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JEL Codes: F23, F55, H27, H73.

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# Tax Revenue from Pillar One Amount A: Country-by-Country Estimates

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## Abstract

This paper presents simulations of the tax revenue arising from the Pillar One Amount A proposal of the G20/OECD Inclusive Framework on Base Erosion and Profit Shifting. Amount A aims at revising taxing rights on multinational enterprises with at least €20 billion in revenue and with profitability above 10%. We consider the latest available Amount A rules and use a variety of databases (Forbes 2000 list of largest companies, Orbis database, OECD AMNE data, OECD CbCR data). In a first step, we identify the MNEs that would be covered by Amount A. Then, we approximate the destination-based revenues of MNEs in different jurisdictions, to determine reallocated profits. In a final step, we account for double taxation relief to obtain the net revenue from Amount A. We find that the total amount of additional tax revenue arising from Amount A is around €15.6 billion. We provide detailed country-specific estimates and a comparison to digital taxes. The extent of taxing rights redistribution induced by Amount A is affected by (a) the inclusion criteria of covered MNEs; (b) the reallocation parameter of 25%.

**Keywords:** Pillar One Amount A, Two-Pillar Solution, International Taxation

**JEL codes:** F23, F55, H27, H73

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# 1 Introduction

Developments in globalisation and digitalisation have resulted in products and services being produced by large multinationals (MNEs hereafter) in dispersed locations and sold to markets worldwide. Whilst, the location of buyers used to be an important factor for the sale of goods and services, in the past 20 years, digitalisation transformed the access to markets worldwide and physical distance has become oftentimes irrelevant. Most MNEs are headquartered in one country, own subsidiaries in multiple countries, and generate income and profits globally. By contrast, changes to the way companies operate did not develop in parallel with changes in taxation: taxes are still collected based on the location of firms and not where the value is created or where the consumer is based.

To address this mismatch between where multinationals book their profits and where they generate them, the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS hereafter) has been devising a set of rules that grants countries new taxing rights. These rights are the first part of a “two-pillar” solution, which aspires to change global taxation<sup>1</sup>. Pillar One aims at establishing new taxing rights that would allow jurisdictions to tax MNEs based on the number of consumers, sales, and profits that have been generated in their local markets. In parallel, the proposal seeks to remove digital taxes that have been applied unilaterally by a number of countries<sup>2</sup>. While negotiations are ongoing, the Pillar One proposal has been discussed in October 2020 and included in the first OECD Economic Impact Assessment OECD (2020), after which a series of public consultations and updates took place with the following elements: Nexus and revenue sourcing rules OECD (2022e), Tax Base Determination OECD (2022d), Scope and the Extractives Exclusion OECD (2022f), Tax Certainty Framework OECD (2022a), the Progress report OECD (2022b) and most recently the progress report on the administration and tax certainty aspects OECD (2022c). Several reports are still expected since the Pillar One rules are under negotiations and revisions.

To examine the fiscal importance of the reform globally, this paper estimates the amount of revenue countries are expected to collect based on the Progress Report on Amount A of Pillar One of July 2022 OECD (2022b). First, we determine the MNEs that are subject to this reform by applying the latest rules and combining data from Forbes and Orbis. Second, by utilising mainly the AMNE database OECD (2016), we proxy each jurisdiction’s market shares with respect to these MNEs, which allows us to estimate the amount of profits allocated to different jurisdictions. The reallocated profits are then taxed with the corporate income tax rate that applies in each country. Finally, using the OECD CbCR database OECD (2017), we apply the double tax relief procedure that allows multinationals to exclude some profits from their tax base in jurisdictions where they have high returns on substance. This produces a net gain

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<sup>1</sup>Pillar One Amount A (hereafter Amount A) applies to the biggest and most profitable MNEs and re-allocates part of their profit to the countries where they sell their products and provide their services, where their consumers are. Without this rule, these companies can earn significant profits in a market without paying much tax there. Under Pillar Two, a much larger group of MNEs (any company with over EUR 750 million of annual revenue) would now be subject to a global minimum corporate tax of 15% on profits.

