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Following a new tax leader: the urge to implement Formulary Apportionment in the European Union

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Following a new tax leader: the urge to implement Formulary Apportionment in the European Union

Joana Andrade Vicente*

Abstract

In this paper we analyse the United States' role as the current international tax leader, acting as an *institutional* leader uncapable of pushing forward towards a new, more suitable international corporate tax regime, due to the particularities of its international taxation system and economic preferences. After assessing United States multinationals' activity in the Single Market, we find evidence of artificial profit shifting across Member States under the current method to allocate multinational enterprises' profits. Such actions challenge a fair international taxation in the European Union, distorting European internal competition and hampering tax revenues collection. Although it may not be (yet) the time for a worldwide unitary taxation approach, the analysis performed highlights the urge for the European Union to overcome the United States political power and to unilaterally adopt the Formulary Apportionment approach, overhauling a century-old set of global tax rules based in the separate entity approach.

Keywords: Country-by-Country Reporting; European Union; Formulary Apportionment; United States multinationals enterprises; tax havens.

JEL classification: F23, H25, H26

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1 Introduction

The current international transfer pricing regime, based in the separate entity approach[1], is no longer adequate to reflect Multinational Enterprises' (MNE) worldwide presence and activity, since it fails to deliver an effective and transparent taxation system capable of aligning taxation and economic substance (Avi-Yonah, 2007; International Monetary Fund, 2019). The scale of MNEs' activity, the growing level of globalization and economic integration, the increasing prevalence of hard-to-value intangible assets, the fragmentation of production and supply chains and the emergence of new ways of business guided by the trade of unique goods and services overburns the local tax authorities' capability of an effective enforcement of the transfer pricing rules, failing to protect countries from MNEs tax abuse and aggressive tax planning schemes (European Commission, 2021). The continuous delay in effectively reforming corporate tax rules has left countries exposed to rampant global tax abuse by MNEs, which costs billions in lost tax revenues every year.

This lack of resilience and suitability of the separate entity approach to deal with tax avoidance and profit shifting activities has led to numerous reform initiatives proposed by governments and international institutions in the last decade, namely: the European *Common Consolidated Corporate Tax Base* (CCCTB) proposal in 2011 (European Commission, 2011); the G20/OECD *Base Erosion and Profit Shifting* (BEPS) Action Plan published in 2015 (OECD, 2013); the updated CCCTB proposal in 2016 (European Commission, 2016); the BEPS 2.0 initiative in 2020 to address the specific challenges of digitalisation (OECD, 2020); and the European Commission's (EC) most recent tax agenda for business taxation in the 21st century, the *Business in Europe: Framework for Income Taxation* (BEFIT) initiative (European Commission, 2021). Altogether, these initiatives highlight the inadequacy of the current international transfer pricing standard-based regulatory model to prevent profit shifting. But when assessed in detail, two distinctive courses of action can be identified.

The first one is pursued by the G20/OECD. It acknowledges that the separate entity approach is outdated in its current form and needs to be overhauled (or enhanced) within its context – what the BEPS 1.0 and 2.0 initiatives have been trying to do. Nonetheless, there has been a growing discussion and recognition that the initiatives resulting from the BEPS project have not been sufficiently effective to fulfil its principles of establishing coherence of international tax rules, realigning substance with taxation rights and increasing transparency (Piantavigna, 2017; Picciotto & Bertossa, 2019). This can be

[1] The separate entity approach treats related entities (entities pertaining to the same economic group) as if they were separate independent entities for tax purposes. Transactions between those entities *should* be valued at market price, *i.e.*, the price at which an enterprise transfers physical goods and intangible assets or provides services to associated enterprises should be the same as that of similar transactions between comparable independent parties. Transfer pricing methods are then used to establish the taxable profit that each entity within an MNE would obtain, *if* it was operating at arm's length (*i.e.*, independently from the other entities pertaining the same economic group). Taxable profits are said to be allocated appropriately between entities if the transfer prices adhere to this arm's length standard (ALS).

explained not only by the recent need to set up a BEPS 2.0 initiative, but, more importantly, by the continuous inadequacy of the separate entity approach to deal with MNEs tax-motivated profit shifting in the high-tech 21st century. The BEPS project has not been, so far, able to proper reform the current international taxation regime, by continuing to rely on an unclear and unsuitable standard-base regulatory model unable to close the existing tax legislative loopholes. Thus, the OECD is trapped in a process to reform corporate tax rules that began in 2013 and which looks increasingly unlikely to deliver a sustainable and global solution.

The other course of action has been pursued by the EC over the last two decades and acknowledges that the separate entity approach is no longer adequate – in any way, shape, or form – to reflect MNEs' worldwide activity, especially within the Single Market, by not granting each jurisdiction its fair share of tax. These shortcomings led the EC to propose a new method to allocate MNEs' profits across the European Union (EU) Member States – the unitary taxation approach with formulary apportionment (FA)[2]. This alternative corporate tax regime has been gaining supporters, and, as the literature strongly suggests, it is the most robust approach better suited to tackle tax avoidance and artificial profit shifting via transfer pricing (Rixen, 2011; Keen & Konrad, 2013; Avi-Yonah & Tinhaga, 2017; International Monetary Fund, 2019; Lips, 2019). Since, under the FA, intercompany prices do not need to be established, this approach would result in a simpler, fairer and more rational international tax system than the current one, cutting off MNEs' tax incentives to shift artificial profits from higher to lower tax jurisdictions, while simultaneously enhancing transparency and easing compliance costs for taxpayers and tax authorities.

By acknowledging the BEPS project's failure in attaining its proposed goals (when almost a decade has passed since the draft reports were issued) and the primacy of the FA approach to better deal with tax avoidance, why is the BEPS 2.0 initiative at the forefront of public debate and policy agenda rather than the discussion on how to implement worldwide FA? Because a worldwide FA approach does not serve the best interest of the international *institutional* tax leader – the United States (US). Many significant developments in the international taxation architecture resulted from unilateral action by the US, who acts as a Stackelberg leader, while European countries act as followers, displaying a sequential decision making (Radaelli, 1998; Keen & Konrad, 2013; Altshuler & Goodspeed, 2015). This strategic dynamic is exacerbated by the absence of a global entity capable of addressing tax issues, since the United Nations (UN) was not able to maintain the leading tax role it once had. But now, considering that the tax revenue losses and the distortions that the current transfer pricing system impose at the European level

[2] Under the unitary taxation with formulary apportionment, legally separated but economically integrated companies are treated and recognized as a single group for tax purposes. It is through a multifactor allocation formula – based on apportionment factors that should reflect the true economic contribution of each entity – that MNEs' global taxable income is assigned as tax base between the different jurisdictions where the MNE has real economic activity. Throughout the paper, the '*FA approach*' refers to a unitary taxation with formulary apportionment, *i.e.*, we are not discussing applying the formula separately to each entity within an MNE, but rather on a combined basis, consolidating the accounts of all legally separate enterprises that are part of a single *unitary* business.

are too significant, US preferences on maintaining the same system should not constitute a valid reason to delay a unilateral reform action by the EU, since it is the Single Market that has been unfairly targeted by the US MNEs aggressive tax planning schemes. US MNEs shift twice as much profit (relative to the size of their earnings) as EU MNEs, while EU higher tax countries lose twice as much profit (relative to GDP) as the US (Tørsløv, Wier, & Zucman, 2022).

This paper's contribution adds to growing research on the role of the US in international tax governance. Research has been focusing mainly on the successful cases of the US as a source of power leading to global tax governance changes (e.g., Radaelli (1998), Altshuler & Goodspeed (2015), Hakelberg (2016), Lips (2019)). Here, we focus on a situation of apathy – or even resistance – in trying to achieve a meaningful tax governance reform, as the introduction of a new, more appropriate international transfer pricing system is long overdue because it does not fully address the US' economic interests. Furthermore, based in the assessment of US MNEs' activity in the European Single Market, we advocate that it is time for a new tax leader to come forward and promote a new long-term comprehensive tax policy reform capable of better dealing with artificial profit shifting. Although it may not (yet) be the time for a worldwide unitary taxation approach – as the BEPS ongoing discussion process demonstrates –, the analysis performed highlights the urge for the EU to overcome the US' great political power and to unilaterally adopt the FA approach.

The remainder of the paper is as follows. In section 2 we review the historical role of the US as an incontestable leader in international tax policy, while discussing the growing call for a UN Tax Convention to establish a true global entity capable of leading the reform of the international tax system. In section 3 we consider how the US international taxation system's particularities have been impacting its position on an alternative tax regime and hampering the effectiveness of other countries' tax initiatives aiming to secure a greater alignment of MNEs taxation. In section 4 we assess how US MNEs are challenging a fair international taxation in the EU under the current separate entity regime by shifting income via transfer prices and, consequently, heavily distorting internal competition in the Single Market. Finally, in section 5 we present the main conclusions.

2 The international arena: the United States as a Stackelberg leader

2.1 Institutional tax leadership: back and forth between the United Nations and OECD

The search for international tax cooperation started a century ago and it was institutionally achieved firstly with the work of the League of Nations (1923), which created a committee on double taxation and issued several model tax conventions. Its model tax treaty, which endorsed the ALS (and the underlying separate entity approach) as the basis for profit allocation between different jurisdictions, is still the foundation for much of our current international tax system.

Its reign did not last long though, and by 1946 the League of Nations was already handing over all its assets to its successor, the UN, which had been founded one year earlier. The UN started to move at full steam on double taxation and fiscal practices, heavily influenced by the work already developed by the League of Nations. Notwithstanding, its role as an international tax policy settler did not last long either, which can be explain by two opposing forces: the UN fiscal committee's gradual decline and final dismantling in 1954; and the assemble of OEEC's[3] fiscal committee and taxation working group in 1956, filling the tax power gap left by the UN and gaining force as a multilateral tax policy settler.

This was the breaking point of when, how, and why the OECD started to become the key player and leader in international tax policy. By the time the UN re-entered the tax policy game, in the late 1960s, the OEEC had already became the OECD and was already well-established as the international tax policy institutional settler, with its tax standards becoming the *de facto* global standards. Even today, the entire international corporate tax system is based in OECD models for bilateral tax treaties and transfer pricing guidelines, while other international institutions seem to only apply reactionary policies to the OECD's tax activity.

Decision-making of global international tax rules have been kept at the OECD level, which has been holding this role for decades, releasing a series of influential reports and guidelines on international taxation. But the problem relies in the OECD's lack of broad political accountability, legitimacy, and authority as a global tax regulator, as its members *only* represent the world's most economically powerful countries, lacking representation from a large number of countries. The Inclusive Framework (IF), created within the BEPS project scope, has now become the centre of the BEPS 2.0 negotiations, but the admission of new members is conditional on the payment of a fee and the implementation of minimum standards that were previously agreed during the first phase of the BEPS project

[3] The Organization for European Economic Cooperation (OEEC) – OECD's predecessor – was created in 1948 by European countries with the well-defined goal of rebuilding post-war Europe. The OEEC became officially the OECD in 1961, after incorporating the US and Canada as its members.

