

# DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft  
*ZBW – Leibniz Information Centre for Economics*

Schoonackers, R.

## Article

# Rethinking corporate taxation in a globalised economy

NBB economic review

**Provided in Cooperation with:**  
National Bank of Belgium, Brussels

*Reference:* Schoonackers, R. (2022). Rethinking corporate taxation in a globalised economy. In: NBB economic review S. 1 - 24.  
[https://www.nbb.be/doc/ts/publications/economicreview/2022/ecorevi2022\\_h14.pdf](https://www.nbb.be/doc/ts/publications/economicreview/2022/ecorevi2022_h14.pdf).

This Version is available at:  
<http://hdl.handle.net/11159/631043>

## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/>

## Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.  
<https://savearchive.zbw.eu/termsfuse>

## Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.*

# NBB Economic Review

## 2022 / #14

### Rethinking corporate taxation in a globalised economy

by R. Schoonackers



# Rethinking corporate taxation in a globalised economy

R. Schoonackers \*

## Introduction

The current system of taxing corporate profits dates back to the 1920s. Since then, the economy has changed significantly; companies are operating more and more on a global scale and ongoing digitalisation has transformed daily life. International tax principles have failed to keep pace with these changes, resulting in a widespread perception that the current system is no longer fit for purpose. Multinationals are becoming increasingly adept at using loopholes in the tax system to lower their tax burden. In this context, the fundamental question of how taxation rights for multinational profits should be allocated across jurisdictions is left unanswered.

Consequently, the need to step up coordination in the area of corporate taxation has returned to the forefront in recent years. In 2013, the OECD succeeded – with the support of the G20 – in launching its Base Erosion and Profit Shifting (BEPS) project. Over a timespan of two years, no fewer than 13 reports were produced, culminating in a set of recommendations, new international rules and good practices. The BEPS project consists of 15 action points. Action 1, tax challenges arising from digitalisation, is currently the top priority for the OECD/G20 Inclusive Framework on BEPS and has already resulted in the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy. To date, 137 Inclusive Framework (IF) members have agreed to apply the Two-Pillar solution.

This article, which draws inspiration from topical publications by Devereux *et al.* (2021) and the De Mooij *et al.* (2021), is intended to provide a comprehensive overview of the OECD Two-Pillar solution and place it in a broader context. It is divided into four parts. The first part contains a brief summary of the current international tax framework and selected issues related to globalisation and digitalisation. In part two, a number of alternative international tax architectures to deal with these problems are examined. The third part focuses on the Two-Pillar solution, its implementation in the European Union and the potential budgetary and economic impact. Finally, some specific reflections on pillars 1 and 2 are given.

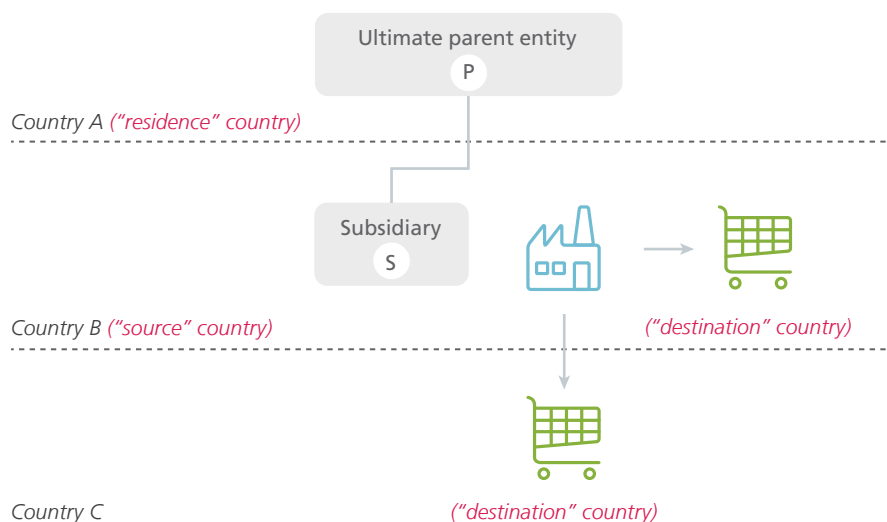
## 1. The current international tax architecture and its flaws

When a business operates on a cross-border basis, the question arises as to where its profits should be taxed. Taxation rights can be assigned to (i) the source country, i.e. the country where production takes place,

\* I would like to thank Stefan Van Parys, Shafik Hebous, Nate Vernon and the members of the NBB Council of Regency for helpful comments and a fruitful discussion on the topic.

## Chart 1

### A multinational firm



(ii) the residence country, i.e. the country where the firm is incorporated, and/or the (iii) destination country, i.e. the country where sales take place.<sup>1</sup>

The current international tax architecture to determine where profits should be taxed is the product of multiple sources (national legislation, international treaties and soft law). Despite the diversity of rules, the basic framework underlying existing practices is characterised by three central features (Auerbach *et al.*, 2021).

First, the physical presence of a firm in a certain country confers taxation rights on this country. This is called the *permanent establishment* threshold.<sup>2</sup> For the hypothetical multinational depicted in chart 1, both country A and country B have taxation rights over its profits.

In order to avoid double taxation, the international tax framework is founded on an extensive network of bilateral double tax conventions (DTC) allocating taxation rights over certain types of income between two countries. Most DTCs are based on three model conventions, which are very similar.<sup>3</sup>

Secondly, as pointed out by Auerbach *et al.* (2021), the tax treatment of a particular income item often depends on the type of income. This can be illustrated by the distinction between *active* and *passive* income. Operating profits from the normal business activity are considered active income while profits stemming from, for example, dividends, royalties and rental income are considered passive. In general, based on the model double tax conventions, active income tends to be taxed primarily in the source country, whereas passive income is taxed in the country of residence.

The third main feature of the international tax framework is that subsidiaries within a multinational group are treated as if they were independent entities. In other words, while a multinational operates as a single entity, its various component parts (for example, the parent company and the subsidiary in chart 1) are treated as independent bodies for tax purposes (Auerbach *et al.*, 2021).

<sup>1</sup> Corporate tax could be considered a withholding tax on shareholder income, so that corporate profit taxation rights could theoretically be assigned to countries where shareholders are located. This option is not considered here.

<sup>2</sup> A permanent establishment is a fixed place of business through which an enterprise wholly or partially conducts business. It can be a place of management, a branch, an office or a factory, etc. (Harpaz, 2021).

<sup>3</sup> As stated by Devereux *et al.* (2021), most DTCs follow the OECD Model Treaty, first issued in 1963 and most recently revised in 2017.

As De Mooij *et al.* (2021) has pointed out, the current tax framework to determine where profits are taxed is nearly 100 years old. It was thus designed for a world in which international trade was much less important and global value chains less complex. Consequently, as many have argued (see e.g. Harpaz, 2021; Devereux *et al.*, 2021; De Mooij *et al.*, 2021), current international tax law and its principles have failed to adapt to global business practices as the framework was designed to accommodate a traditional *brick and mortar* economy. One could thus state that both the further globalisation and intensified digitalisation of the economy has put pressure on the current international tax framework.

Globalisation has increased the mobility of capital which in turn influences the decisions taken by firms concerning (i) their production location and (ii) their profit-shifting behaviour. Concerning the choice of location, standard theoretical models show that – all other factors being equal – firms tend to base their activities where the average effective corporate tax rate is lowest. They therefore do their best to take advantage of differences in corporate tax rates between countries. Likewise, countries aim to attract businesses by adjusting their tax rates. The advantage they hope to gain is not only increased tax revenue but also, and more importantly, the attraction of real economic activity, with positive effects on the economy due to heightened employment and productivity spillovers. When competing to attract multinationals, countries tend to disregard the resulting negative externalities for other countries, as reflected in capital outflows. As a result, international tax competition has intensified and given rise to sub-optimal corporate tax rates.

When it comes to shifting profits, multinationals have various ways of exploiting the differences between tax systems to lower their tax burden. These profit-shifting techniques can be roughly divided into two categories: (i) the manipulation of transfer prices between different entities of the multinational and (ii) modification of the corporate financing structure by exploiting the fact that, in most corporate tax systems, interest on borrowings is tax deductible while the opportunity cost of capital (notional interest) is not.

Due to digitalisation, intangible assets are becoming increasingly important, which creates problems when applying the arm's length principle<sup>1</sup> as intangibles are notoriously hard-to-value, leading to increased profit-shifting opportunities. In addition, digital business models have unique characteristics in that a company can offer services online without being physically present in the jurisdiction where its customers are located. For example, a company that sells user-generated data and/or online advertising can easily base its infrastructure, such as servers, in a low-tax country and engage with users in other countries without having a physical presence there. Under the permanent establishment threshold, taxation rights are allocated to the country where the infrastructure (the servers) are located, in this case the low-tax country, and not to the country where the actual value added for the firm is generated. In other words, due to digitalisation, there is a disconnect between the place where a firm is physically present and the place where value is created.