<sup>2</sup>Around 36 countries in the world so far have either proposed or introduced digital taxes, from which 12 countries are part of the EU.

estimate per country<sup>3</sup>.

Our benchmark scenario is restricted to the Inclusive Framework member countries<sup>4</sup>. We find that the global gross revenue potential of Pillar One Amount A is approximately €24 billion. This amount decreases further to €15.6 billion when the elimination of double taxation is accounted for, representing 0.2% of total tax revenues. For the EU, the net revenue gain is €2.6 billion. One should however keep in mind that the aggregate net gain is not the only metric by which Amount A should be assessed. Amount A aims to redistribute taxing rights rather than generate aggregate revenues by allocating new taxing rights to market jurisdictions on one hand, and placing the burden of double-tax relief on jurisdictions where multinational enterprises (MNEs) have high returns on substance on the other hand. The global net gain of €15.6 billion is primarily a result of the redistribution of the tax base from low-tax to higher-tax countries. As a consequence, tax reliever jurisdictions experience significantly lower net losses compared to the net gains experienced by market jurisdictions. This aggregate net gain for jurisdictions corresponds to the new tax burden covered MNEs will incur as a result of Amount A. We acknowledge that Amount A is a milestone in the reform of the global tax system, being the first agreement to introduce profit apportionment on such a global scale. Its cooperative nature also aims to prevent trade tensions that may arise from the implementation of unilateral measures like digital taxes. However, our findings suggest that the current design of Amount A limits the extent of taxing rights redistribution and does not necessarily generate more tax revenues than digital taxes. This is in particular due to: (a) the high amount of global revenue required for firms to be under the scope of the reform, which reduces the pool of eligible MNEs ; (b) a 10% profitability requirement, which excludes some large MNEs even when they are large enough in size; (c) the reallocation parameter of 25%. Together with our benchmark scenario, we present results for two additional scenarios: one including all jurisdictions in the world<sup>5</sup> and another one taking into account the tail-end revenues<sup>6</sup> provision.

An additional contribution of this paper is to provide a country-specific breakdown of the estimated net revenues. We find that the US and China will collect most of the revenue, which should be expected given the concentration of MNEs' final consumers in their jurisdictions. The same reasoning explains why, in absolute terms, we find that developed countries would gain the most compared to developing countries. As a percentage of total taxes, gains from Amount A are almost the same across different country classifications. We estimate that developed countries would collect an additional 0.17% of their total taxes while developing and least developed countries would increase by 0.15% of their total taxes. We further find that tax havens are the ones paying for Amount A as the design of Pillar One leads to tax relief being mainly allocated by their jurisdictions. In our baseline scenario, tax havens lose around

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<sup>3</sup>All results in this study are first-round effects, i.e., before behavioral adjustments of multinationals and tax jurisdictions to the reform. We also do not account for the interactions between Pillar One and Pillar Two proposals.

<sup>4</sup>There are 142 countries that are members of the OECD/ G20 Inclusive Framework on BEPS. The list of the IF member countries is available in Appendix J.

<sup>5</sup>It should be noted that estimations for some countries are based on gravity models and therefore the results should be interpreted with caution.

<sup>6</sup>In the design of the Pillar One rules, unallocated revenues might be redistributed to least developed countries. In the third scenario, we assume that 5% of Amount A fail to be redistributed and go therefore to least developed countries.

€1.2 billion from Amount A. On the firms' side, the global revenue threshold of €20 billion for MNEs to be covered by the reform leads to a reallocation of profits mostly from American and Chinese firms, which are relatively large. Lastly, we provide a comparison of Amount A net gains with the revenue potential of digital taxes.

Despite the importance and global scope of Amount A, there is surprisingly slim literature on its revenue potential. Starkov and Jin (2022) estimate the amount of revenue that could be collected from Amount A for 84 countries. However, the study covers only on members of the South Center Tax Initiative and developing countries, and not all countries worldwide<sup>7</sup>. In January 2023, the OECD (2023) presented aggregate estimations from their Economic Impact Assessment on Amount A taxing rights of around \$132 billion on average and net revenues from Pillar One of \$12-25 billion on average over the 2016-2021 period. Related to these estimates, Devereux and Simmler (2021) assess the companies that are subject to Pillar One. This study contributes to the literature by providing detailed country-specific and an overall aggregate estimates of the expected revenue. We also contribute by taking into account double-taxation relief rules and providing a comparison of Amount A revenue to those arising from digital taxes.