– in which the potential new members were not involved. Furthermore, the OECD operates in a political vacuum, with self-proclaimed international tax standards and guidelines that serve, first and foremost, the interests of its member countries. The decision-making power is vested in the OECD Council alone, although with an influence that reaches far beyond the members it serves and without authority to impose binding rules or sanctions in the event of non-compliance – half of the top 10 jurisdictions of the Financial Secrecy Index[4] are OECD members.

The current situation can be classified as a complex, resource-intensive and open-to-interpretation system of bilateral tax treaties with the OECD (an exclusive organization) setting the system, which has been leading to a growing call for a UN Tax Convention, in order to improve the fairness of the decision-making process in international taxation and move its rulemaking out of the OECD's *jurisdiction* (Ryding, 2022). The aim of creating an inclusive intergovernmental tax body is, in addition, to set coherent global tax rules, more capable of comprehensively addressing the threat of cross-border tax abuse. Just as tax evasion and tax avoidance are a global problem, the required solution should also be global. A UN tax leadership, by representing a true worldwide organization, could, to some extent, mitigate the limited degree of institutionalization of the international tax system (currently vulnerable to entropy), and act as an international leader capable of reforming and managing the current international taxation regime. MNE's worldwide profits and tax base could be better assessed and allocated by an international global entity, since the current bilateral exchange of information between tax authorities is hardly a long-term solution, given the volume of data involved and the burden imposed on understaffed tax administrations. A UN Tax Convention would also bring developing countries into the fold, representing a unified, universal, and democratic intergovernmental framework for the construction of a fair international tax rule system.

Doubts on the OECD's lack of legitimacy as the global tax institution are intensified by the ascertainment that, among its members, one disproportionally stands out. The US' initiatives to reform the international tax regime are usually the main catalyst of the reform process within the OECD, allowing one single country to set the international tax agenda and to act as a tax standard-setting *institution*, masked under the OECD's umbrella. Home to large MNEs and the main contributor of the OECD's budget[5], the US has been enjoying a privileged position, influencing the tax policymaking process, and, simultaneously, ignoring policies that are deemed inconsistent with its interests and favouring bilateral agreements where it can negotiate to its competitive advantage[6].

[4] The Financial Secrecy Index ranks each country based on how intensely its financial and legal systems allow for hiding and laundering money. For further details, see https://fsi.taxjustice.net/.

[5] The OECD's budget is comprised of Part I and Part II. Part I is funded primarily by contributions from its member countries, based on both a proportion that is shared equally and a scale proportional to the relative size of their economies. For 2023, the US contributions alone are estimated to amount to 19% of OECD's total Part I budget (OECD, 2023). On the other hand, Part II of the budget – which covers programs that are of interest to a limited number of members – is funded according to scale of contributions or other agreements among the participating countries, but no disaggregated information by contributor is disclosed.

[6] For example, the US did not sign the Multilateral Competent Authority Agreement on the Exchange of Country-by-Country Reports, aimed to facilitate the automatic exchange of these reports with all the jurisdictions in which an MNE operates, preferring to negotiate individual bilateral agreements.

2.2 The United States as the incontestable leader in international tax policy

A common observation among policymakers is that, particularly since the 1986 US Tax Reform Act, the US has been taking a leadership role in international tax policy, stimulating European tax reforms in the ensuing years, which suggests a (Stackelberg) leader-follower relationship with sequential decision making (Radaelli, 1998; Keen & Konrad, 2013; Altshuler & Goodspeed, 2015). This happens even though both economies share a significant influential global market power and size, with an incomparable position in terms of in and outward foreign direct investment (FDI). **Table 1** shows, based on the latest data available, that the EU exports more goods and services than any individual country, also recording the highest level of imports, just ahead of the US. The US registers a substantial trade deficit (measured by the difference between exports and imports), larger than in any other main global economy. It also reports a lower degree of exposure to international trade, as the average value of exports and imports for goods and services represented 11.8% of its GDP, a figure that contrasts with higher ratios for the other world's largest economies.

Table 1. Indicators of economies' economic power in 2020

Indicators	US	EU	China	Japan	UK
GDP (current US$, billions)	20,997	15,299	14,723	5,058	2,764
Population (millions)	339	447	1,425	125	67
FDI (stock, outward, % of world total)	20.8	33.9	6.5	4.6	5.4
FDI (stock, inward, % of world total)	25.9	28.6	4.6	0.6	5.3
Exports of goods and services (% of world total)	11.8	18.3 (1)	15.2	4.4	4.3
Imports of goods and services (% of world total)	15.6	16.0 (1)	13.2	4.5	4.3
Trade to GDP ratio	11.8	20.2 (1)	17.4	15.8	28.2

(1) Extra EU-trade

Note: the total value of exports and imports for the world excludes intra-EU trade.

Source: Eurostat (2022a) and UNCTAD Data Center (UNCTADstat)

Eccleston (2013) argues that US preferences over certain tax governance policies has been leading to different profiles of international tax policy since, at least, the 1960s. The US was a pioneer in introducing controlled foreign company (CFC) rules in those years, diffused throughout other OECD members only in the following decade; in 1977 it approved the Foreign Corrupt Practices Act to illegalize foreign bribes to US companies, while the OECD signed a convention on bribery only in 1998; and in the 1980s the US was already fighting the use of abusive tax shelters, while, in Europe, the first measure of mandatory disclosure of aggressive tax planning schemes was only introduced in 2005. Following that, it was also the US who unilaterally enforced the adoption of an automatic exchange of banking information as a new global standard against tax evasion, leading to the establishment of OECD's Common Reporting Standard in 2014, heavily based, and in line, with the US Foreign Account Tax Cooperation Act, enacted in 2010.

More examples of the US as an international leader shaping global tax governance can be easily found, whether as a role model for setting corporate income tax (CIT) rates or, more relevant for the scope of this paper, as a decision-maker of the primary transfer pricing methods to apply in transactions between related entities. The ALS gained a significant international boost as the basis for profit allocation across jurisdictions when the League of Nations (1923) model tax treaty (the foundation for much of our modern international tax system) endorsed this approach – which was the one preferred by the US at the time (Rixen, 2011). Following that, the US was the first country to incorporate the ALS into tax law (in 1935) and to disclose (in 1968) precise regulations regarding its methods (Avi-Yonah, 2007). On the other hand, the OECD consolidated the separate entity approach only in 1963 (with modest guidance) and disclosed detailed information on the ALS implementation latter on in 1979, in the '*Transfer Pricing and MNEs*' (non-legally binding) report (Avi-Yonah & Tinhaga, 2017; Krever & Mellor, 2020).

Over time, as the '79 OECD guidelines became increasingly unfit to adequately consider the transfer of high-profitable intangibles out of the US (depriving it from higher tax revenues), the US led the questioning of the ALS suitability to deal with the proliferation of intangible assets, resulting in an update of its national transfer pricing regulations in 1994, shifting the focus to profit-based methods, rather than transaction-based ones (U.S. Department of the Treasury, 1994)[7]. That did not entail a departure from international cooperation, as it did not represent a complete erasing of the ALS (rather a dilution of the primacy of transactional methods), but it was, nevertheless, a significant change in the international transfer pricing system, without prior discussion or consensus with other OECD members. This reform, undertaken unilaterally by the US, later led, in 1995, to a revision of the OECD guidelines, aimed, not only to reflect technological developments, but, more importantly, to address differences following the reform, so as to achieve greater harmonization. This move reflected, once more, the US leadership guidance of OECD countries towards a new equilibrium and reinforced its position as the clear centre of gravity in the international tax policy process.

* * *

As the current international taxation system is becoming increasingly unsuitable to deal with artificial profit shifting, globalization, hard-to-value intangible assets and aggressive tax planning schemes – and since both the BEPS 1.0 and 2.0 initiatives have been proven inept to address these issues –, policymakers, academics, international institutions and tax experts have been advocating for a true tax reform, moving away from the ALS and the separate entity approach to an FA approach (Rixen, 2011; Keen & Konrad, 2013; Avi-Yonah & Tinhaga, 2017; International Monetary Fund, 2019; Lips, 2019). Under this system, MNEs would be taxed on their global consolidated profits, with taxing rights allocated between jurisdictions according to an agreed formula that would

[7] Profit-based methods rely less on comparable transactions and allocate income according to appropriate industry profit-level indicators. However, these methods require a high degree of expertise and qualified economic data, out of reach for most national tax authorities.

ensure that each country receives its fair share of tax revenue.

Although replacing the ALS may seem a wide-ranging dismantling of the current transfer pricing regime, tax experts (e.g., Avi-Yonah & Tinhaga (2017) and Picciotto & Bertosa (2019)) argue that the FA could be, indeed, compatible with the existing bilateral double tax treaties network, suggesting that the main obstacles to the introduction of FA are not legal, but rather political. For example, the EC has been trying to implement the FA approach over the last two decades, under the CCCTB and BEFIT proposals, with no avail. If two of the main international political forces (the US and the EU) reached consensus and coordinated on a broader implementation of the FA, sequential decisions on similar tax reforms would be expected (Avi-Yonah, 2010). However, we do not see any other significant attempts in the international stage. If implementing a worldwide unitary taxation with FA is commonly accepted as the best approach to allocate MNEs' profits across jurisdictions, why hasn't the US moved towards this tax regime, when, in the past, it has already unilaterally taken other more *revolutionary* tax decisions? Simply put, because it is not in its best economic interest.

3 Made in the EU, taxed in the US

US MNEs tax-motivated profit shifting remains an important concern after the Tax Cuts and Job Act (TCJA), with a number of US MNEs generating large profits in the Single Market but paying little or no tax in the EU, relying in aggressive tax planning schemes, national mismatches and legal loopholes (Clausing, 2020; Garcia-Bernardo, Janský, & Zucman, 2022). Although the motivations leading to the continuous preference for the separate entity approach may have changed slightly before and after the TCJA (effective in 2018), they still run in the same direction. Hence, the lack of a more considerable international effort to implement worldwide FA can be pointed, on a large scale, to US preferences – the incontestable international leader in tax policy with a unique structural power to ensure compliance.

Until the beginning of 2018, the rationale was very straightforward: stricter source country taxation measures (*i.e.*, taxation where economic activity takes place) increases US Treasury foreign tax credits to US MNEs, which results in a potential loss of tax revenue. This occurred due to the previous US worldwide income taxation system, under which US tax authorities did not exempt taxation rights on active income earned abroad, providing instead a non-refundable credit to US companies against taxes paid in a foreign country. Tax liability to the US was, however, deferred until dividends were paid from the foreign affiliates to the US parent. This system demonstrated US preference in wanting their MNEs to avoid *foreign* taxes by engaging in aggressive tax planning schemes and tax avoidance activities (enabled by the ALS), while assuring that US taxes were not avoided by other mechanisms, by protecting its own tax base (e.g., through stricter CFC rules, that are residence country-strengthening and were developed first by the US). The deferral option allowed US MNEs to reinvest their foreign profits abroad without fully paying taxes over them, increasing their competitiveness over non-US MNEs. But, as a result, it also created a distortive incentive for US MNEs to park their profits in foreign tax havens instead of repatriating their cash back to their parent company in the US. Under this tax system, a subsidiary's income could then grow abroad without being subject to any US tax until its repatriation, providing strong incentives to *earn* (book) profits in lower tax countries.