As a result, taxation rights over the profits of highly digitalised multinationals are very unequally distributed across market jurisdictions. This has caused some countries, including France and Italy, to unilaterally impose a digital services tax (DST)<sup>2</sup> in order to collect more tax revenue from highly digitalised multinational firms. However, as noted by the IMF (2019), the uncoordinated proliferation of DSTs creates complexity, jeopardises tax cooperation and increases the risk of double taxation.

1 The arm's length principle forms the basis for the transfer pricing rules. This principle states that the value or price of a transaction between two related entities of a multinational firm should be the same as that applicable in a comparable transaction between two unrelated entities.

2 A DST usually takes the form of a flat tax on gross revenue from taxable digital services earned by a large multinational in a given jurisdiction (Harpaz, 2021). More information on DSTs around the world can be found in the comprehensive overview prepared by KPMG (2022).

## 2. Alternative international tax systems

As multinational businesses are becoming more skilled at taking advantage of flaws in the international tax system, corporate tax revenue is increasingly under pressure. This makes an in-depth reform of the international tax architecture indispensable. Currently, a number of potential changes to the existing framework are being widely discussed in both academic and political circles.

When evaluating alternative international tax systems, it is important to bear in mind certain general objectives for designing an optimal international tax framework. First, the system should be as efficient as possible. A tax on pure economic rent is considered ideal because it does not tax the normal return on corporate investments<sup>1</sup>. Consequently, the tax has no effect on the marginal cost of capital or the minimum required pre-tax rate of return (Mirrlees, 2011). In other words, only excess profits are taxed.<sup>2</sup> Taking into account the international dimension, an efficient system also implies that corporate tax does not distort the allocation by multinationals of resources between countries, i.e. the tax rate should not be a determinant of a firm's location choice.

Second, an optimal international tax system should be as fair as possible. In this regard, it is important to stress that it should be fair not only with regard to the level of tax paid, meaning the system should discourage, insofar as possible, tax-induced profit shifting and limit tax competition between countries, but also with respect to where taxes are paid. This implies that the link between where value added for companies is created and where companies are taxed should be restored.

Finally, the ideal system should be as simple as possible and therefore keep administrative and compliance costs to a minimum. In that sense, the system should be understandable when it comes to taxpayer obligations in order to ensure maximum tax certainty.

To adjust the current corporate tax system and achieve the abovementioned objectives, international tax proposals focus on three key elements, i.e. (i) a harmonization of the corporate tax rate to a certain extent, (ii) a redefinition of the tax base and/or (iii) a redistribution of taxation rights between the source, residence (host) and destination countries. Current international tax proposals combine these three elements in various ways.

To harmonise the corporate tax rate across countries, a form of minimum taxation is often discussed. Minimum taxation ensures that company profits are subject to a minimum level of taxation, thereby primarily targeting profit shifting and, more generally, international tax competition. The large-scale introduction of a minimum tax would force low-tax countries to increase their corporate tax rates to at least the minimum. This would lead to a decrease in tax differences between countries. As a result, tax-induced profit shifting would become less rewarding and subsequently decline. In order to deter profit shifting, the crucial factor is of course the level at which the minimum rate is set.

Current proposals for an alternative tax architecture also consider redefining the tax base. A popular idea is to opt for cash-flow taxation, meaning only net receipts are taxed. This implies immediate relief for all expenditures, including capital expenditures, and the taxation of revenue as it accrues. If cash-flow taxation were to be adopted on a wide scale, it would result in a common tax base across countries, thereby easing tax compliance and administrative costs.

Another way of improving the current international tax framework would be to advocate for a consolidated tax base. This would entail abolishing the separate accounting principle pursuant to which, for tax reasons, different parts of a firm are treated independently. It is important to note in this regard that a consolidated tax base would

<sup>1</sup> As noted by, among others, the IMF (2019), implementing rent taxes is not straightforward, partly because some costs like the risk-free return on investment and the risk premium can only be determined by approximation.

<sup>2</sup> An interesting overview of excess profit taxation and its design can be found in Hebous et al. (2022).

eliminate tax-induced profit shifting as the manipulation of transfer prices and rearrangement of the financing structure would have no impact on the consolidated tax base.

When considering a consolidated corporate tax base, the question obviously arises as to how taxation rights should be allocated between countries. One proposal currently on the table is to give countries taxation rights based on the destination principle. This means that taxation rights are allocated between jurisdictions based on where sales actually take place. This is very appealing since, to the extent the location of the end consumer is fixed, the tax base is highly immobile and consequently there is no room for tax competition between countries. Further, instead of depending solely on sales, the consolidated corporate tax base could be apportioned across jurisdictions in accordance with a specific formula in which, for example, payroll expenses and fixed assets are also taken into account.

For many years now, the European Union (EU) has been discussing a potential long-term solution to the problem of international tax avoidance and tax evasion, namely the introduction of a common consolidated corporate tax base (CCCTB), combining the principle of a consolidated tax base with the redistribution of taxation rights to countries where profits are effectively generated. A first draft CCCTB directive was released by the European Commission (EC) in 2011, revised in the following years and reintroduced in 2016. The original proposal allowed internationally operating businesses to calculate their tax base at group level before apportioning it, in accordance with a formula, between Member States, which would then apply their own tax rate. Having regard to political resistance, however, the 2016 proposal provides for a step-by-step procedure in which a common tax base is first established before proceeding to the consolidation phase<sup>1</sup>. In 2021, the Commission confirmed plans for a common corporate tax base in the EU, including an allocation formula, under the new label “Business in Europe: Framework for Income Taxation (BEFIT)” (Heckemeyer, 2022).

Another often-discussed alternative to the current international tax framework, which incorporates some of the abovementioned building blocks, is a destination-based cash-flow tax (DBCFT). In a closed economy, a DBCFT essentially boils down to cash-flow taxation, whereas in an open economy, a destination-based component is added to determine the share of a multinational’s taxable income falling within a particular jurisdiction. Like value added tax, a DBCFT is a form of border adjustment tax, meaning exports are untaxed while imports are subject to tax. In other words, a DBCFT is based on sales of goods and services in a country less expenses incurred in that country<sup>2</sup>. A DBCFT has some appealing characteristics. First, it taxes, in essence, pure economic rent, as cash-flow taxation implies that the government takes only a share of net revenue. Tax is only due to the extent returns are above normal. Consequently, a DBCFT should not distort business investment. Moreover, it has also been shown that a DBCFT eliminates the bias towards debt financing by ensuring the equal treatment of debt and equity as financing sources<sup>3</sup>. Furthermore, if adopted universally, a DBCFT would significantly eliminate profit-shifting behaviour and tax competition. Tax competition would be eliminated due to the largely immobile tax base while profit shifting would be heavily reduced as a DBCFT is robust against avoidance through intercompany transactions often used for such purposes, i.e. the mispricing of intercompany transactions and the use of intercompany debt. That being said, the introduction of a DBCFT would raise significant implementation issues – both administrative and legal – and thus require substantial changes to the current system. For example, processes such as the set-off of losses between related companies in different DBCFT countries are not straightforward in practice. Consequently, shifting from the current international tax system to one based on a DBCFT would be a major overhaul (Auerbach *et al.*, 2017; IMF, 2019).

1 Important to note is that the EC’s C(C)CTB proposal only would apply to multinational groups with a consolidated turnover of more than € 750 million.

2 As intermediary goods and services are taxed when imported but can also be deducted for determining the tax base, the tax and subsequent deduction cancel out. Consequently, the tax base of a DBCFT comes down to taxing sales of goods and services in a country less the expenses actually incurred in that country.

3 This can easily be shown when a DBCFT is limited to “real” flows, so excluding any financial flows and thus making interest payments not deductible. But as shown by Auerbach *et al.* (2017) it also holds for the alternative option where both “real” and “financial” flows are considered.



Discussions on the introduction of a DBCFT stress the importance of a multilateral or globally agreed solution. Auerbach (2017) illustrates this by focusing on the implications if a DBCFT were to be introduced in only a subset of countries. In that case, profit shifting issues for non-adopting countries could be heavily intensified. Multinationals operating in high-tax countries that did not adopt the DBCFT, would have an incentive to overprice their imports but would not be subject to a countervailing tax when exporting them from related countries where the DBCFT is in place. More generally, many potential changes to the current international tax framework would lose their attractiveness if adopted on an individual scale. Harmonisation and coordination measures should thus preferably involve as many countries as possible, which makes these initiatives intrinsically fragile.