The paper is structured as follows. Section 2 presents the overall design of the Amount A proposal and Section 3 goes into detail on the data and methodology we used. Section 4 presents the results and Section 5 discusses the results and their limitations. Finally, Section 6 concludes.

## 2 The Pillar One Amount A Proposal

The rules of Pillar One Amount A<sup>8</sup> were introduced in the OECD Progress Report of July 2022 OECD (2022b). Amount A consists in the definition and allocation of new taxing rights on the largest and most profitable MNEs in the world (hereafter Covered Groups) and their reallocation based on jurisdictions' market shares with respect to these groups. In order not to double tax reallocated profits, so-called "Obligations to Eliminate Double Taxation" (OEDT) are also allocated across jurisdictions where Covered Groups have high profits and returns on substance. The introduction of Pillar One rules would require the signing countries to abolish all current of future forms of digital taxation.

In order to estimate revenues from Amount A, the first step consists in determining which MNEs will be covered. Covered Groups in year  $t$  are defined as MNEs with a global turnover above €20 billion and a profitability (i.e. profit before tax over revenues) greater than 10% in year  $t$ . In addition, to qualify as a Covered Group, an MNE must either have been a Covered Group in one of the past two years or it must have had a profitability of at least 10%

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<sup>7</sup>The South Center is the intergovernmental organisation of developing countries headquartered in Geneva (Switzerland) and comprises 55 members of developing countries.

<sup>8</sup>The Amount A of Pillar One redistributes part of the taxing rights on the residual profits of Covered Groups. The Amount A is the aggregate amount of profits that would be reallocated. Another component of Pillar One, which is not considered in this work, is Amount B. Amount B is intended as a simplification and streamlining measure in applying the arm's length principle, based on the guidance provided in the OECD Transfer Pricing Guidelines.

in two of the past four years and on average over the last five years. Importantly, MNEs' profits and revenues arising from financial and insurance services and extractive activities are to be excluded when computing total revenues and profitability. In the case where an MNE has non-financial-nor-extractive revenues above €20 billion but does not meet the profitability threshold of 10%, segments of the MNE are to be considered as Covered Segments if they meet the revenues and profitability tests defined above.

Once Covered Groups are identified, one needs to determine for each of them the amount of profits that will be reallocated to market jurisdictions under Amount A or, in other words, the tax base consisting of profits subject to Amount A. These correspond to one-fourth of an MNE's profits in excess of a 10% profitability threshold. After estimating, for each Covered Group, the Amount A profits that are going to be reallocated, one needs to compute jurisdictions' market shares with respect to each of them. The Progress Report on Amount A of Pillar One OECD (2022b) provides an extensive list of transaction-specific revenue sourcing rules according to which revenues from any given transaction must be allocated across jurisdictions. These rules vary depending on the type of goods or services sold by the Covered Group. An important provision that may impact significantly revenues for low-income jurisdictions regards so-called "tail-end revenues" which are derived from the sale of finished goods to final consumers through independent distributors but that Covered Groups fail to source in any jurisdiction. If a Covered Group cannot demonstrate that part or all of these tail-end revenues do not arise from any low-income jurisdictions, they are allocated across these countries exclusively depending on their total final consumption expenditure. Finally, in order for a jurisdiction to be eligible for profits reallocation from a given Covered Group, the latter group must derive at least €1 million in revenues from that jurisdiction. For jurisdictions with GDP lower than €40 billion, this revenue threshold is decreased to €250 000.