In late 2017, with the stated motivation of stimulating corporate investment and job creation in the US, the country took a new direction for the tax treatment of its MNEs. The TCJA reform shifted the US from worldwide taxation towards partial territoriality, moving to a system closer to those of other OECD economies (based on the source principle[8]) by excluding from US taxation active business income earned abroad, while still taxing the income from passive investments of foreign subsidiaries. In effect, the US now presents a hybrid system, with *some* worldwide taxation (for certain foreign income)

[8] In the international taxation system, profits are generally taxed according to the source principle, under which profits from active income are taxed where reported (aiming to avoid international double taxation), and profits from passive income (e.g., capital gains, interest and royalty payments) are deductible at source and taxed in the residence country of the recipient MNE, to limit MNEs' ability to shift profits to lower tax countries.

without deferral, under the Global Intangible Low Tax Income (GILTI) measure, which imposes a minimum tax of 10.5% (if no tax is paid abroad) on the defined term '*global intangible low taxed income*'[9], taxed annually as earned (*i.e.*, regardless of income being repatriated). A tax credit is given for 80% of foreign taxes, so, if the foreign tax on that income exceeds 13.125%, then US tax liability is fully eliminated, supporting the continue misalignment of US interests with the worldwide FA approach.

US tax law applies some tightening measures against profit shifting targeted at MNEs with activities in tax havens, namely through CFC rules, the GILTI measure and a tax applied to certain cross-border transactions between foreign related parties and its US subsidiaries (under the Base Erosion and Anti-abuse Tax). However, this does not prevent artificial profit shifting between overseas subsidiaries, from higher to lower tax countries, leading the EU to lose twice as much profit (relative to GDP) as the US, since the US MNEs shift profit twice as much (relative to the size of their earnings) than EU MNEs (Tørsløv et al., 2022). These activities highly distort the European internal market, resulting in unfair competition between EU Member States.

Implementing a form of FA in the EU would represent a reform towards greater alignment of economic value creation and taxation, reducing US MNEs' tax avoidance opportunities and competitiveness, leading to a higher tax burden for them abroad and larger tax credits in the US, which would involve less tax revenue to the US Treasury. The EU leveraging its market power through stricter unilateral source-country taxation measures could thus have far-reaching tax consequences for the US. This is especially true given that the majority of US foreign direct investment (FDI) stock is in Europe and that large US technology MNEs are among the main beneficiaries of tax rulings granted by EU tax havens (U.S. Department of the Treasury, 2016; UNCTAD, 2022).

3.1 Shifting the international debate away from Formulary Apportionment

While a decision is not reached at the EU-level, due to the current political impasse over the unanimous decision of choosing the FA as the single method to allocate MNEs' profits across Member States, the US has been shifting the political debate towards other *solutions*, namely under the BEPS 2.0 initiative – the OECD's current work plan for MNEs' taxation based on a two-pillar solution –, strengthening the idea that OECD tax plans are *made in America*, with the US heavily influencing its course.

Firstly, by trying to limit the reach of the Pillar One initial proposal, attempting to remove the bias towards tech and consumer facing businesses, and seeking to persuade other jurisdictions to remove provisions regarding all unilateral existing digital service

[9] This tax is not targeted directly at the income from specific intangible assets held in lower tax foreign countries. It rather operates as a form of minimum tax on the profits of the excess active income over a deemed tangible income, measured as a 10% return rate on tangible assets located abroad, *i.e.*, to the profits earned abroad that exceed a company's '*normal*' return.

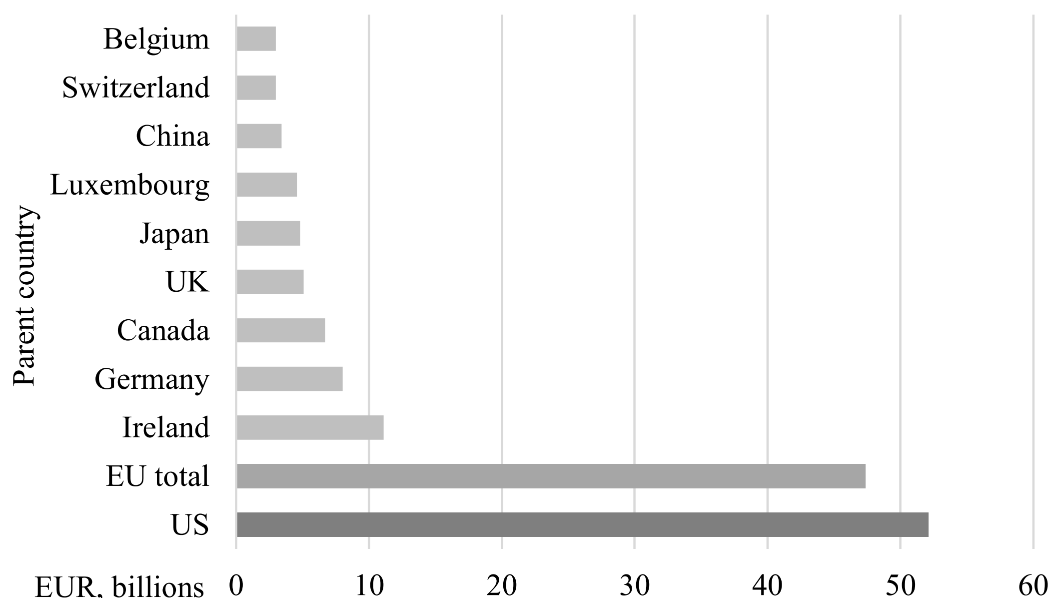
taxes (that predominantly target US tech businesses). Rather than targeting specific sectors, which appears to disproportionately impact US MNEs, the US proposes instead an approach based on revenue and profit margins that affects only the largest and most profitable MNEs, which would significantly narrow the scope of Pillar One and its goal to allocate new taxing rights to market jurisdictions.

Secondly, with a fierce support for Pillar 2, which can be explained by two reasons. Pillar 2 aims to create a floor on international tax competition and hinder the race to the bottom, by introducing a global minimum effective tax rate of 15% over profits of MNEs with a consolidated threshold above 750M€. MNEs within scope are required to calculate their global anti-base erosion effective tax rate for each jurisdiction where they operate and will be liable to pay a top-up tax for the difference between their assessed rate and the 15% minimum rate in the jurisdiction of the parent entity of the MNE (irrespective of where these profits were created), rather than in the lower tax country[10]. This is of particular importance, given that large US MNEs are among those who report sizable earnings in foreign lower tax jurisdictions (Baraké, Chouc, Neef, & Zucman, 2022) and engage more in profit shifting activities, enabling them to ensure low global effective tax rates. The lower the taxes paid by US MNEs abroad, the bigger the differential to the 15% that the US (the residence country) gets to tax, which helps explaining why the US is identified as the main beneficiary of Pillar 2[11] (**Figure 1**), with individual estimated revenue gains (€52.1 billion) higher than all EU Member States combined (€47.4 billion). This system does not prevent nor avoid, yet again, profit shifting within the EU, it simply channels tax revenues into the US Treasury, rather than to the rightful European Member State, causing US MNEs profits to be made in the EU, but taxed in the US.

[10] Initially, it was stipulated that it is the country in which the headquarters are located that gets to collect the minimum tax, based in the *income inclusion rule*. But on the updated OECD's Model Rules of December 2021, it was added the option of being the host country of foreign affiliates that gets the priority to collect the additional tax revenues, under the *qualified domestic minimum top-up tax*. In this paper, we will assume the headquarter scenario by default, since the US would always get the priority for collecting the tax revenues of its MNEs with respect to the source countries, under the GILTI measure, that would be treated as covered taxes.

[11] The OECD released broad updated estimates on the impact of both pillars in 2023. However, a comprehensive economic impact analysis and methodology report will only be made available in the coming months and it is not expected assessment data broken down by specific jurisdictions, leading to no official country-level revenue assessments.

Figure 1. Revenue gains estimates of a 15% global minimum tax in 2021 (EUR, billions)

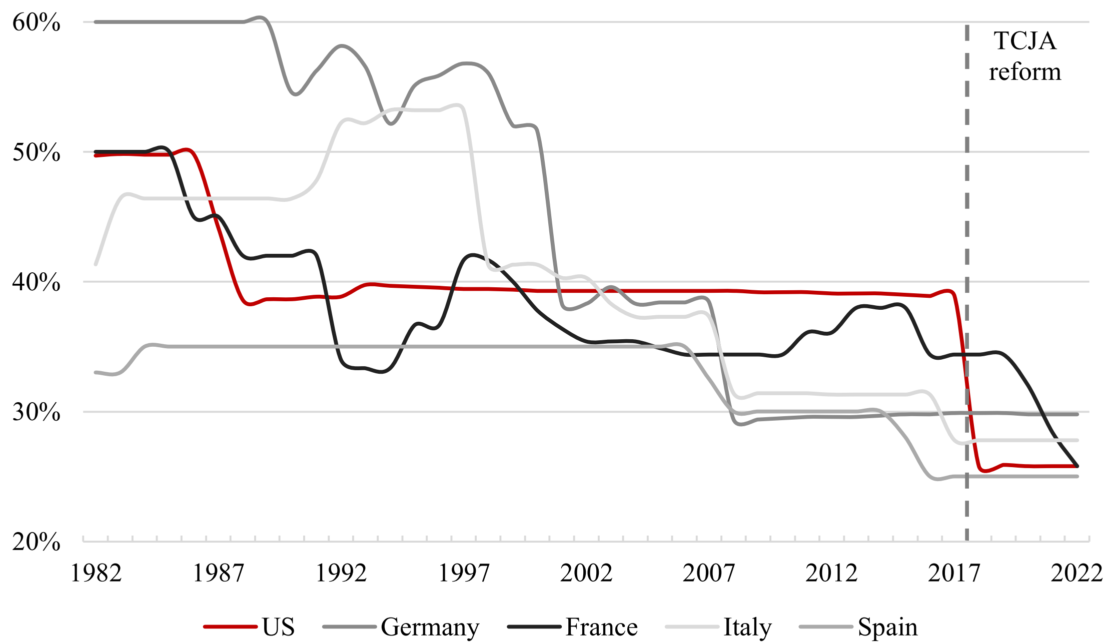


Note: the sample is restricted to the top 10 beneficiaries with available data. Results are presented with substance carve-outs of 8% of tangible assets and 10% of payroll.