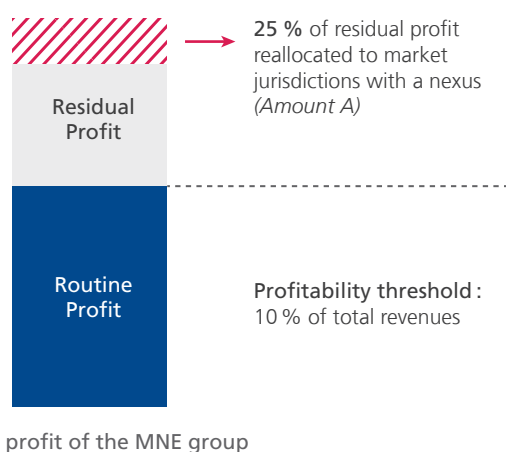
### 3. An OECD coordinated approach to rethinking corporate taxation

International institutions play an important role in making progress towards an overhaul of the international tax framework. A good example is the OECD/G20 Inclusive Framework on BEPS' Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy of 8 October 2021. This statement is an important milestone in reshaping the general consensus on how to deal with tax avoidance and tax evasion on an international scale. However, as noted by the IMF (2022) and others, implementation issues and potential refinements must still be worked out and broader challenges inherent in the taxation of multinationals dealt with.

#### 3.1 The design of Pillars 1 and 2

Chart 2

##### Pillar 1: Allocation of taxation rights in a globalised economy



Source: OECD (2021a).

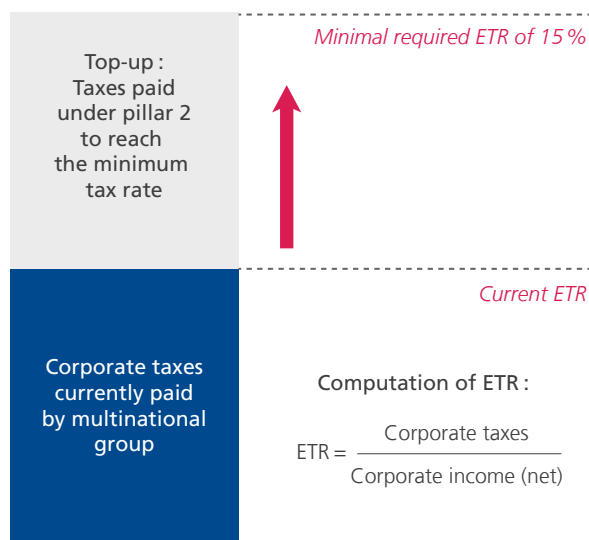
Pillar 1 adjusts the international corporate tax system by allocating to market jurisdictions taxation rights over a share of the profits of large multinational enterprises (MNEs). A portion of these profits are allocated based on where actual sales take place, without the need for the MNE to be physically present. Pillar 1 applies to multinationals with global turnover in excess of € 20 billion.<sup>1</sup> This approach to the redistribution of taxation rights from source to destination countries is shown in chart 2.

<sup>1</sup> Extractives and regulated financial services are currently excluded (IMF, 2022).



### Chart 3

#### Pillar 2: The Level of taxation in a globalised economy



Source(s): OECD (2021a)

To allocate the profit share transferred to market jurisdictions, the MNE's profits are first broken down into normal or routine profits and excess or residual profits. Measuring excess profit, meaning that above a normal return on capital, is not always straightforward, that is why a simplified approach is used. More precisely, a profitability threshold is used to approximate the level of non-routine or residual profits. Profits in excess of 10 % of total revenue are considered residual; 25 % of non-routine profits are then transferred to market jurisdictions with a nexus, using sales as the key reallocation factor.<sup>1</sup> A country will be considered to have a nexus with a given MNE if sales in that country exceed € 1 million (or € 250,000 if the country's GDP is below € 40 billion).

As stressed by the IMF (2022), the implementation of Pillar 1 will require that countries sign a multilateral treaty, implying they will have to repeal any possible unilateral digital service tax and similar measures and agree not to introduce new ones. According to the latest OECD communication (2022), negotiations to turn Pillar 1 into practice are ongoing. The Inclusive Framework is in the process of gathering feedback from stakeholders on the overall design of the rules to be used to determine the reallocation of profits. At the October 2022 meeting, stakeholder input will be reviewed in order to fix the rules. As a next step, the Inclusive Framework aims to have the Pillar 1 rules ratified globally, i.e. by a critical mass of countries, including the largest economies where most large multinationals are headquartered, by mid-2023 so that Pillar 1 can enter into force in 2024.

Pillar 2 provides for a minimum corporate tax rate, set at 15 %, to ensure that large multinationals pay their fair share of tax, regardless of where they are located. Pillar 2 applies to multinationals with global turnover of at least € 750 million, meaning it covers many more MNEs than Pillar 1. Chart 3 summarises the mechanism. If corporate income is taxed below the minimum effective tax rate, the MNE will be required to pay a top-up tax in order to reach the effective rate of 15 %. Pillar 2 includes two important interrelated tax rules: (i) the income inclusion rule (IIR) and (ii) the undertaxed-payments rule (UTPR).<sup>2</sup>

<sup>1</sup> The share of profits reallocated under Pillar 1 is called "Amount A" (OECD, 2021c).

<sup>2</sup> Both rules and their implications are analysed in more detail in the section of this paper on the EU draft directive on the implementation of Pillar 2 (see below).

Regarding the top-up tax, a correct calculation of the average effective tax rate (ETR) is crucial. The first step is to determine the tax base (the denominator), namely the profit before tax, using financial accounting standards. For policy reasons, a number of adjustments are then made to add or remove certain items so as to eliminate a number of common book-to-tax differences. In addition, it is necessary to agree on the taxes covered (the numerator); the entity's current taxes for the fiscal year form the basis and are adjusted to reflect certain timing differences. Tax relief that provides only a timing advantage will not depress an entity's ETR (Deloitte, 2021).

The IMF (2022) notes that the introduction of a global minimum tax is a “common approach”, meaning it is not mandatory for countries to implement it. However, by joining the IF Statement on the Two Pillar Solution, countries implicitly accept the adoption of this solution by others. In its latest communication (2022), the OECD states that the technical work on Pillar 2 is almost complete and points out that implementation now lies in the hands of IF members, with sufficient progress already having been made. It seems that many countries are planning on entry into force in 2024. One example is the United Kingdom, which published draft legislation to implement Pillar 2 in July 2022.<sup>1</sup> The EC has also proposed a directive to ensure a global minimum effective tax rate of 15 % for large groups operating in the EU. However, to date, unanimity has not been reached amongst the Member States as Hungary is still not on board.<sup>2</sup> To underscore the EU's commitment to the introduction of a global minimum effective tax rate, France, Germany, Italy, the Netherlands and Spain recently issued a joint statement stressing their willingness to implement Pillar 2 in the EU.<sup>3</sup> The key features of the EU draft directive are discussed below.

### 3.2 Main features of the EU draft directive on the implementation of Pillar 2<sup>4</sup>

The EU draft directive generally follows the OECD blueprint on the implementation of Pillar 2. However, to comply with the fundamental principle of freedom of establishment in the EU, Pillar 2 will also apply to large-scale domestic groups with combined annual turnover of at least € 750 million. In this way, the EC wishes to avoid the risk of discrimination between cross-border and purely domestic cases.

The primary rule to impose a minimum tax on large businesses in the EU is the income inclusion rule (IIR). The IIR imposes a top-up tax on an EU-based parent company for low-taxed income of a constituent entity. In the example in chart 4, a subsidiary (S) of a multinational group subject to Pillar 2 does not pay the minimum tax rate of 15 %. Pursuant to the IIR, the parent entity (P) needs to pay a top-up tax in country A to arrive at an ETR of 15 % for S. In this example, the top-up tax is equal to 50. It should be noted that it does not matter if the subsidiary is located in the EU.

1 The draft legislation is subject to technical consultation and stakeholders could comment until 14 September 2022 (KMPG, 2022).