Once all revenues of each Covered Group in period  $t$  have been allocated across jurisdictions, one can obtain the allocation keys that serve to reallocate the Amount A profits of each Covered Group  $i$  across jurisdictions  $j$ . The resulting Reallocated Profits $_{ij}$ , computed after any adjustment arising from the Marketing and Distribution Profits Safe Harbour (MDSH) which caps profits allocated to market jurisdictions that already have taxing rights over  $i$ 's Amount A profits, is the tax base on which jurisdiction  $j$  is given taxing rights on Covered Group  $i$ . Gross gains from Amount A for jurisdiction  $j$  are then defined as the sum of Reallocated Profits to  $j$  from all Covered Groups, taxed in accordance with  $j$ 's domestic law provisions on corporate income tax.

To avoid double taxation, so-called "Specified Jurisdictions $_i$ " (with respect to a given Covered Group  $i$ ) are allocated Obligations to Eliminate Double Taxation with respect to  $i$ ' Amount A profits (OEDT $_i$ ) that are subtracted from the tax base of  $i$  on their territory. Specified Jurisdictions $_i$  consist of the smallest group of jurisdictions making up at least 95% of  $i$ 's global profits. In addition, any jurisdiction where  $i$  books more than €50 million of profits must also be considered a Specified Jurisdiction $_i$ . Among Specified Jurisdictions $_i$ , OEDT $_i$  are allocated in priority to jurisdictions where  $i$  has a higher Return on Depreciation and Payroll (RoDP).

OEDT<sub>*i*</sub> must be allocated until the total allocated amount equals *i*'s Amount A profits. If this amount is not reached, the allocation procedure continues until *i*' remaining tax base in every Specified Jurisdiction<sub>*i*</sub> yields a RoDP that would have been obtained by Group *i* at the global level if it has had a 10% profitability.

More precisely, to allocate OEDT<sub>*i*</sub>, the OECD Progress Report provides rules defining a “water-fall” or “tiered” procedure. To begin with, one needs to rank Specified Jurisdiction<sub>*i*</sub> according to *i*'s RoDP on their territory. Then, one considers Specified Jurisdiction<sub>*i*</sub> forming Tier 1, where *i* has a RoDP greater than 15%. The jurisdiction in Tier 1 where *i* has the highest RoDP (ranked 1<sup>st</sup>) is first allocated OEDT<sub>*i*</sub> until *i*'s profits that remain taxable in this jurisdiction yield a RoDP equal to *i*'s second highest RoDP (in the jurisdiction ranked 2<sup>nd</sup>). The two jurisdictions are then allocated obligations to eliminate double taxation simultaneously in proportion to the amount of OEDT<sub>*i*</sub> they would need to be allocated so that *i*'s RoDP in both jurisdictions equals *i*'s RoDP in the 3<sup>rd</sup> jurisdiction. This process goes on until *i*'s profits that remain taxable in every Tier 1 jurisdiction yield a RoDP equal to 15 times *i*'s global RoDP. If at this point the total amount of allocated OEDT<sub>*i*</sub> is still inferior to *i*'s Amount A profits, the allocation procedure continues in a similar fashion with OEDT<sub>*i*</sub> being progressively allocated to jurisdictions where *i* has a RoDP above 1.5 times its global RoDP (Tier 2), 40% (Tier 3A), and the global RoDP that would be obtained by *i* with a 10% profitability (Tier 3B). We provide the full formalized procedure in Appendix I. Finally, the net revenues from Amount A for a given jurisdiction *j* is equal to the difference between gross gains, as defined above, minus the sum of all the OEDT allocated to *j* with respect to each Covered Group, times the effective tax rate at which these profits were taxed.

## 3 Data and Methodology

### 3.1 Covered Groups

Using Forbes 500 and Forbes 2000 rankings, we identify 677 companies that had more than €20 billion in revenues in at least one of the years from 2016 to 2020. We were then able to retrieve 641 (95%) of these companies in Orbis from which we used the consolidated data on Revenues, Profits, and Profitability for the 2016-2020 period. As a proxy for the exclusion of revenues from financial and extractive activities, we exclude from the sample any company with a NACE Rev.2 core code relating to extraction and primary processing of extractive products and financial and insurance services (list provided in Appendix F ). After that step, we end up with a group of 437 companies. We then define as a Covered Group in 2020 any MNE whose revenues and profitability in 2020 and 2019 or 2020 and 2018 were above €20 billion and 10% respectively. Consistently with OECD rules, we also define as Covered Groups the MNEs with revenues and profitability above €20 billion and 10% in 2020 and with average profitability over the 2016-2020 period of at least 10% where profitability must have been above 10% for at least two years between 2016 and 2019. We exclude from the remaining sample 9 Chinese Companies which have activities almost exclusively in China. The latter should not be affected