Source: Baraké, Chouc, Neef & Zucman (2022)

Moreover, it is important to highlight that the US' renewed support for this initiative followed the decrease of its CIT rate from 35% (one of the highest) to 21%, under the TCJA. **Figure 2** shows the US CIT rate before and after the reform, compared to the large euro area (higher tax) economies. Prior to the reform, the US CIT rate was above the rates of all these selected economies, while, after the reform, the tax burden on US corporate income felt significantly, to a level closer to most euro area economies – with an average rate of 23% in 2022 – and even to the lower end of CIT rates in large euro area economies, reducing the previous significant discrepancy. As the TCJA reform can have important spillovers and implications for European CIT rates, the Pillar 2 initiative comes as a way of ensuring that the US domestic fiscal stimulus will not be undermined by a reactive race to the bottom on CIT rates in other jurisdictions.

Figure 2. Statutory corporate income tax rates (%)



Note: C*ombined statutory corporate income tax rates*, which include both central and sub-central CIT rates.
Source: OECD Tax Database, *Table II.1. Statutory corporate income tax rate*

Thus, the public debate on international taxation is, once more, focused on an initiative that does not aim to fight artificial profit shifting nor change where profits are allocated, but only where they are taxed, representing, at best, a partial fix within the existing arrangements. This initiative, by focusing on the residence over the source taxation principle, sheds light on the governments' aim to increase corporate tax revenues, rather than overhauling and truly addressing the current international tax system's deeper flaws.

4 Knocking on tax havens' door: assessing US MNEs' activity in the Single Market

Although the European Single Market is a very competitive and important market for MNEs all over the world, we focus our attention on the activities developed only by US MNEs, as: i) the US is the international tax leader, setting the pace for tax reforms (and currently preventing greater worldwide efforts to reform the international tax system) (Altshuler & Goodspeed, 2015); ii) US MNEs are the ones that mostly shift profits from EU higher tax countries (Clausing, 2020; Tørsløv et al., 2022); and iii) the EU and the US have the largest bilateral trade and investment relationship (UNCTAD, 2022) – they are each other's biggest trading partner in services and source of FDI. However, this transatlantic integrated economic relationship does not come without consequences.

To understand how US MNEs' behaviour may affect the Single Market's functioning, it is important to evaluate their existing corporate activities, disaggregated by Member State, to further infer on the possible distortion of competition between them. The goal is to assess if US MNEs have a more *intense* relationship with EU tax havens without the corresponding economic activity, insinuating an artificial presence. There are different alternative definitions of what constitutes a tax haven[12] and some degree of judgement is involved with any tax haven list. Menkhoff & Miethe (2019) provide a summary of the classifications used in six different publications, so, by combining the criteria provided by these multiple sources, we assume in this paper as a potential tax haven any country that is labelled accordingly in any of those lists. Out of the current 27 Member States, there are 7 countries that satisfy the criteria for an EU tax haven status: Austria, Belgium, Cyprus, Ireland, Luxembourg, Malta and the Netherlands.

Despite not being possible to assess all feasible tax planning strategies, a risk assessment analysis to potential aggressive tax avoidance schemes employed by large US MNEs in the EU can be performed based in aggregate Country-by-Country Reporting (CbCR) data[13] made available by the Internal Revenue Service (IRS) on its Statistics of Income Tax Stats webpage[14]. Latest available data refers to returns filed for tax year 2020,

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[12] According to Dharmapala & Hines Jr. (2009), tax havens tend to be small, affluent and well-governed countries. They are also characterized for having very low tax rates (usually effective tax rates below 10%) and other tax attributes designed to appeal to foreign investors.

[13] Aggregate CbCR data, developed under BEPS Action 13, seeks to enhance transparency for national tax authorities by providing them with information to conduct transfer pricing risk assessments. An MNE's CbCR should include tax jurisdiction-wide tax information relating to the global allocation of its income, taxes paid and economic activity in the jurisdictions in which it operates. The first CbCR data was required to be filed for fiscal years beginning on or after January 1st, 2016. The information reported by MNEs concerns to *aggregate* data, with separate information on each constituent entity in a jurisdiction being combined with no adjustment for transactions between constituent entities in the same MNE, as opposed to *consolidated* data, that treats the constituent entities of an MNE in a particular jurisdiction as a single economic entity.

[14] Data is based in CbCR made available annually by the IRS, specifically from *Form 8975 – Country-by-Country Report* and *Form 8975 Schedule A – Tax Jurisdiction and Constituent Entity Information*, available at https://www.irs.gov/statistics/soi-tax-stats-country-by-country-report. Forms 8975 are required to be filed by certain US ultimate parent entities of US MNE groups with annual revenue of $850,000,000 or more. No specific information about a particular MNE can be inferred from the published data.

reporting data such as the number of filers, revenues, profit, income taxes, earnings, number of employees and tangible assets. The database used in our exercise refers to the period between 2018 and 2020 – allowing us to capture three years after the reform and to provide a clear picture of the dynamic of US MNEs' activity after the TCJA – to stabilize the ratios calculated and conclusions inferred.

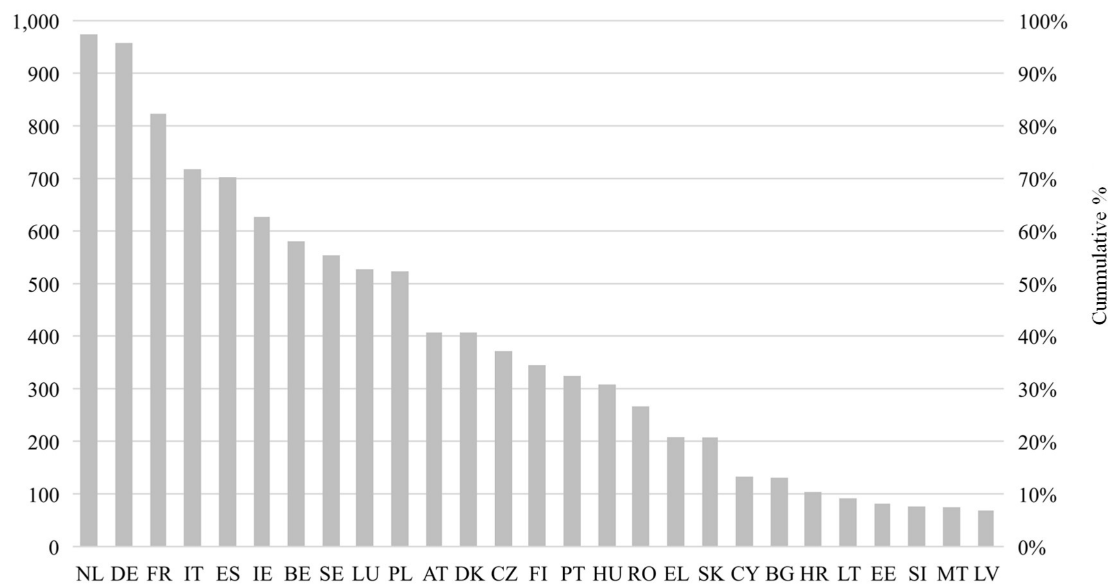
The OECD (2017) lists a number of potential tax risk indicators that can be derived from the information contained in an MNE individual CbCR. With due adaptations, that information can also be used to build an overall picture of the level of BEPS-related risks posed by US MNEs in an aggregate manner, mainly by exploring the following three tax risks indicators: i) ownership; ii) profitability; and iii) effective tax rate (ETR).

Ownership: the footprint of US MNEs in particular jurisdictions

Analysing the patterns of ownership of US MNEs in the EU is a starting point for understanding if the existing activities of these US MNEs within the EU may be distorting the internal Single Market. Profits arising in any US subsidiary go back to the ultimate parent entity as a dividend, which may trigger withholding taxes that have different treatment across EU Member States, incentivizing US MNEs to structure their European activities in a particular way. But profits can also be shifted between different parts of a MNE (and, consequently, between different jurisdictions) using other forms of income (e.g., interest and royalties). In this case, profit shifting opportunities can arise without a specific ownership structure, and a more general analysis of the location of US MNEs is useful to identify clusters of countries in which subsidiaries of these MNEs tend to be located.

According to the information filed by US MNEs with an annual revenue in excess of $850M – those subject to the FA tax reform proposed scope –, there were on average 55,463 constituent entities resident in Europe ultimately owned by a US parent entity between fiscal years 2018-2020, with a total of 1,416 different US MNE groups operating in the same region. **Figure 3** shows how US MNEs are spread across the EU. The Netherlands, Germany and France are the Member States with a larger number of reporting groups (974, 958 and 823, respectively). Together with Italy, Spain, Ireland and Belgium, they account for more than half of the total US MNEs present in the EU.

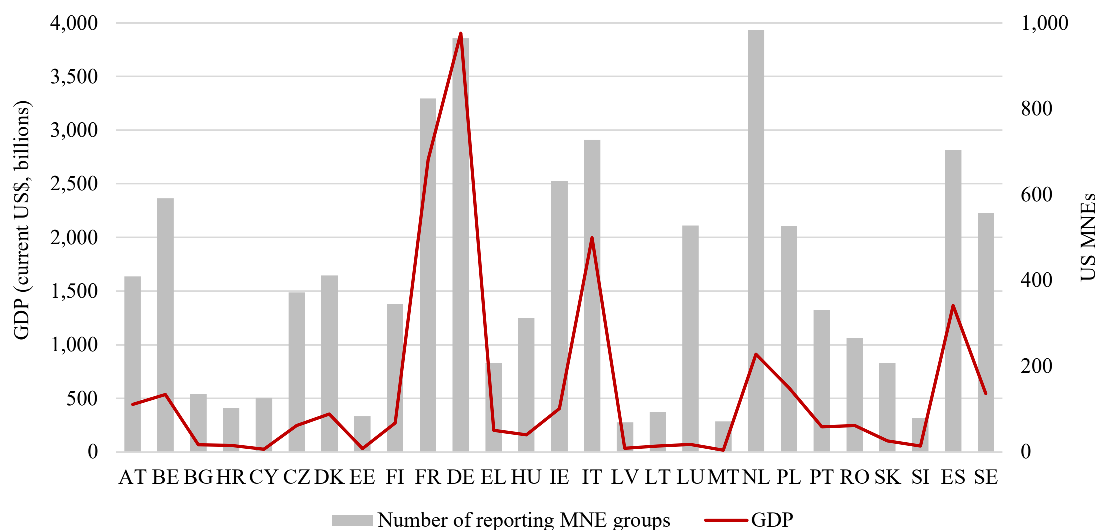
Figure 3. Number of reporting US MNE groups in the EU (2018-2020)



Notes: Tax jurisdiction detail exceeds the total mentioned above because some MNE groups filed information in more than one jurisdiction. Data labels use International Organization for Standardization (ISO) country codes.
Source: IRS Statistics of Income Division, *Table 1A. CbCR (Form 8975)*

It is expected, however, that larger economies appear more frequently, since greater economic activity takes place in those countries, so we were already expecting to see a significant number of MNE groups and subsidiaries in Germany, France, Italy and Spain. But, relative to their size, some counties do appear to be more prevalent (**Figure 4**).