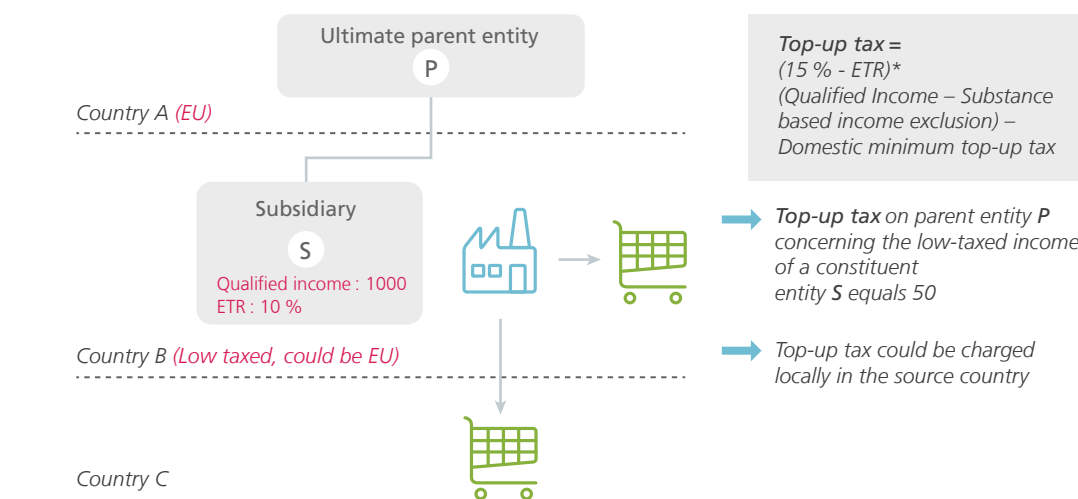
2 For tax matters, unanimity is required in the EU.

3 If unanimity is not reached amongst the EU Member States, these countries are determined to follow through on their commitment by opting for a form of “enhanced cooperation”. The joint statement is available at [joint-statement-by-France-Germany-Italy-Netherlands-and-Spain-ok.pdf \(mef.gov.it\)](#).

4 This section is mainly based on EC (2021a) and EC (2021b).

Chart 4

# Income inclusion rule



Source: based on EC (2021a)

The Model Rules for Pillar 2 allow jurisdictions to charge a local or domestic top-up tax to arrive at the minimum ETR for constituent entities located in their territory. This domestic top-up tax is fully creditable against the top-up tax owed by the parent entity. A provision to this effect is also included in the EU draft directive, implying that the top-up tax could be charged and collected in a jurisdiction in which below-the-minimum-rate taxation occurs. In our example, this means that if country B applies Pillar 2 and also opts for a domestic top-up tax, the additional tax of 50 will be paid in country B, with no extra tax revenue for country A, the jurisdiction where the parent entity is located.<sup>1</sup> The source country will thus have discretion to decide whether to charge a local top-up tax. In reality, all Member States will most likely introduce such a tax in order to stake a claim to a portion of the tax revenue under Pillar 2.

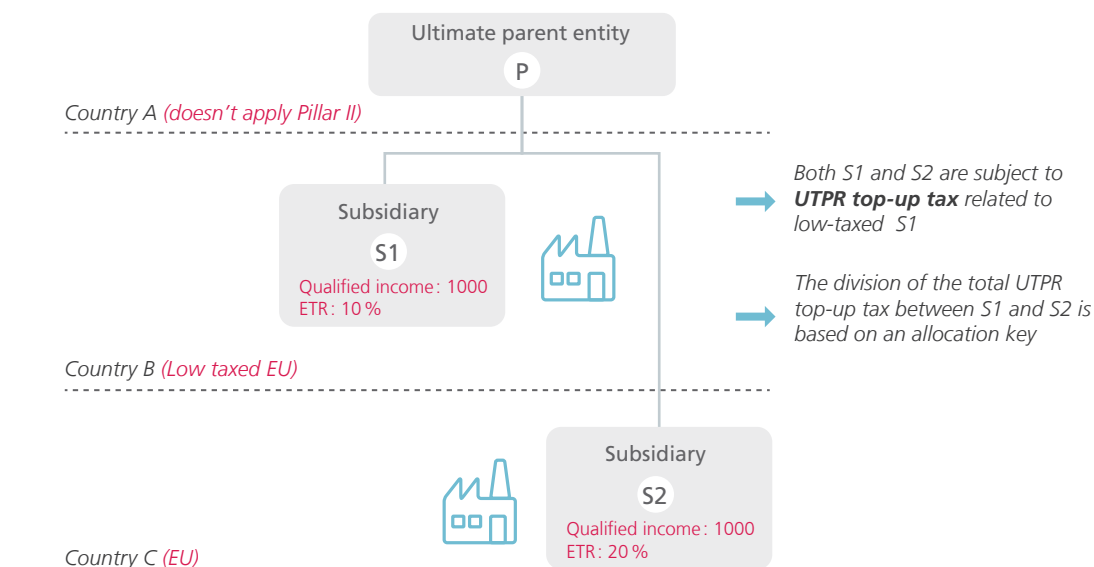
In addition, the OECD rules allow a specific deduction from the tax base used to determine the overall top-up tax charged on low-taxed income of a constituent entity. The EU draft directive also provides for a substance-based income exclusion, for payroll costs and the value of tangible assets. The justification for such an exclusion is that Base Erosion and Profit Shifting behaviour is less present when real economic activity takes place. More concretely, after a transition phase during which higher percentages will apply, it will be possible to deduct 5 % of the value of tangible assets and 5 % of payroll costs from the tax base when calculating the top-up tax. Finally, if a multinational group in a certain jurisdiction has profits below € 1 million and revenue below € 10 million, no top-up tax will be owed.

The second rule, the undertaxed payments rule (UTPR), comes into play when the parent entity is located in a jurisdiction that does not apply Pillar 2. The UTPR serves as a backstop to the IIR and is intended to ensure that the top-up tax is paid when the parent entity is located in a country with no IIR in place. Pursuant to the UTPR, constituent entities located in a country where Pillar 2 is in force will owe a share of the top-up tax related to low-taxed entities of the multinational group. In keeping with the OECD blueprint, calculation and allocation of the UTPR top-up tax amongst constituent entities located in Member States will be based on the share of both employees and the value of tangible assets in all UTPR jurisdictions.

<sup>1</sup> This is only the case of course if the domestic top-up tax is equal to 50. If it is below this amount, the difference is still payable in country A.

Chart 5

### Undertaxed payments rule)



Source: based on EC (2021a).

The functioning of the UTPR is illustrated by the example in chart 5, where the parent entity (P) is located in a country not applying Pillar 2. It is immediately clear that S1, a subsidiary of P, is low-taxed. If country B does not impose a domestic top-up tax, the additional tax of 50 should be paid by P in order to arrive at the minimum ETR of 15 % for its constituent entity (S1). However, P is located in a country where Pillar 2 is not enforced. In these circumstances, the UTPR comes into play. Due to the UTPR, S1 and S2 – both located in countries where Pillar 2 is in place – will owe a share of the top-up tax of 50. This share will be based on the number of employees and the value of tangible assets of each subsidiary.

### 3.3 Tax revenue effects of the introduction of Pillars 1 and 2

When assessing the tax revenue effects, it is important to take into account two important caveats. First, existing impact assessments are often based on outdated data. For example, the data used by the OECD (2020) and Barake *et al.* (2021) predate significant tax policy reforms, such as the 2017 US and Belgian corporate tax reforms (see also Bunn, 2022). Moreover, a credible estimate of the behavioural reaction of both firms and governments is crucial for a solid impact assessment. However, anticipating dynamic behaviour is not straightforward, leading to an impact analysis being surrounded by much uncertainty.

Bearing these caveats in mind, there will clearly be a major difference between the entry into force of the two pillars. The implementation of Pillar 1 will entail a significant change to the manner of allocating at least a portion of taxation rights between countries. However, this will lead to only a modest – if not negligible – increase in global tax revenue. On the other hand, the introduction of a minimum ETR pursuant to the implementation of Pillar 2 could potentially lead to a significant increase in worldwide corporate tax revenue.

With regard to the expected global revenue effects of Pillar 1, the recent IMF analysis (2022) illustrates that, based on data for the largest 40,000 international firms, multinational profits in 2019 were estimated at around \$ 7.9 trillion. As can be seen in chart 6 (left panel), various simplified empirical methods are used to decompose total multinational profits into routine profit and excess profit. To comply with Pillar 1 rules, a revenue

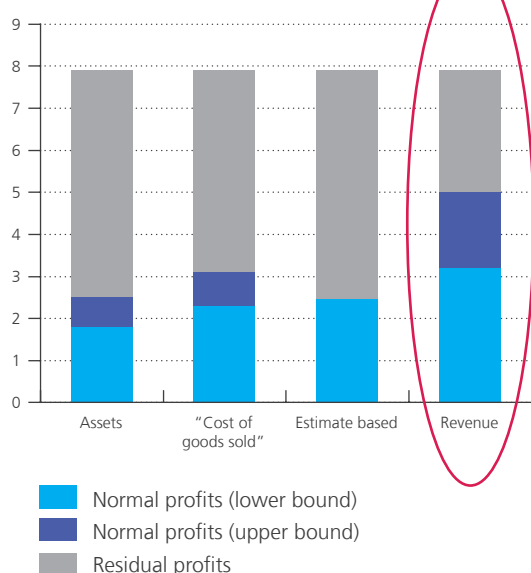
threshold of 10 % is used to further decompose multinational profits so as to estimate the taxation rights to be redistributed under Pillar 1 (chart 6, right panel). Based on this analysis, the share of excess profit reallocated to market countries is around \$ 150 billion, thus only 2 % of total multinational profits. The IMF further estimates that around 140 multinationals will be impacted by Pillar 1. This chart is in line with OECD projections (2021b) that Pillar 1 will apply to about 100 of the largest and most profitable multinationals. Finally, if country-specific estimates are studied, the IMF results suggest that revenue will be reallocated from low-tax investment hubs to both low-income and advanced economies. For advanced economies, tax revenue is expected to rise by around 1 % on average. It should be noted that a detailed analysis of the winners and losers within advanced economies is – at least to the best of our knowledge – not available. As Pillar 1 is about the redistribution of taxation rights between countries, such an analysis could be very interesting from a country perspective. However, this does not detract from the intrinsic need to reallocate taxation rights amongst market economies.