by the reallocation of profits since Amount A applies to MNEs only. In the end, we identify 69 Covered Groups. However, since we only gathered consolidated data at the group level, we did not consider potential Covered segments. We found 241 companies passing the revenue test in 2020 while failing the profitability test, for which Covered Segments might be considered.

### 3.2 Profits subject to Amount A of a Covered Group

We use Profit/Loss before tax from Orbis ( $PLBT_i$ ) which corresponds to Financial Accounting Profit or Loss without any of the book-to-tax adjustments<sup>9</sup> required by the Amount A rules. Moreover, net losses carried forward are ignored. The profits subject to Amount A for a given Covered Group  $i$  (or Amount A profits $_i$ ) are thus defined as:

$$\text{Amount A profits}_i = (PLBT_i - \text{Revenues}_i \times 10\%) \times 25\%$$

### 3.3 Reallocation of Profits subject to Amount A

Since we do not have group-level country-by-country data to determine the distribution of Covered Groups’ destination-based revenues across jurisdictions based on the revenue sourcing rules<sup>10</sup> stated in Amount A rules, we approximate the latter using OECD (2016) AMNE<sup>11</sup> data. AMNE data break down the distribution of sales and exports of multinationals across market jurisdictions by headquarter jurisdiction<sup>12</sup> and sector. Figure 1 presents, as an example, how one would ideally compute destination-based revenues derived from Ireland by US MNEs in Apple’s sector. AMNE data do not include information on direct exports to market jurisdictions nor on intra-group sales within market jurisdictions. We hence assume that the latter are negligible to adopt a simpler “output minus exports” approach.

A further difficulty with AMNE data is that they do not provide the breakdown by headquarter jurisdiction of foreign MNEs’ exports from a given market jurisdiction (in the example given in Figure 1, we actually only have total exports from Ireland of foreign MNEs in Apple’s sector, without knowing what share of this amount are by MNEs headquartered in the US). Our proxy of destination-based revenues of MNEs in sector  $s$  with headquarter jurisdiction  $h$  derived from market jurisdiction  $j$  is therefore computed in two different ways depending

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<sup>9</sup>The Adjusted Financial Accounting Profit should be calculated as the Financial Accounting Profit minus the following items: Tax Expense or Tax Income, Excluded Dividends, Excluded Equity Gain, Policy Disallowed Expenses, Financial Accounting Profit and by adding the following items: Loss of Excluded Entities, Prior Period Errors and Changes in Accounting Principles, Asset Fair Value or Impairment Adjustments, Acquired Equity Basis Adjustments, Asset Gain or Loss Spreading Adjustments.

<sup>10</sup>There is a variety of rules that cover locations, industries or types of goods. Some specific examples are the following: (a) “Revenues derived from the provision of Location-Specific Services are treated as arising in a Jurisdiction when the place of performance of the service is in that Jurisdiction” (b) “[...]half of the Revenues derived from the provision of Cargo Transport Services are treated as arising in the Jurisdiction of the Place of Origin of the Cargo Transport Service; and half in the Jurisdiction of the Place of Destination.” (c) “Revenues derived from sale, lease or other alienation of Real Property are treated as arising in a Jurisdiction when the location of the Real Property is in a Jurisdiction”.

<sup>11</sup>The AMNE data provides output data for 59 countries by sector, headquarter country and host country. It consists of annual surveys on the activities of foreign-controlled enterprises and foreign affiliates abroad controlled by residents of the compiling country.

<sup>12</sup>market jurisdictions refer to the term partner countries in some databases and headquartered jurisdictions refer to parent countries.

on whether market jurisdiction  $j$  is also the headquarter jurisdiction  $h$  of the MNEs considered.