Figure 4. Number of reporting US MNE groups in the EU and relative economy size (2018-2020)



Source: IRS Statistics of Income Division, *Table 1A. CbCR (Form 8975)* and UNCTAD Data Center (UNCTADstat)

The undoubted preference for the Netherlands – by far the largest host of EU subsidiaries of US companies (6,067 in the reporting period) – may be explained for nontax reasons. Nevertheless, considering the relative size of its economy, the disproportional use of this country seems likely to be related to its relatively favourable

tax treatment. On average, each US MNE reporting group present in the Netherlands has more than six subsidiaries operating within Dutch borders (with an average of three subsidiaries per MNE in the remaining Member States). Another country that features relatively heavily as a location for US companies is Luxembourg, followed, to a lesser extent, by Ireland and Belgium. The identification of this cluster of countries points to a degree of tax planning in determining location decisions, as these are among the EU tax havens identified previously.

The decision to establish subsidiaries in these Member States may be associated with the perceived idea that tax havens provide low tax rates (Dharmapala & Hines Jr., 2009; Keen & Konrad, 2013). If MNEs can shift profits to their subsidiaries in these (assumed to be) lower tax jurisdictions by under-pricing sales to them and/or overpricing purchases from them, they can reduce their overall tax burden. But tax competition and tax planning opportunities also take place through instruments other that the statutory tax rates, such as research and development (R&D) tax subsidies, patent box regimes and generous tax exemptions. Hence, besides stating the number of US MNEs' subsidiaries spread across the EU, it is useful to assess the possible unequal predominance of specific sectors in specific jurisdictions. **Table 2** shows the split of the EU subsidiaries of US MNEs by Member State and their main business activity, allowing us to identify two important facts.

Table 2. Number of US entities resident in the EU per main business activity (2018-2020)

Tax jurisdiction	No. of entities	Main business activities								
		Purchasing or procurement	Manufacturing or production	Sales, marketing, or distribution	Administrative, management, or support services	Services to unrelated parties	Regulated financial services	Holding shares or other equity instruments	Dormant	All other business activities
Austria	801	29	65	426	113	161	12	109	42	158
Belgium	1,472	85	209	699	304	296	26	114	85	336
Czech Republic	671	30	139	343	125	128	5	18	35	136
Denmark	917	25	91	449	115	181	20	154	47	208
Finland	575	18	69	334	86	116	18	28	29	129
France	3,717	138	799	1,706	517	605	66	524	204	874
Germany	5,029	232	981	1,868	922	850	111	863	365	1,352
Greece	314	9	23	164	47	79	9	7	31	49
Hungary	566	23	91	251	118	102	9	40	44	121
Ireland	2,385	87	185	529	303	447	159	365	321	768
Italy	1,969	84	396	1,014	279	374	58	143	108	458
Lithuania	141	6	10	54	40	25	7	5	14	34
Luxembourg	2,575	17	30	97	133	175	145	1,433	115	943
Malta	210	5	7	26	12	28	5	65	18	71
Netherlands	6,067	184	417	1,347	637	692	99	2,672	445	1,366
Poland	1,168	53	226	511	228	212	33	33	61	245
Portugal	629	13	54	347	88	132	12	33	36	78

Tax jurisdiction	No. of entities	Main business activities								
		Purchasing or procurement	Manufacturing or production	Sales, marketing, or distribution	Administrative, management, or support services	Services to unrelated parties	Regulated financial services	Holding shares or other equity instruments	Dormant	All other business activities
Romania	428	25	75	189	104	96	6	8	26	97
Spain	2,014	50	274	903	293	406	72	221	148	410
Sweden	1,418	40	137	650	191	257	34	222	113	300

Notes: data on Bulgaria, Croatia, Cyprus, Estonia, Latvia, Slovakia and Slovenia is missing due to the small number of forms on which they are based, in order to guarantee confidentiality. Tax jurisdiction detail exceeds the total number of entities because some of them may have more than one associated main activity business.

Source: IRS Statistics of Income Division, *Table 1D. CbCR (Form 8975)*

The first interesting fact drawn is that US MNEs concentrate their holdings mainly in the Netherlands and Luxembourg, which account for 38% and 20% of the total number of subsidiaries in the EU with '*holding shares or other equity instruments*' as their main business activity. This predominance could have been explained by the fact that these two Member States serve as residency of a larger absolute number of US MNEs' subsidiaries, as already stated. But, when looking at the relative weight that these subsidiaries represent in the total constituent entities resident in the corresponding jurisdictions, that possible justification caves in. The weight and importance that holding companies have in the Netherlands and Luxembourg are unrivalled, representing 56% and 44% (respectively) of all subsidiaries operating in these countries in other business activities. Malta also appears with a prominent position, with 31%. This poses a higher risk of BEPS due to the high mobility feature of this activity: holding companies – legal entities with no or minimum substance and no real economic activities – are relatively easy to shift to a different jurisdiction in order to benefit from a more favourable tax regime, by simply relocating its corporate tax residence to a more business-friendly environment, while continuing operations in the original location. For MNEs operating in higher tax jurisdictions, establishing holding companies in tax-preferential jurisdictions has been a popular strategy to minimize the global tax burden, with legitimate tax advantages available in doing so. A concentration of holding companies can then be evidence of certain tax planning structures. Holding companies established in the Netherlands and Luxembourg have access to extensive treaty networks and EU Directives that exempt them from withholding taxes within the EU while, simultaneously, benefiting from tax treatments that that also exempt withholding taxes on outbound payments. These Member States have been also particularly prone to granting access to reduced rates under tax rulings (DG Competition, 2016).

Other than the manipulation of transfer prices, MNEs frequently shift profits across jurisdictions using channels such as financing structures (e.g., intragroup loans, internal debt shifting or cash-pooling schemes) and the location of valuable intangible assets (intellectual property (IP), such as trademarks or patents) (Dharmapala & Riedel, 2013; Mooij & Liu, 2018). Here lies the second interesting fact drawn by **Table 2**. The OECD

(2017) handbook lists the reporting requirements that countries should follow and makes available a template on which the information by main business activity should be based. When comparing the referred template with the data made available under the US CbCR, disaggregated information regarding the specific '*research and development*', '*holding or managing intellectual property*' and '*internal group finance*' business activities is missing and no justification is mentioned in the data files nor in the IRS's '*Data Sources and Limitations*' disclaimer. We should not expect this to be due to confidentiality concerns, given the large number of CbCR filed and the fact that, from all the 47 jurisdictions included in the public OECD CbCR database[15] with information by business activity, the US is the only country that does not disclose this information in a disaggregated manner. Instead, it presents all the categories missing as '*all other business activities*'.

This aggregation of the statistics is a significant limitation, as it masks the effects of outliers and does not detail information that would be useful for the analysis of BEPS activities. Interest payment is one of the strategies that MNEs can apply to reduce tax liabilities in a particular jurisdiction. By being tax deductible, if a subsidiary in a higher tax country pays interest to another group subsidiary in a lower tax EU country, then the tax charge of the MNE will be lower, reflecting the difference in tax rates and tax systems in the two Member States. Countries concentrating a higher number of subsidiaries engaged in '*internal group finance*' could, therefore, present a higher risk of BEPS.

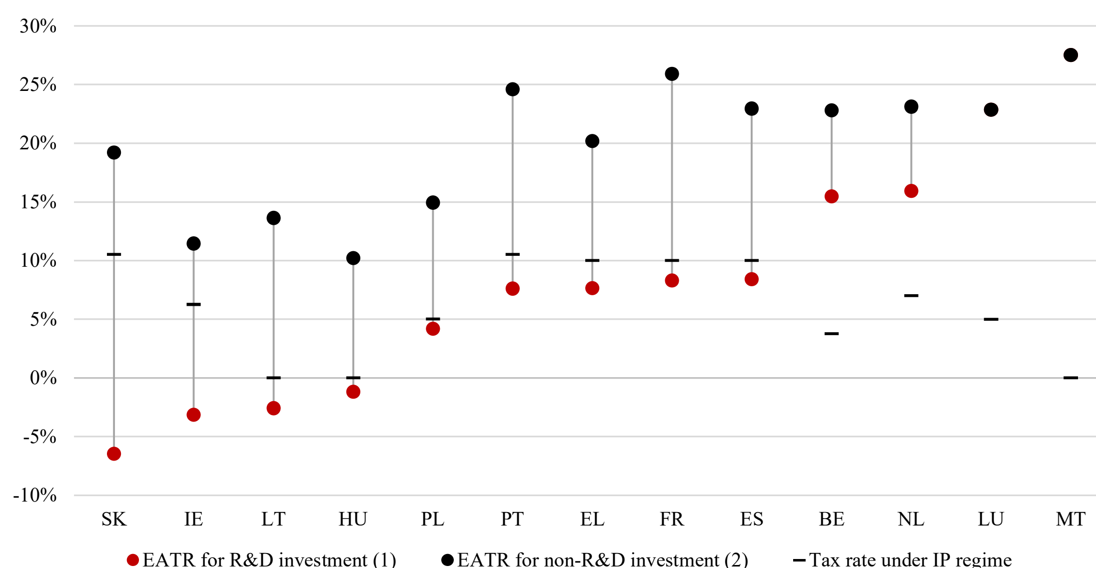
On the other hand, MNEs can argue that their IP is owned by entities headquartered in tax havens, to which the companies that sell their products in other (higher tax) populous markets must pay royalties. Royalties accrue to the affiliate that holds the IP of the group in the tax haven (that probably offers a preferential regime for income derived from IP – the patent box regimes), enabling US MNEs to exploit the mismatch resulting from inconsistencies in rules between EU Member States. Hence, by shifting the ownership of intangible assets – unique to the MNE and for which there is no easily established market price – to subsidiaries in lower tax jurisdictions or with favourable IP regimes, MNE groups can also lower their overall tax burden.

There are currently 13 Member States offering favourable IP regimes – already reviewed by the OECD and considered as *non-harmful* – that allow income from the exploitation of IP to be taxed at a lower rate than the statutory tax rate (**Figure 5**). As some features of the preferential IP regimes can facilitate BEPS activities and, therefore, unfairly impact the tax base of other jurisdictions, the OECD impels a *nexus approach* – which requires a link between the income benefiting from the IP regime and the extent to which the MNE has undertaken the underlying R&D that generated the IP asset. To assess the fulfilment of that requirement, more than being able to identify where the entities with '*holding or managing IP*' activities are located, it would be useful to know whether the IP ownership is separated within the group and in a different jurisdiction to the MNE's

[15] The OECD releases aggregated and anonymized information on the global tax and economic activities of MNE groups headquartered in 47 jurisdictions (OECD Corporate Tax Statistics, *Table I – Aggregate totals by jurisdiction*). The last available year is 2018.

activities that give rise to the IP (as '*research and development*'). If so, a higher number of IP registered in certain countries can point to a possible use of this channel to engage in BEPS activities, because there should be substantial R&D activity, effectively and actually carried out, in order to access the preferential patent box regimes. This is particularly important for Slovakia, Ireland and Lithuania, which present lower (even negative) effective average tax rates (EATR) for R&D investment.