Chart 6

### Global corporate tax revenue effects from the introduction of Pillar 1

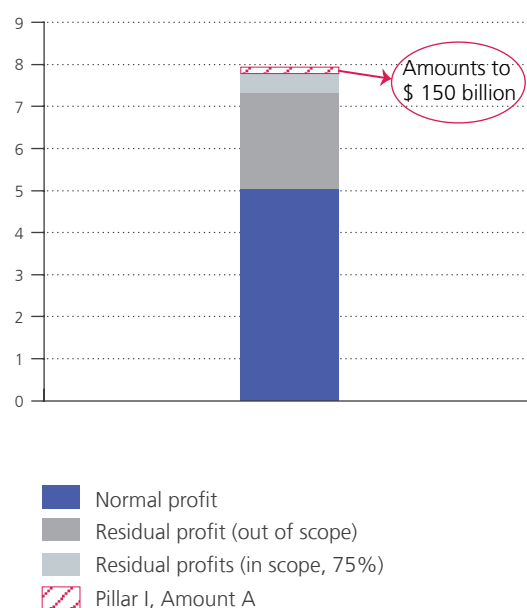
#### Disaggregation of total profits of multinational corporations according to different approaches

(Trillions of US dollar, 2019)



#### Pillar 1 reallocates a small fraction of total profits of multinationals

(Trillions of US dollar, 2019)



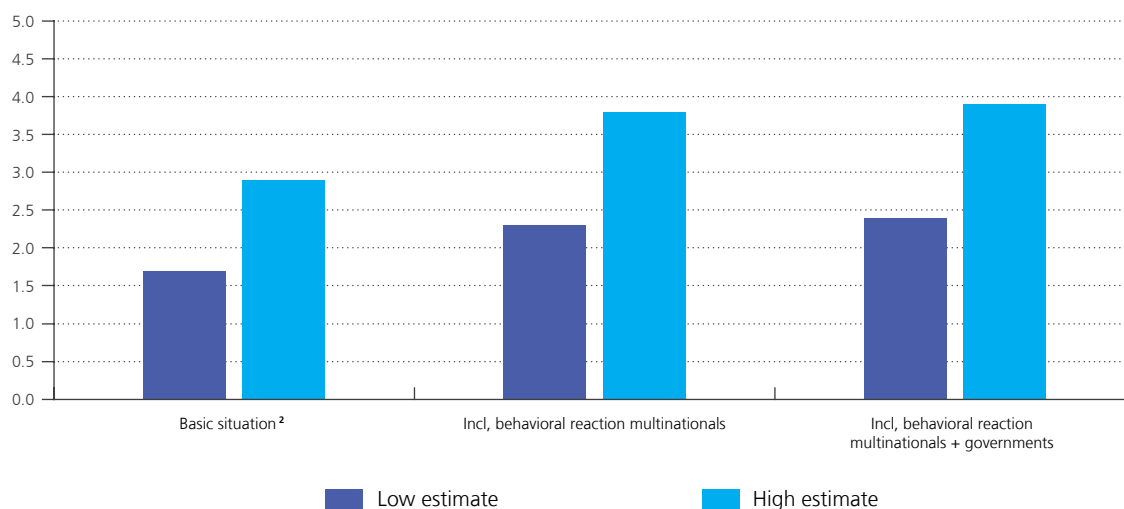
Source: IMF (2022).

Note: The left panel shows empirical estimates for normal and excess profits across four simplifying measures: 5-7.5 % of total assets, 5-7.5 % percent of costs of goods sold, estimate-based using econometric specifications and 5-10 % of revenue. In the right panel, the Pillar 1 approach for estimating residual profit is taken. There, out of scope profit refers to both companies below the revenue threshold to be included under Pillar 1 and to companies operating in the sectors where Pillar 1 does not apply, i.e. the regulated financial and extractive sectors.

When analysing the revenue effects from the introduction of Pillar 2, both the static effects and the dynamic impact – including behavioural effects – are considered. In this regard, it is important to note that estimates vary widely between studies. Three main factors can explain this significant variance: (i) differences in the data used, with regard to both scope and time period, (ii) differences in the additional assumptions needed for a static estimate and (iii) differences in how the behavioural reactions of firms and governments are assessed. Estimates by the OECD (2020), Barake *et al.* (2021) and the IMF (2022) are discussed below.

Chart 7

### Global corporate tax revenue effects from the introduction of Pillar 2 – OECD estimates



Source: OECD (2020).

1 For calculation of the revenue gains, a 10% carve-out for payroll costs and the value of tangible assets was applied to determine the tax base. To be consistent with the assumption that the US global intangible low-taxed income provision will coexist with Pillar 2, the estimates exclude revenue gains related to multinationals with an ultimate parent company in the US. The difference between the lower and upper estimates reflects data uncertainty, with the upper bound also taking into account uncertainty related to pockets of low-taxed profit in higher-tax jurisdictions.

2 The basic scenario takes into account the interaction of Pillar 2 with Pillar 1, without including revenue gains from the introduction of Pillar 1.

The OECD (2020) is very transparent regarding the caveats applicable to its detailed impact analyses and acknowledges that its estimates should be interpreted as illustrating a broad order of magnitude rather than as precise point estimates. In its analysis, the OECD explicitly models the behavioural reaction of both firms and governments. Concerning firms, it tries to estimate – by making a number of necessary assumptions – their reaction in terms of profit-shifting behaviour. As differences in effective tax rates are the major factor driving profit shifting, the introduction of Pillar 2 will reduce ETR differentials across countries. The incentive to shift profits to lower-tax jurisdictions will thus diminish as the benefit in doing so decreases. As the costs inherent in profit shifting – such as reputational and advisory costs – will not decline, profit shifting will become less attractive. The OECD also tries to capture government policy reactions. It assumes that some countries with an ETR below the minimum rate that do not apply Pillar 2 will increase their ETR for multinationals in order to obtain a share of the additional tax revenue. Incorporating this dynamic effect, however, will lead to only a small increase in revenue as it is merely a shift of gains between jurisdictions.<sup>1</sup> The OECD's estimates of revenue gains following the introduction of a minimum ETR of 15% with a 10% substance-based carve-out for payroll costs and the value of tangible assets are shown in chart 7.<sup>2</sup> The low estimates cover only the impact on low-taxed profits in low-tax countries. The upper bound estimate attempts to account for the uncertainty related to pockets of low-taxed profit in higher-tax jurisdictions. The results show that – excluding any behavioural reaction – global corporate income tax revenue will increase by between 1.7% and 2.9%. Including the dynamic behaviour of firms and governments, global corporate income tax revenue could potentially rise by up to 4%.

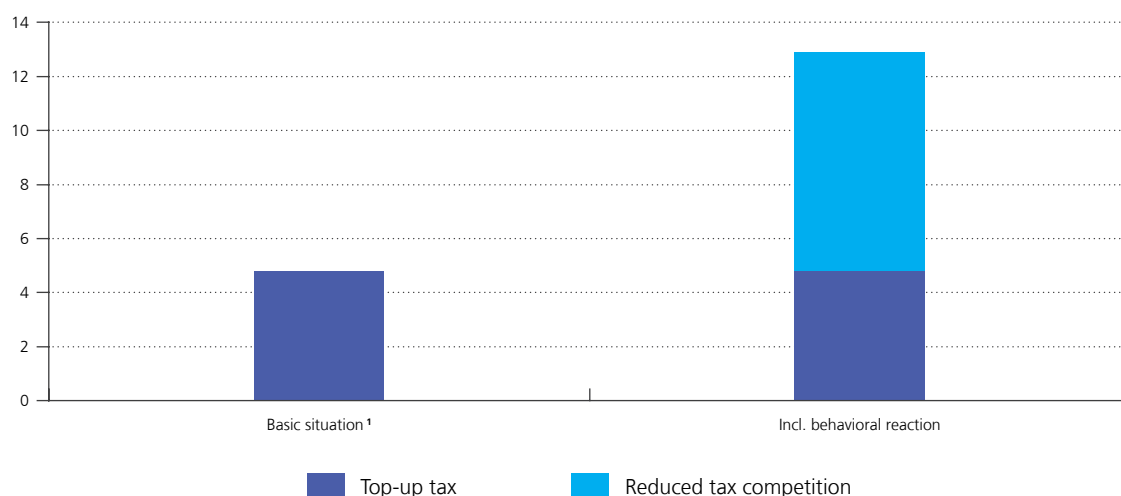
1 The OECD (2020) only considers the revenue impact of an ETR increase in low-tax countries (that do not apply Pillar 2) on multinationals, not on companies that fall outside the scope of Pillar 2. The additional revenue from taking into account the behavioural reaction of governments is mainly attributable to (i) additional revenue from multinationals not present in countries applying Pillar 2 and (ii) a lower substance-based income inclusion due to an increase in the ETR by low-tax countries.

