOVO NORDISK A/S	1.6	DK	Manufacturing
ORLEN S.A.	1.5	PL	Energy
MICROSOFT CORPORATION	1.3	US	IT/communication
VODAFONE PROCUREMENT COMPANY S. A R.L.	1.3	LU	Other
CHRISTIAN DIOR	1.2	FR	Manufacturing
LVMH MOET HENNESSY LOUIS VUITTON	1	FR	Manufacturing
ALPHABET INC.	1	US	IT/communication
ACCENTURE PUBLIC LIMITED COMPANY	1	IE	Other
PETROLEO BRASILEIRO S.A.	.8	BR	Energy
ORRORON ENERGY AB	.8	SE	Other
MERCK SHARP & DOHME B.V.	.8	NL	Manufacturing

Notes: Profits allocated according to destination-based principle, based on OECD CbC reports.

Figure 6: What percentage of sales by multinationals domiciled outside the EU occurs within the EU?

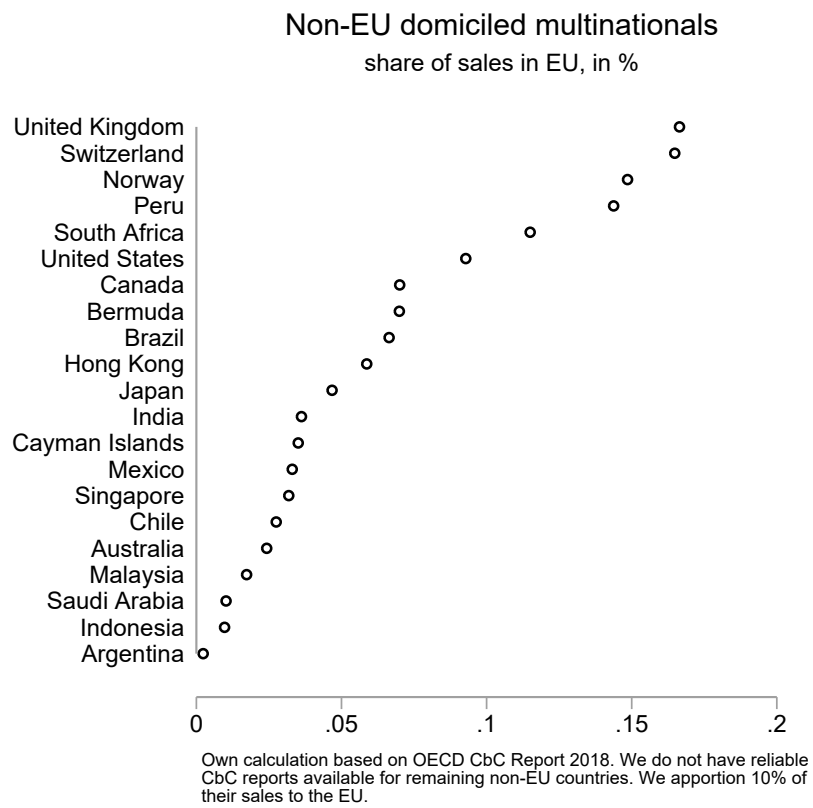


Figure 7: Firm distribution by rate of return. Each bin represents the level of rate of return. Most firms are below base excess profits, i.e. below a 10% rate of return on total assets.