Figure 5. Effective average tax rate for R&D investment in the EU (2021)



[(1)] The EATR for R&D investment includes the impact of expenditure-based R&D tax incentives. It should be interpreted as an upper bound of the generosity and incentives provided by the tax system for the location of profitable R&D investments.

[(2)] The EATR for non-R&D investment considers a comparable investment that does not benefit from expenditure-based R&D tax incentives. The difference between (1) and (2) provides an estimate of the *preferential tax treatment for R&D investments* in the Member State, which measures by how much R&D tax incentives reduce the taxation of R&D investments that earn an economic profit.

Note: only IP regimes reviewed by the OECD's Forum on Harmful Tax Practices were considered.

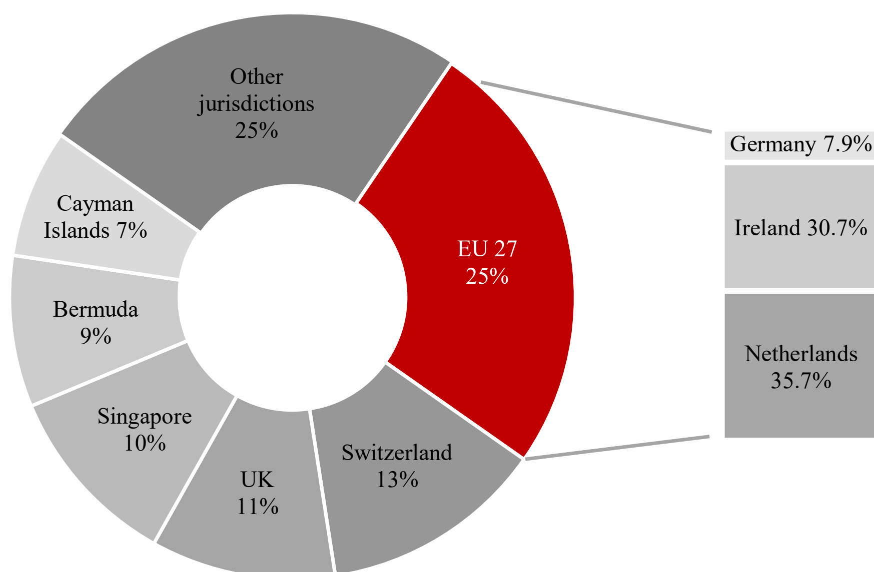
Source: OECD Corporate Tax Statistics, *Effective tax rates for R&D* and *Intellectual Property Regimes*

As already stated, the disaggregated information needed to perform that assessment is not available. However, from the OECD's CbCR data we can calculate the average weight that '*all other business activities*' represent in the number of total entities per Member States with the US as a partner jurisdiction and with the information by main business activity disaggregated according to the OECD's template. On average, *other* entities do not represent more than 9% of the total companies. In the IRS CbCR data, the countries that most deviate positively from this ratio (used as a very loose proxy) are Luxembourg, Malta and Ireland, where *other* entities represent over one-third of all entities engaged in other business activities. These countries are, thus, the ones with an assumed higher relative percentage of entities engaging in intragroup activities, being better positioned to take advantage of the commonly used channels of profit shifting (finance structures and IP management). In these countries, MNEs can more easily relocate their activities and artificially rearrange intragroup payments to shift profits from higher to lower tax countries without actually relocating much of their real economic activity.

Profitability: the (dis)connection between profits and economic activity

Before the TCJA (pre-2018), US MNEs booked a disproportionate share of their worldwide foreign profits – profits booked outside of their headquarter country – in lower tax locations (Clausing, 2020; Tørsløv et al., 2022). From **Figure 6**, it is possible to assert that the situation has not changed post-TCJA. Considering individual tax jurisdictions, the top 5 countries in which large US MNEs allocate profits are often identified in the literature as tax havens: Switzerland (13%), UK (11%), Singapore (10%), Bermuda (9%) and Cayman Islands (7%). Considering the EU Member States altogether, the preference for allocating profits in the Single Market is clearly visible, as it captures almost ¼ of all US MNEs' foreign profits. However, the individual contribution of each Member State to the EU's global preponderance is quite disproportionate: almost ¾ of those profits were allocated solely in three countries – the Netherlands, Ireland and Germany. As Germany represents the largest EU economy, the allocation of 7.9% of US MNEs' EU-wide profits to this country is not surprising. The same, however, cannot be said for the Netherlands (35.7%) and Ireland (30,7%), the fifth and the tenth largest EU economies, respectively. In fact, these countries alone rank 4th and 6th in the top preferred destinations of US MNEs to allocate foreign profits. Accumulated earnings are even more disproportionately reported, with the Netherlands and Luxembourg accounting for more than 75% of the EU-wide total.

Figure 6. Foreign profit allocation of US MNEs (2018-2020)



Notes: foreign profits allocated to '*stateless entities*' and '*foreign controlled domestic corporations*' were excluded. All computations are based on the subsample of profit-making jurisdictions of the dataset, which excludes two reporting countries (Denmark and Malta).

Source: IRS Statistics of Income Division, *Table 1D. CbCR (Form 8975)*

One of the first indicators that an MNE may be incurring in BEPS-related activities is having earnings that are disproportionate and misaligned with their level of economic activity. At the aggregate level, this means assessing if there are jurisdictions with significant profits but little substantial activity or, on the other hand, jurisdictions with

significant activities but low levels of profit. Both can indicate potential profit shifting and, thus, a tax risk. **Table 3** show the allocation of US MNEs' EU-wide profits, employees and tangible assets of the 10 Member States with higher profits.

Table 3. Allocation of EU-wide US MNEs' profits, employment and tangible assets (2018-2020)

Tax jurisdiction	Profit before tax (US$, thousands)	% of EU profits	*Rank*	Number of employees	% of EU employees	*Rank*	Tangible assets (US$, thousands)	% of EU tangible assets	*Rank*
EU, total	**162,790,143**			**2,622,358**			**561,920,310**		
Netherlands	58,049,229	36%	*1*	172,004	7%	*6*	70,541,902	13%	*4*
Ireland	49,948,153	31%	*2*	162,354	6%	*7*	105,628,971	19%	*1*
Germany	12,894,813	8%	*3*	588,223	22%	*1*	76,424,826	14%	*3*
Belgium	7,336,670	5%	*4*	107,792	4%	*8*	45,516,060	8%	*6*
Spain	5,322,033	3%	*5*	198,443	8%	*5*	23,067,176	4%	*8*
France	4,857,193	3%	*6*	374,373	14%	*2*	50,606,661	9%	*5*
Luxembourg	4,759,181	3%	*7*	14,169	1%	*19*	98,958,856	18%	*2*
Italy	4,115,619	3%	*8*	203,691	8%	*4*	27,817,476	5%	*7*
Sweden	3,497,474	2%	*9*	62,268	2%	*12*	8,693,218	2%	*10*
Hungary	2,958,951	2%	*10*	70,310	3%	*11*	4,760,488	1%	*14*

Note: all computations are based on the subsample of profit-making jurisdictions of the dataset, which excludes two reporting countries (Denmark and Malta).

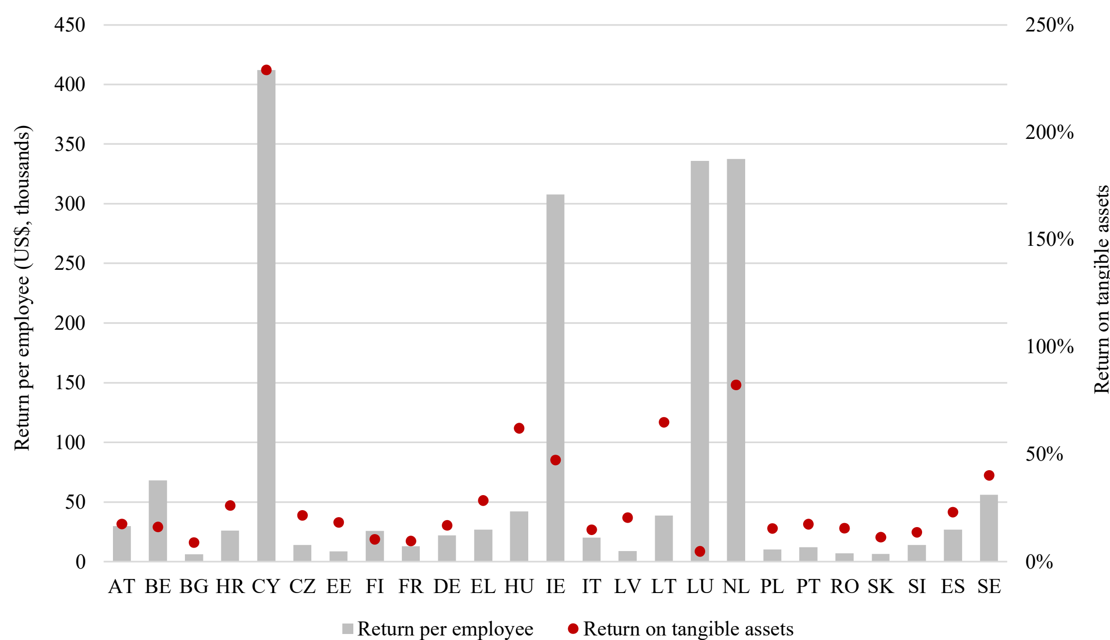
Source: IRS Statistics of Income Division, *Table 1A. CbCR (Form 8975)*

The high concentration of foreign profits contrasts with the dispersion of employees and tangible assets. Despite evidence that MNEs shift the location of real economic activity in response to tax-rate differences among jurisdictions (Keen & Konrad, 2013), a substantial share of US MNEs' real activity remains in higher tax countries, mostly large economies (Germany, Spain and France, mainly). This suggests that US MNEs have been able to reduce their tax liability by artificially shifting ownership and profits to lower tax jurisdictions, where little real economic activity occurs – either measured by employment, sales or investments in plant and equipment. They keep developing their profit-generating activities (e.g., manufacturing or production; sales, marketing or distribution; provision of services to unrelated parties; regulated financial services) in higher tax countries while booking the corresponding profits in lower tax countries – this is particularly visible in the case of the Netherlands, where there is evidence of limited real activity in comparison with the profits allocated therein. The share of tangible assets and employees located in tax havens – *i.e.*, the *real* economic activity carried out there – is disproportionately low, compared to reported profits.

To further assess the role that EU tax havens play in US MNEs' global activities, we computed two common profitability measures, namely the average ratio of pre-tax profits to tangible assets ('*return on tangible assets*') and to the number of employees ('*return per employee*') in different countries for the period under analysis. The profitability measures are computed by dividing the aggregate profits reported by all EU subsidiaries of US MNEs by the aggregate amount of tangible assets and the number of employees,

in each country. The results are presented in **Figure 7**.