2 It should be noted that the substance-based income exclusion percentages are not equal to those mentioned in the final OECD Inclusive Framework Statement, in which the percentages are set at 5%, subject to a transition period during which the exclusion is set at 8% for the value of tangible assets and 10% for payroll costs (OECD, 2021).

## Chart 8

### Global tax revenue effects from the introduction of Pillar 2 – IMF estimates

(% of global corporate income tax revenues)



Source: IMF (2022).

<sup>1</sup> For calculation of the revenue gains, a carve-out for payroll costs (10 %) and the value of tangible assets (8 %) was applied to determine the tax base. This is consistent with the initial phase of the substance-based carve out provided for by the proposed EU directive. To facilitate comparison with OECD (2020) estimates, results are shown without the United States. The estimates thus exclude revenue gains related to multinationals with an ultimate parent company in the US, which is consistent with the assumption that the US global intangible low-taxed income provision will coexist with Pillar 2.

The IMF (2022) approach to estimate the revenue impact of Pillar 2 is also very well documented. It is important to note that the IMF static estimates do not include revenue that could stem from profits taxed below 15 % arising in the headquarters country since, at the time of estimation, the definitive design of the rules was unclear. According to the IMF, the introduction of Pillar 2 will result in an increase in global annual corporate tax revenue of about 4.8 % <sup>1</sup> (chart 8). Taking into account dynamic behaviour, reduced tax competition will lead to an additional 8.1 % in global corporate tax revenue. The IMF acknowledges, however, that quantifying the dynamic effect is very challenging. Its approach is based on the realistic assumption that low-tax countries will raise their corporate tax rates to the minimum, possibly for in-scope multinationals only. <sup>2</sup> The IMF expects high-tax countries to react by raising their rates as well. <sup>3</sup> Using an empirical approach to estimate a corporate tax reaction function, the IMF found that a one percentage point change in the average foreign statutory corporate tax rate leads to an increase in the home rate of up to 0.6 percentage point. In short, the IMF's dynamic estimation concretely assumes that countries with a corporate tax rate below 15 % will raise their tax rates to the minimum, which will in turn prompt other countries to raise their rates, in accordance with the estimated corporate tax reaction function, causing the weighted average global corporate tax rate to rise from 22.2 % to 24.3 %. As the IMF relies on the upper estimates of its tax reaction function, the estimated dynamic impact can be seen as an upper bound.

<sup>1</sup> Pursuant to OECD (2020) estimates, we report the IMF (2022) projection for a sample that excludes the US, the reason being that the US levies its own minimum tax (the global intangible low-taxed income provision) so we expect both taxes to coexist.

<sup>2</sup> The OECD Model Rules allow for a domestic top-up tax only on multinational facing Pillar 2.

<sup>3</sup> Even if low-tax countries only increase the tax rate for in-scope multinationals.



Finally, the analysis of Barake *et al.* (2021) of the EU Tax Observatory should be mentioned. This study also estimates the revenue effects from the introduction of a minimum ETR of 15 % but, unlike other studies, presents country-specific projections. These projections should be interpreted with caution, however, as they are subject to substantial uncertainty. First, the results are based on the assumption that parent companies will charge the top-up tax for their constituent entities. In reality (see the EU draft directive on the introduction of Pillar 2), countries can and probably will introduce a domestic top-up tax, meaning the top-up tax will be paid where low-taxed subsidiaries are located. This assumption heavily affects the distribution of revenue gains across countries. Second, country-specific results are – in our view – much more driven by data imperfections than more aggregate results. Barake *et al.* (2021) acknowledge this and point to two main data issues, namely (i) the double counting of intra-firm dividends and (ii) unrealistic one-off high profit margins. These issues lead to unrealistically low average ETRs and consequently inflate the expected revenue from the introduction of Pillar 2. The IMF (2022) compared its results with those of Barake *et al.* (2022) and found that, for countries included in both studies, corporate tax revenue increased on average by 7.4 % according to Barake *et al.* but only by 4.8 % according to the IMF. This difference may be due to a few outliers in the analysis of Barake *et al.* (2021). Finally, when it comes to assessing the cost of introducing a substance-based income exclusion to determine the top-up tax, the findings of Barake *et al.* (2021) could be very useful as they illustrate that a carve-out of 10 % for payroll costs and 8 % on the value of tangible assets (as per the initial phase described in the EU draft directive) would lead to a reduction in revenue gains of about 23 %.

### 3.4 Other economic effects from the introduction of Pillars 1 and 2

As explained above, the introduction of Pillars 1 and 2 will reduce profit-shifting opportunities for internationally operating firms. Together with the direct effect from the introduction of a minimum effective tax rate, this will result in a higher effective tax rate on business investment for in-scope multinationals. However, to the extent countries react by raising their overall tax rates, other firms will be affected as well.

An increase in the ETR raises the user cost of capital, i.e., the minimum pre-tax rate of return on an investment a firm needs to achieve in order to break even after taxes. The OECD (2020) has illustrated that global adoption of the two-pillar solution will cause the effective marginal corporate tax rate to increase by 1.4 percentage point<sup>1</sup> on average. However, when evaluating the precise impact on business investment choices, it is important to take into account the distinction between (i) the relocation of investment between entities in a multinational group and (ii) changes in overall investment at group level. As noted by the OECD (2020), the latter could be less affected, as investment is merely shifted from one location to another. This point is also mentioned by Devereux *et al.* (2020) who acknowledge that an increase in tax rates could improve global economic efficiencies, the idea being that a reduction in ETRs across countries decreases tax-induced distortions in location decisions and investment behaviour. Although subject to substantial uncertainty, the OECD (2020) estimates the direct impact on current economic activity of lower corporate investment due to the global introduction of the two-pillar solution to be relatively small, i.e., less than 0.1 % of GDP.<sup>2</sup> To evaluate this direct impact, the OECD (2020) argues that the right counterfactual scenario is one in which tax and trade disputes (e.g., due to DSTs and double taxation) are likely to intensify and tax uncertainty to increase significantly. This will have a much more negative impact on GDP. Consequently a global adoption of the two-pillar solution is by far the preferred option. The IMF (2022) has also concluded that while the two-pillar solution would result in corporate investment becoming more costly, the aggregate effect would be modest. Its estimates indicate that the aggregate effect for investment in fixed assets would be limited, but that large country-specific effects could occur, i.e., investment could be heavily revised downwards in some low-tax countries. This is in line with the preceding argument that multinationals reallocate investment in response to a decline in tax rate differentials between countries.

1 This is a weighted average. Moreover, it should be noted that the OECD's (2020) calculations are based on a minimum ETR under Pillar 2 of 12.5 % rather than 15 %.

2 The OECD's findings build on interesting work by Millot *et al.* (2020).

Although the precise revenue impact of the two-pillar solution is highly uncertain, it is clear that corporate tax revenue will increase. Moreover, its negative impact on economic activity will be limited. Given the current fiscal situation in many European economies, characterised by significant government assistance to deal with the energy and inflation crisis, an increase in tax revenue, with little distortive economic effects, would be very welcome to help restore or maintain the sustainability of public finances. Moreover, as the additional revenue would be permanent, it could be used to revise the optimal mix of taxation across the various factors of production, e.g., to lower taxes on labour. Other possible uses include support for public investment and a reduction in public debt. All in all, the additional revenue will undoubtedly have an overall positive impact on the economy.

To the extent that large multinationals are traditionally subject to a lower minimum effective tax rate due to a wider array of tax planning options, smaller businesses are placed at a competitive disadvantage and competition amongst firms decreases. Ultimately, this can lead to the creation of very large multinationals with high (possibly monopolistic) market power, lower consumer welfare, less innovation, increased profit-shifting options, etc. Global adoption of the two-pillar solution could help to restore a level playing field as large multinationals will need to pay a minimum effective tax rate of 15 %. Additional indirect positive economic effects could thus be expected due to the lessening of the competitive disadvantage for small and medium-sized enterprises in terms of the tax burden.