Figure 7. Profitability measures of US MNEs in the EU (2018-2020)



Note: all computations are based on the subsample of profit-making jurisdictions of the dataset, which excludes two reporting countries (Denmark and Malta).

Source: IRS Statistics of Income Division, *Table 1A. CbCR (Form 8975)*

Subsidiaries located in tax havens are, on average, far more profitable than subsidiaries located elsewhere. In these countries, the average return to tangible assets is roughly 66%, which is more than twice the value for subsidiaries located in other jurisdictions. Differences in returns on tangible assets within the tax havens countries are, however, almost imperceptible, except for two clear outliers: Cyprus (229%) and the Netherlands (85%). Returns per employee – which can provide a representation of productivity (although not being a complete measure) – show an even larger difference: tax havens are jointly, on average, twelve times more profitable than the remaining countries. The average profits per employee in tax havens is of US$249 thousand. Within this group, the countries that stand out above average are, in decreasing order, Cyprus (412), the Netherlands (337), Luxembourg (336) and Ireland (308). In this case, a worker from Cyprus is assumed to be almost twenty times more productive than, for instance, a German worker – a clear sign of misalignment of profits with economic activity.

Finally, when assessing US MNEs' profits, there is an additional aggregate measure worth evaluating, respecting to the related party revenues (*i.e.*, revenues derived from companies within the MNE group). If earnings are largely derived from related party revenues (in absolute terms or in proportion of total revenues), that poses an additional risk, as it can indicate that profit is being shifted from other entities of the MNE (probably located in higher tax jurisdictions), through inadequate transfer prices – one of the main

channels through which MNEs shift profits[16]. Only in 6 countries revenues generated from related parties account for more than 50% of the total amount of revenues: Cyprus (78%), Luxembourg (70%), Lithuania (66%), Belgium (65%), the Netherlands (64%) and Ireland (56%). Excluding Lithuania, all the remaining countries were previously identified as potential EU tax havens. This suggests that subsidiaries located in tax havens are particularly important for the provision of goods or services to affiliated companies, generating more than 50% of their revenues through related party transactions. This finding, combined with the higher profitability shown in some tax havens, may indicate a strategic location of revenues, aiming to shift profits to lower tax jurisdictions.

Effective tax rate: comparing the ability to minimize taxes

The analysis performed so far represents an attempt to infer the extent to which US MNEs engage in tax planning activities when they operate and undertake investment in the EU. The problem in question is whether US MNEs actually succeed in shifting profits and pay relatively low rates of tax on their activities, providing them a competitive advantage relative to European companies.

The statutory tax rate is just one of the several legal components of corporate taxation that determine the tax liability of MNEs, as the tax burden also depends strongly on the definition of taxable profits. These may differ from profits before tax due to capital and equity allowances, tax deductible interest payments, special tax regimes (e.g., R&D incentives or patent box regimes), special agreements between tax authorities and individual MNEs ('*tax rulings*') and tax losses carry forward rules. Hence, to truly assess the tax burden of MNEs, we need to calculate their ETR. Very low ETRs may serve as an indirect measure of profit shifting or an indicator of a tax haven. With the information included in the IRS CbCR dataset, we cannot calculate the ETR for specific subsidiaries or for the corporate group as a whole, but we can assess it at a country-level for the aggregated US MNEs within scope.

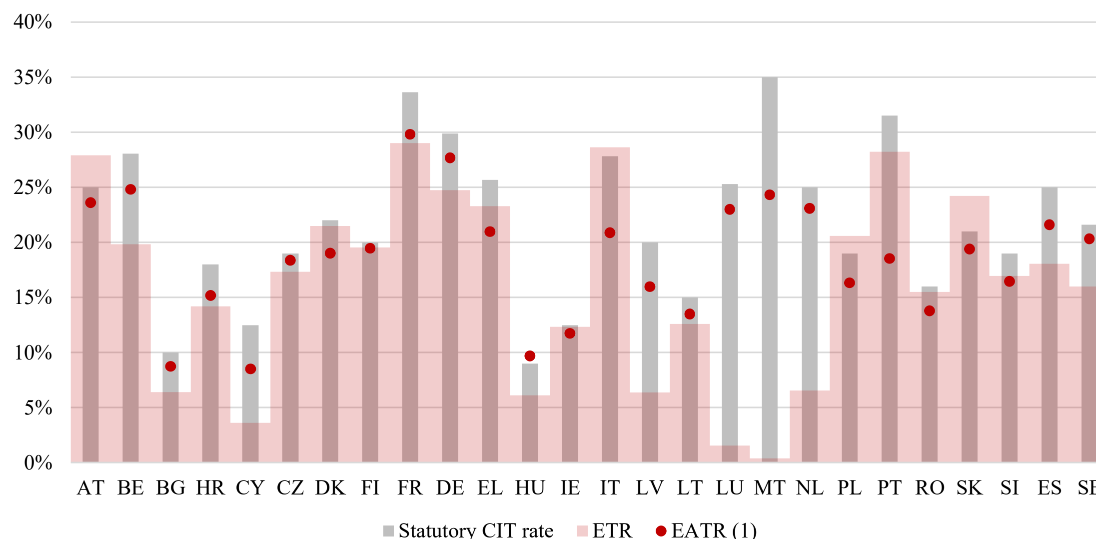
To assess the tax liability, we consider '*profit and loss before income tax*' a direct measure of taxable profit. The average ETR per country is then proxied by the ETR of the US MNEs' affiliates resident in that country, computed as foreign income taxes paid[17] relative to pre-tax profit. Note that these figures represent taxes paid only in the EU – they do not include any further taxes paid in the US or in any other country by the MNE

[16] Empirical evidence suggests that the most common mechanism for MNEs to shift profits (around 70%) is through strategic distortion of transfer prices on intragroup trade (Heckemeyer & Overesch, 2013).

[17] The *income tax paid* represents the actual amount of cash paid in taxes by the MNEs in a particular financial reporting year. However, it is not necessarily directly related to the profit before tax reported in that same financial reporting year, as it considers: payments of tax with respect to profits earned in earlier periods, advanced payments made in the current year and withholding tax incurred on payments. As for the *income tax accrued*, it is more related to the amount of profit before tax reported in a specific period, but it does not represent the true tax burden bore by the MNEs. There are a number of valid reasons why the figures for these two variables are different for a particular fiscal year. It might be an indicator of possible tax risk only if the level of tax paid in a jurisdiction is materially lower than the level of tax accrued and/or if this difference is persistent over time. Nonetheless, if we were to consider the income tax *accrued*, it would not alter the results.

groups considered. As in the remainder of the analysis, ETRs are calculated on a country-by-country basis and averaged over the three available years (2018 to 2020). Also, as taxes are mostly paid only by profitable companies, only entities with positive profits and tax payments were considered when computing the ETR. Results are shown in **Figure 8**.

Figure 8. Effective tax rates of US MNEs in the EU (2018-2020)



[1] The EATR reflects the average tax contribution a company makes on an investment project earning above-zero economic profits. It is a forward-looking (*ex-ante*) rate constructed as a weighted average across finance and asset-specific EATRs, under a country-specific interest and inflation rates scenario.

Notes: all computations are based on the subsample of profit-making entities of the dataset. Data on Estonia is missing (probably to ensure confidentiality due to the small number of forms on which the information is based).

Source: IRS Statistics of Income Division, *Table 1D. CbCR (Form 8975)*, OECD Tax Database, *Table II.1. Statutory corporate income tax rate* and OECD Corporate Tax Statistics, *Effective tax rates*

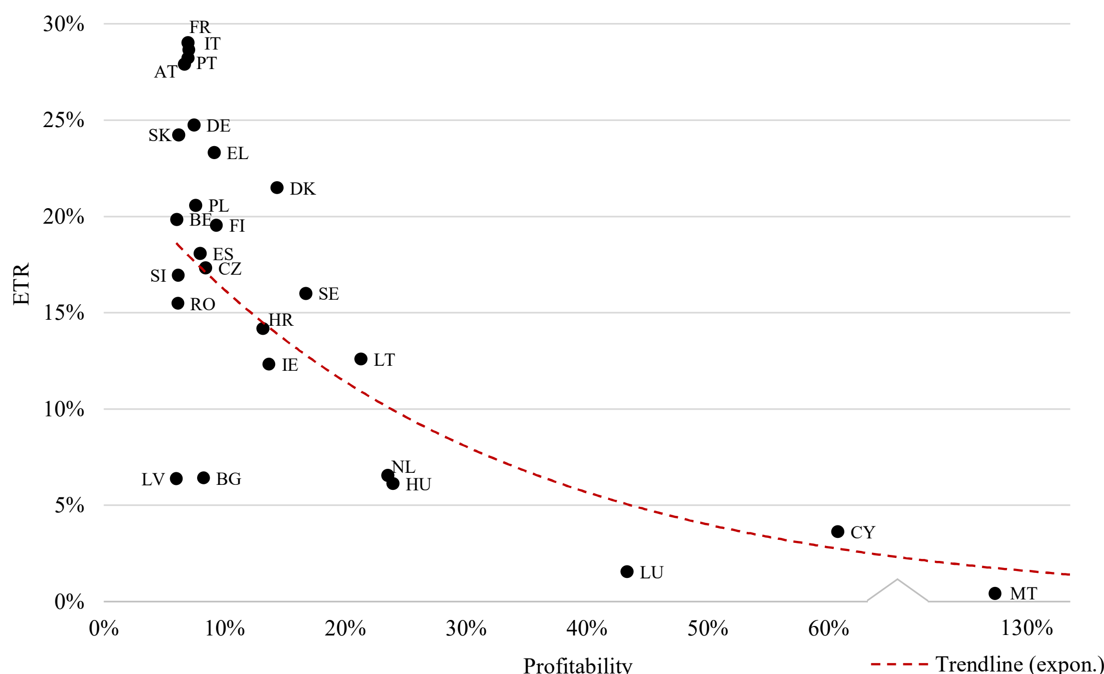
This analysis – based on aggregate data concerning only large companies, obliged to fill a CbCR – seems to confirm that large firms have the ability to exploit their greater resources to reduce the tax burden and engage in more sophisticated tax planning strategies, enabling them to benefit from lower ETRs. This is especially true not only in the Member States recording an exceptionally lower ETR, but also when a significant difference is observed between the headline tax rate and the ETR.

The differences in the taxation of corporate profits can partially explain some of the cross-country differences in profitability identified above, as some of the most *profitable* Member States (measured in return per employee and return on tangible assets) are also the ones with low ETRs. There are 7 Member States presenting an ETR below 10%: Bulgaria, Cyprus, Hungary, Latvia, Luxembourg, Malta and the Netherlands. However, the first four already have low statutory CIT rates, which helps to explain the resulting lower ETRs. This leaves us with three prominent cases: Luxembourg (1.6%), Malta (0.4%) and the Netherlands (6.6%). In addition to having low ETR, these countries have some of the highest statutory CIT rates, well above EU average (21.8%), hence showing the highest percentage point differences between the two rates. They are, simultaneously, the top 3 countries where there is a greater difference compared to the country specific

EATR estimated by OECD, which reflects the average tax contribution that all (and not exclusively US) companies make on an investment project earning positive profits. As this also happens on average across the EU, this highlights the fact that US MNEs do have, on average, lower values of consolidated ETR in the EU, demonstrating that they are able to reduce their EU-wide taxable profit rather than simply shifting it between EU countries.