In addition, it should be noted that for in-scope multinationals, compliance and administrative costs will probably increase under the new tax rules. When it comes to implementation, the additional administrative burden should be minimised insofar as possible. However, these additional costs are not a valid reason not to adopt Pillars 1 and 2. As the OECD (2020) has noted, assuming large multinationals use complex tax planning structures to reduce their tax burden, the two-pillar solution could even help to reduce administrative and compliance costs as profit-shifting options will be reduced.

#### 4. Other reflections on the OECD's two-pillar solution

Through their national corporate tax systems, countries offer a wide range of tax incentives and relief. Generally, these incentives tend to reduce the effective corporate tax rate. A general criticism on the design of Pillar 2 is how it deals with these tax provisions. In general, Pillar 2 does not distinguish between tax incentives that encourage welfare enhancing activity, such as investment in R&D, and those intended as instruments of tax competition (Salehy, 2022). For in-scope multinationals, tax incentives could lose their effectiveness if the benefit they confer is cancelled out by the (increase in) top-up tax needed to arrive at an ETR of 15 %. However, it should be noted that tax provisions will still lower the effective tax rate for firms not subject to Pillar 2 (small and medium-sized enterprises and multinationals with consolidated profits of less than € 750 million) and for multinationals subject to an ETR above the minimum rate.

When considering tax incentives in Belgium, the reduced effectiveness of tax provisions for in-scope multinationals could generate some adverse effects. An oft-heard criticism is that the introduction of Pillar 2 will substantially reduce the effectiveness of Belgian R&D tax incentives, which have significantly increased over the last decade. The main R&D tax relief provisions in Belgium are, in terms of input-related R&D support, the partial exemption schemes from payment of the withholding tax on the wages of R&D employees and the R&D tax credit or investment deduction in the corporate tax system. When it comes to targeting the output of innovation, Belgium has a system where IP-derived income is taxed well below the statutory rate.

A decline in the effectiveness of R&D tax incentives could lead to a drop in foreign direct investment in Belgium and even to relocation by multinationals to other countries. However, the argument often raised by critics of the two-pillar solution that R&D tax incentives will lose their attractiveness should be nuanced.

First, the main goal of R&D tax incentives is to foster private investment in R&D. They should not primarily be used as pure instruments of tax competition. When it comes to input-related R&D, research by Dumont (2019) provides robust evidence for Belgium that the different schemes of partial exemption from payment of the withholding tax on the wages of R&D personnel are effective in stimulating additional R&D activities. When firms use these partial exemption schemes, however, their average effective tax rate is not impacted as the implied subsidy on the wages of R&D personnel is also taxed at the corporate rate. Consequently, even under Pillar 2, this tax incentive would remain very effective.

R&D tax credits, on the other hand, decrease a firm's ETR. For multinationals subject to Pillar 2, such credits may become less attractive if they result in an ETR below the minimum rate. However, as noted by Salehy (2022), within Pillar 2, special rules apply to *qualified* refundable tax credits.<sup>1</sup> According to our understanding, the Belgian R&D tax credit could be considered as a qualified refundable tax credit: it is calculated as a fixed percentage of qualifying R&D expenditure, applied to the taxpayer's tax liability and becomes refundable if not fully used after four years. As stated by Salehy (2022), to calculate the ETR, Pillar 2 considers a qualified refundable tax credit as part of qualified income, not a reduction in or reimbursement of taxes. This favourable treatment will lead to a much smaller reduction in the ETR than if the credit were treated as simply a tax reduction. Therefore, even for in-scope multinationals, R&D tax credits could be an effective tool to stimulate private R&D investment.

On the other hand, tax policies targeting the output of innovation through a patent/intellectual property (IP) box will indeed significantly lower a firm's ETR. As a result, for in-scope multinationals, the entry into force of Pillar 2 will heavily reduce the attractiveness of this type of preferential tax regime. However, it should be noted that the evidence suggests that IP regimes do not necessarily stimulate R&D investment, one argument being that they do not reduce the *ex ante* risk to innovation as they reward only successful projects (Schoonackers, 2020).

It could thus be argued that IP regimes are mainly an instrument of tax competition, and it just so happens that Pillar 2 is designed to address tax competition, limit the race to the bottom in corporate taxation and ensure that multinationals pay their fair share of tax. As preferential tax treatment will be less effective in attracting multinationals and corresponding investment, countries could consider investing more in other factors such as the quality of public infrastructure and highly skilled labour. However, it is important to keep in mind that the focus of tax competition between potential locations could shift to other tax fields such as the taxation of highly skilled labour.

Finally, it is worth emphasising a number of important elements and consequences regarding the blueprint of Pillars 1 and 2. As discussed by Valenduc (2021), Pillar 1 has some appealing features as it is a first step towards unitary taxation, i.e., the transferred taxation rights are determined at group level and thus on a consolidated base. In addition, the destination principle is used to allocate rights between countries. As sales to final consumers are a much more immobile tax base than production, this leaves less room for tax competition between countries. Of course, this also implies – as Bauer (2020) and others have argued – that taxation powers could be shifted from small open economies to the world's largest countries. However, it should be clear that this is not necessarily the case for all small economies, but merely for low-tax investment hubs.

In addition, as the use of preferential tax regimes will become less effective in steering the investment and production choices of large multinationals, large countries could again benefit more compared to small(er) open economies. The reason being that big countries have the competitive advantage of a large internal market. This claim is hard to assess ahead of time, as behavioural responses are very difficult to predict. However, it is safe to say that for small open economies like Belgium, tax competition is and should not be the only instrument to attract economic activity from globally operating firms. Other location-specific determinants – such as the country's geographic position in Europe, R&D support which, as argued above, will remain effective, and a highly skilled labour force – also play an important role.

<sup>1</sup> A qualified refundable tax credit is a one that, under relevant national law, must be paid to the recipient in cash or cash equivalents within four years from the time the recipient meets the conditions to receive it (Salehy, 2022).

Moreover, the substance-based income exclusion rule incorporated into the design of Pillar 2 still leaves some room for tax competition between countries. Ideally, this rule should eventually be phased out as it somewhat contradicts the fundamental purpose of Pillar 2, namely to put a stop to tax competition.

Finally, when considering the scope of Pillars 1 and 2, it is hard to understand the justification for the agreed thresholds. Pillar 1 has an excessively limited scope, which is very regrettable. At least aligning the Pillar 1 threshold to the same parameters as Pillar 2 would be advisable. Moreover, the group of firms subject to Pillar 2 could be expanded. After all, all profit-making companies should pay their fair share of tax and establishing a minimum ETR of 15 % could significantly reduce tax competition between countries and contribute to a more efficient sharing of the tax burden between the factors of production.

## Conclusion

The international corporate tax framework is nearly 100 years old and was designed for traditional brick-and-mortar economy. Over time, economic life has changed significantly due to the rise of global value chains and digital business practices. Unfortunately, however, the international tax architecture has not kept pace with these developments. Consequently, multinationals and digitalised firms are using loopholes in the system to lower their overall tax liability, resulting in a widespread perception that the current international tax framework is no longer fit for purpose.

Globalisation has increased the international mobility of capital, thereby widening the range of possible production locations and dramatically increasing profit-shifting options. As a result, tax competition between countries has intensified to attract economic activity. On the other hand, the digitalisation of the economy has increased the relative importance of intangible assets, which are often hard-to-value, again expanding firms' profit-shifting options. Moreover, due to digital business models, the link between the physical presence of a firm and the place where real added value is created is disappearing.

Consequently, the debate on reform of the international tax framework and how to deal with tax avoidance and tax evasion has returned to the forefront. The OECD Inclusive Framework Agreement on BEPS and its October 2021 Statement on a Two-Pillar Solution to Address the Tax Challenges from the Digitalisation of the Economy are an important milestone and symbolise a real political shift. Pillar 1 deals with the question of where to tax, the idea being to redistribute taxation rights from source to destination countries. Taxation rights over a portion of the profits of large multinationals will be assigned to market jurisdictions. The multilateral adoption of Pillar 1 is a first step towards unitary taxation, which will significantly reduce profit-shifting options. Moreover, sales to final consumers will be used to allocate taxation rights between countries. This is a much more immobile tax base than actual production and leaves less room for tax competition between countries. Pillar 2 focuses on how much to tax and introduces a minimum corporate tax rate of 15 % on the profits of multinationals. This will limit tax competition between countries by ensuring that in-scope multinationals pay their fair share of tax, regardless of where they are located.