Besides the fact that jurisdictions with significant profits and or/ accumulated earnings usually having a low level of tax accrued, literature typically finds a negative correlation between tax rates and profitability, with companies in relatively lower tax jurisdictions being more profitable than companies in higher tax jurisdictions (Keen & Konrad, 2013; Garcia-Bernardo, Janský, & Tørsløv, 2021). Based on a profit-to-revenues ratio, **Figure 9** supports this growing view discussed in the literature. That is especially true in Cyprus, Hungary, Luxembourg, Malta and the Netherlands, that have profitability ratios above 50% while applying ETRs below 10%. As sales are measured based on where they originate (instead of final destination), selling from subsidiaries in lower tax jurisdictions increase their profitability compared to other subsidiaries located in higher tax countries. It is then not surprising that lower tax jurisdictions have higher ratios of revenues (especially related party revenues) than their employment or assets would suggest.

Figure 9. Profitability of US MNEs in the EU by ETR (2018-2020)



Notes: all computations are based on the subsample of profit-making entities of the dataset. Data on Estonia is missing (probably to ensure confidentiality due to the small number of forms on which the information is based).

Source: IRS Statistics of Income Division, *Table 1D. CbCR (Form 8975)*

Finally, evidence from US MNEs suggests that lower tax rates indeed offer powerful incentives to inbound foreign investment and tax avoidance activities, sustaining the extensive literature on FDI tax sensitivity (Keen & Konrad, 2013). Countries are eager to

attract foreign capital and the economic benefits that accompany them, and, for that, some rely on low tax rates or other tax attributes designed to appeal to foreign investors. From 2018 to 2020, about 88% of US FDI stock in the EU was located in merely three countries – the Netherlands (43%), Luxemburg (33%) and Ireland (12%) –, incidentally countries with lower ETRs or aggressive IP tax regimes and, simultaneously, large shares of US MNEs' foreign profits booked (Eurostat, 2022b)[18]. These high shares reflect the investment that is held in investment funds and holding companies in all of these countries. The level of FDI directed to these countries represents more than half of their economic weight, with Luxembourg being the most prominent case – net FDI inward from the US represents more than 800% of its GDP. This strongly indicates the use of aggressive tax practices to attract investments and income (acting as offshore investment hubs).

* * *

In performing the tax risk analyses above, we ought to recognize that most of the inferences reached can be explained by non-related BEPS reasons. For example, a high ratio of returns on tangible assets can be reasonably explained if MNEs also hold intangible assets in that particular jurisdiction, as these assets are not disclosed in the CbCR and therefore cannot be considered. Also, it may be efficient for non-tax reasons to hold the IP in a single jurisdiction and that tax avoidance concerns may not be the main driver, so long as the payments to the IP holding entity from entities in other jurisdictions are at arm's length. However, when taking in consideration all of the tax risk indicators addressed previously, it is hard not to attribute at least a part of US MNE activity to tax avoidance practices.

As data show us, the EU should critically reflect upon its current role in the international tax policy setting, since following US leadership and preferences has been distorting the Single Market internal competition under the current dysfunctional separate entity regime. US MNEs have been exploiting the differences in the 27 Member States tax systems and relying on European tax havens to carry out their activity under a tax-friendly environment, granting them a competitive advantage. Not only income earned locally is taxed at favourable rates, but tax havens also facilitate the avoidance of taxes that might otherwise have to be paid to other Member States. Although ETRs might be biased downwards and profitability ratios biased upwards – due to limitations of the CbCR statistics and the many differences between accounting profits and taxable profits – that does not utterly change the comparative results between Member States and the distortion that US MNEs' activity imposes in the Single Market.

Out of the 7 EU tax havens commonly identified in the literature, the Netherlands and Luxembourg (and Ireland, to a lesser extent) appear to be the ones with a higher degree of complicity with US MNEs' artificial activity and in a better position to allow them to

[18] Data on Austria, Cyprus, Malta and Sweden is not available due to confidentiality concerns; hence it was not accounted for. It would be interesting, however, to know the percentage of FDI from US MNEs in Malta, given the high incidence of holding companies in this country, as already stated.

engage in BEPS activities, highlighting the fact that better-governed countries – measured by political stability, government effectiveness, rule of law and the control of corruption – are much more likely than others to become tax havens (Dharmapala & Hines Jr., 2009). They are the countries that attract large amounts of FDI and profits from US MNEs, while applying low ETR and showing little real economic activity (measured either by sales, employment or assets). They rank 4th, 6th and 11th, respectively, on the Corporate Tax Haven Index[19], and take the podium positions considering only EU countries. The Netherlands hosts 11% of the global financial activity conducted by MNEs around the world, a fraction only surpassed by the US in 1 p.p.. They are also the jurisdictions that have been under increased scrutiny by tax authorities and the EC, essentially due to tax rulings signed between local tax authorities and MNEs (DG Competition, 2016).

Finally, in addition to these countries allowing internal unfair competition and blocking EU-wide anti-avoidance measures, they are also used as gateways through which US MNEs channel profits out of the Single Market (Hakelberg, 2016). They have been identified in recent literature on profit shifting as a way for US MNEs to shift their profits to non-EU offshore centers, serving as conduit EU tax havens that facilitate profit shifting to non-EU havens, such as the Bermudas (Tørsløv et al., 2022), by using the differences of tax systems within the Single Market and distorting intra-EU competition.

[19] The Corporate Tax Haven Index ranks each country based on how intensely its tax and financial systems enable MNEs to underpay CIT. For further details, see https://cthi.taxjustice.net/en/.

5 Final considerations

For the last 60 years, the OECD has been the institutional key player and rulemaking in international tax policy, albeit failing to protect countries from tax abuse and incapable of offering a meaningful voice to developing countries. Even within its group members, countries' tax reforms do not occur simultaneously: the US acts as a Stackelberg leader and European countries as followers, displaying a sequential decision making (Radaelli, 1998; Keen & Konrad, 2013; Altshuler & Goodspeed, 2015). This strategic dynamic is exacerbated by the absence of a true global institutional tax structure to address tax issues, since that the UN was not able to maintain the leading position it once had a century ago (as its predecessor, the League of Nations), hampering reforms that could improve international tax governance and decrease inequalities between countries.

Who controls the agenda, controls the politics. Hence, as an incontestable leader in international tax policy, the lack of a more devoted attempt to truly overhaul the current transfer pricing system can then be pointed out to the US, which does not share the same interests as the EU in achieving a greater alignment between MNEs' taxation and economic value creation. It is the US' power and economic interests that have been preventing a new, more appropriate transfer pricing regime, drifting the international debate away from the FA approach, and allowing for the continuity of a regime based on a complex system of bilateral tax treaties. After almost a decade of failed reform efforts at the OECD level to curtail MNEs' tax avoidance with the BEPS project – that, after several rounds of negotiations and compromises, was reduced to a defence of the *status quo*, with the ALS as the cornerstone of the international tax system –, it is time to push for an alternative that best serves EU preferences, over the US'. Preferences that not only translate into economic gains, but mostly in equity and fair gains over the taxing rights allocation between Member States.

The FA approach would grant higher taxation rights to source-countries and would address the distortion of competition that the current separate entity approach allows in the European Single Market, possibly harming US tax revenue and, most certainly, US MNEs competitiveness abroad – which does not serve the interests of the current tax and political leader. But, as the assessment performed in this paper has showed, even after BEPS 1.0 and 2.0, US MNEs' activity in the EU is still harmful and highly distortive of the Single Market functioning, due to its artificial profits shifting activities. Its economic impact and hampering of tax revenues collected, shows us that the EC previous and current attempts to unilaterally introduce a FA is vital. The time has come for a new leader to come forward. It is in the EU's best interest, to fix this highly dysfunctional distribution of taxing rights among its Member States.

Moreover, implementing a FA approach in the EU would restrain US MNEs ability to engage in overseas cross-border aggressive tax planning schemes and to avoid foreign taxes (mainly by exploiting the ALS), therefore possibly decreasing the US' aversion to a worldwide unitary taxation. If the EU could assert itself as a greater leader in international tax governance, leveraging its own market power, growing tensions with the US' current preferences would lead to increased uncertainty for US MNEs operating in

Europe, pushing them to endorse the FA transfer pricing standard more easily as a way of increasing certainty over the ALS tax planning opportunities.

The implementation of a FA approach by the EU could serve, consequently, as the catalyst for a multilateral shift to a new international taxation system, which would be a game changer on how MNEs are taxed and on the ability of countries to secure their fair share of taxes. But even if it still not the time for the international adoption of this approach – taking the clear divergence of preferences between the US and the EU over the transfer pricing policies to implement –, it is the right moment for the unilateral adoption at the EU-level. The EU, being the biggest loser of the current system, who forfeits more from profit shifting, and one of the economies with greater political and market power, has to move towards a new taxation system. It cannot keep resting in the US political leadership – the number one leader of the Financial Secrecy Index ranking, *the* jurisdiction who plays the biggest role, globally, in enabling banking secrecy and anonymous shell company ownership, enabling money laundering and tax evasion, and failing to meet international standards on information exchange with other countries.

Tax data collected by the IRS – the CbCR data, which provides a complete coverage of the global distribution of profits and indicators of economic activity for MNEs exceeding a certain revenue threshold – allow us to study profit shifting activities of US MNEs in the EU, providing a clear indication that their activity in the EU is distorting the Single Market. The analysis performed shows evidence that US MNEs have more subsidiaries in tax-friendly countries – such as the Netherlands, Luxembourg and Ireland – than would be expected by the size of their economies. Subsidiaries in EU tax havens are much more profitable than those in non-tax haven countries, which can be explained by the disproportionate large share of profits reported in tax havens and the small fraction of economic activity (tangible assets and employees). Of the global profits reported in the EU, 36% rests in the Netherlands and 31% in Ireland. Offshore centers like these support tax avoidance activities – the legal exploitation of loopholes in tax systems – either by offering low taxes on corporate profits or by exempting from taxation certain types of payments received by a company from its foreign subsidiaries.

The analysis developed suggests then that additional policy efforts must be put in place – especially in the EU – to further reduce profit shifting by US MNEs. The EU must hold European countries up to the same level of scrutiny as non-European countries concerning harmful tax practices or favourable aggressive tax planning practices. Continued delay in implementing a FA in the EU will continue to allow these behaviours. The EU, a large financial and consumer market that accounts for an important fraction of US MNEs' global sales, should be able to translate market size into political power and impose tax avoidance measures without risking the US presence in the Single Market.

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