It is difficult to measure with precision the tax revenue effects of the two-pillar solution. One reason for this is the need for a credible estimate of the behavioural reactions of firms and governments. Anticipating such dynamic behaviour is not straightforward and by definition uncertain. As a result, studies on the revenue effects have reached widely different conclusions. However, it is safe to say that multilateral adoption of Pillar 2 will significantly increase global corporate tax revenue while Pillar 1 will mainly lead to a redistribution of tax revenue between countries. Assessing country-specific revenue effects is much harder. In general, low-tax investment hubs will lose revenue under Pillar 1, while Pillar 2 will benefit the most advanced economies significantly. Quantifying country-specific results remains very challenging. However, this is not a reason not to welcome introduction of the two-pillar solution.

When it comes to flaws in the design of the two-pillar solution, Pillar 2 seems not to distinguish between tax incentives that encourage welfare enhancing activity and those intended to be used to facilitate tax competition. In that sense, an oft-heard criticism is that Pillar 2 will significantly reduce the effectiveness of the Belgian R&D tax incentives for in-scope firms. This argument should be taken with a grain of salt. The main goal of R&D tax incentives is to stimulate investment in R&D. Pillar 2 will not affect the effectiveness of the partial exemption from payment of the withholding tax on the wages of R&D personnel. Moreover, Belgian R&D tax credits will also remain effective, as under the Pillar 2 rules they will be considered qualified refundable tax credits. This implies a much more favourable basis for calculating the ETR. Finally, the Belgian IP regime will significantly lose its attractiveness due to the adoption of Pillar 2. However, this regime can be considered a policy instrument designed for tax competition. Reducing its effectiveness should therefore be applauded for efficiency reasons as location decisions should be based on fundamentals and not be tax-induced.

That being said, the design of both pillars could be improved. The threshold used to determine the scope of Pillar 1 is too narrow and should at least be aligned to that of Pillar 2. In addition, the substance-based income exclusion rule in Pillar 2 could be abolished as this still leaves some space for tax competition between countries.

All in all, the two-pillar solution is a first step in the right direction when it comes to rethinking international taxation and will effectively deliver what it was designed to do i.e. to reduce tax competition between countries, to reinstate the link between the place where taxes are paid and the place where value is created and to ensure that large multinationals pay their fair share of tax. The multilateral convention on the two-pillar solution could therefore significantly help to achieve a more efficient sharing of the tax burden between production factors. Policymakers should thus be encouraged to ratify the convention and put the two-pillar solution into practice. In addition, future international efforts should focus on further substantial international harmonisation of corporate taxation by advocating for a common consolidated tax base. This would significantly increase tax fairness and overall efficiency and considerably reduce compliance costs.

## Bibliography

- Auerbach A. (2017), *Destination-based cash flow taxation*, Oxford University Centre for Business Taxation, Working Paper 01.
- Barake M., P.E. Chouc, T. Neef and G. Zuchman (2021), *Revenu effects of the global minimum tax: country-by-country estimates*, EUTAX observatory, Note 2, October.
- Bauer M. (2020), *Unintended and undesired consequences: the impact of OECD Pillar I and II proposals on small open economies*, ECIPE, Occasional Paper 04.
- Bunn D. (2022), *Time for an updated impact assessment of the global tax deal*, Tax Foundation.
- Coppens B., R. Schoonackers, L. Van Meensel and S. Van Parys (2018), "Recent international trends in corporate taxation: more competition or more convergence?", NBB, *Economic Review*, September, 99-136.
- De Mooij R, A. Klemm and V. Perry, (2021), *Corporate income taxes under pressure: Why reform is needed and how it could be designed*, IMF.
- Deloitte (2021), *Pillar One and Pillar Two*, July.
- Devereux M.P. (2020), *The OECD Global Anti-Base Erosion ("Globe") proposal*, Oxford University Centre for Business Taxation, January.
- Devereux M.P, A. Auerbach, M. Keen, P. Oosterhuis, W. Schön and J. Vella (2021), *Taxing profit in a global economy – A report of the Oxford international tax group*, Oxford University Press.
- EC (2016), *Proposal for a council directive on a common consolidated corporate tax base (CCCTB)*, COM(2016) 683 final, 0336 (CNS), 25 October.
- EC (2021a), *OECD "Pillar Two" towards EU implementation*, DG TAXUD, Commission Expert group Platform for Tax Good Governance, Presentation for meeting of 8 December.
- EC (2021b), *Proposal for a council directive on ensuring a global minimum level of taxation for multinational groups in the Union*, COM(2021) 823 final, 0433 (CNS), 22 December.
- Heckemeyer J.H. (2022), *Removal of taxation-based obstacles and distortions in the Single Market in order to encourage cross border investment, publication for the Subcommittee on Tax Matters, Policy Department for Economic Scientific and Quality of Life Policies*, European Parliament, Luxembourg.
- Harpaz A. (2021), *Taxation of the digital economy: adapting a twentieth-century tax system to a twenty-first-century economy*, Journal of international law.
- Hebous S., D. Prihardini and N. Vernon (2022), *Excess profit taxes: historical perspective and contemporary relevance*, IMF, Working Paper 187, September.
- IMF (2019), *Corporate taxation in the global economy*, Policy Paper 007.
- IMF (2022), *Coordinating taxation across borders*, Fiscal Monitor, Chapter 2, April.

KPMG (2022), Taxation of the digitalized economy – developments summary, [kpmg.com](https://www.kpmg.com), 27 June.  
Mirrlees J., S. Adam, T. Besley, R. Blundell, S. Bond, R. Chote, M. Gammie, P. Johnson, G. Myles and J. Poterba (2011), *Tax by design: the Mirrlees Review*, Oxford University Press.

OECD (2020), *Tax challenges arising from digitalisation – Economic impact assessment: inclusive framework on BEPS*, OECD/G20 Base Erosion and Profit Shifting Project, OECD Publishing, Paris.

OECD (2021a), Tax challenges arising from the digitalisation of the economy, Economic Impact assessment, *Belgian Institute of Public Finance Webinar*, 4 March.

OECD (2021b), *Addressing the tax challenges arising from the digitalisation of the economy*, Paris, July.

OECD (2021c), *Statement on a Two-Pillar solution to address the tax challenges arising for the digitalisation of the economy*, Paris, 8 October.

OECD (2021c), *Tax challenges arising from the digitalisation of the economy – Global anti-base erosion model rules (Pillar Two): Inclusive Framework on BEPS*, Paris.

OECD (2022), *OECD Secretary-General Tax report to G20 Finance Ministers and Central Bank Governors, Indonesia*, Paris, July.

Salehy B. (2022), *Pillar two and the future of tax incentives*, Tax Journal, 6 July.

Schoonackers R. (2020), “Tax incentives for R&D: are they effective?”, NBB, *Economic Review*, September, 77-96.

Valenduc C. (2021), *International taxation: Biden opens up the way to reform*, ETUI Policy Brief, 10.



## Conventional signs

%	per cent
e.g.	<i>exempli gratia</i> (for example)
<i>et al.</i>	<i>et alia</i> (and others)
etc.	<i>et cetera</i>
i.e.	<i>id est</i> (that is)

# List of abbreviations

## Countries or regions

US	United States
----	---------------

## Abbreviations

BEPS	Base Erosion and Profit Shifting
CCCTB	Common consolidated corporate tax base
CCTB	Consolidated corporate tax base
DBCFT	Destination-based cash-flow tax
DST	Digital services tax
DTA	Double tax agreements
EC	European Commission
ESM	European stability mechanism
ETR	Effective tax rate
EU	European Union
G20	Group of Twenty
GDP	Gross domestic product
IF	Inclusive Framework
IIR	Income inclusion rule
IMF	International Monetary Fund
IP	Intellectual Property
MNE	Multinational enterprises
OECD	Organisation for Economic Cooperation and Development
R&D	Research and development
UTPR	Undertaxed Payments Rule

## National Bank of Belgium

Limited liability company

RLP Brussels – Company number: 0203.201.340

Registered office: boulevard de Berlaimont 14

BE-1000 Brussels

[www.nbb.be](http://www.nbb.be)



Publisher

Pierre Wunsch

Governor

National Bank of Belgium

Boulevard de Berlaimont 14 – BE-1000 Brussels

Contact for the publication

Dominique Servais

Head of General Secretariat and Communication

Tel. +32 2 221 21 07

[dominique.servais@nbb.be](mailto:dominique.servais@nbb.be)

© National Bank of Belgium

All rights reserved.

Reproduction of all or part of this publication for educational and non-commercial purposes is permitted provided that the source is acknowledged.

© Illustrations: National Bank of Belgium

Cover and layout: NBB CM – Prepress & Image

Published in 2022