Revenues sourced in  $j \neq h$  of MNEs in sector  $s$  with headquarter jurisdiction  $h =$

$$\text{Output in market jurisdiction } j \text{ of foreign MNEs in sector } s \text{ with headquarter } h = \frac{\text{Exports of foreign MNEs in sector } s \text{ from market jurisdiction } j}{\text{Share of headquarter } h \text{ in total output in market jurisdiction } j \text{ of foreign MNEs in sector } s}$$

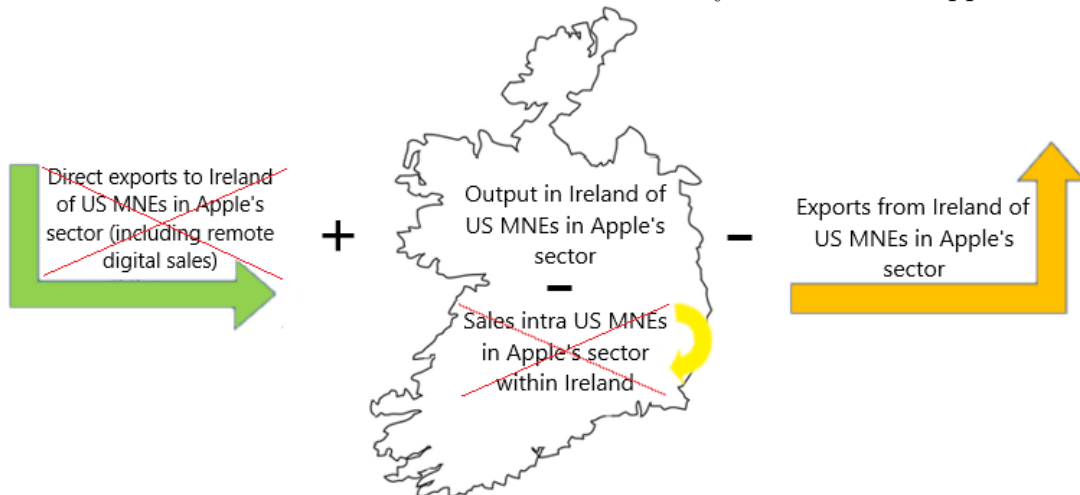
One should note that the latter equation boils down to assuming that the propensity to export out of their output in a given jurisdiction for foreign MNEs in a given sector is the same whatever their headquarter jurisdiction.

Revenues sourced in headquarter jurisdiction  $j = h$  of domestic MNEs in sector  $s =$

$$\text{Output in headquarter jurisdiction } j = h \text{ of domestic MNEs in sector } s = \frac{\text{Exports of domestic MNEs in sector } s \text{ from headquarter country } j = h}{\text{Share of headquarter } h \text{ in total output in headquarter jurisdiction } j = h \text{ of domestic MNEs in sector } s}$$

Figure 1: Computing destination-based revenues using AMNE data, ex: Apple and Ireland

Destination-based Revenues derived from Ireland by US MNEs in Apple's sector =



This figure presents an example of how destination based revenues were computed based on the AMNE data. Ideally, the amount of sales should take into account the direct exports to country  $i$ , the intra-company Sales of the MNE within country  $i$ , the output of the MNE in country  $i$  and the exports of the MNE from country  $i$ . As the figure shows, we assume that Direct exports and intra-company sales within country  $i$  cancel out. Therefore, the destination based revenues are calculated as Output in country  $i$ , sector  $s$  - Exports from country  $i$ , sector  $s$ .

The AMNE data provides country-by-country revenues and exports of MNEs from 59 headquarter jurisdictions (including the 13 headquarter jurisdictions of our Covered Groups) and the Rest of the World (ROW) in 34 sectors and across 59 market jurisdictions and the ROW. Once we have obtained a  $(60 \times 34) \times 60$  matrix of destination-based revenues with the two equations above, we redistribute the ROW entries across the market jurisdictions not included

in the AMNE data using the gravity model provided in Appendix H. Although this gravity model is used to fill 31% of the cells of the destination-based revenues matrix, the total of Amount A profits that are eventually redistributed to these cells represent only 0.44% of total Amount A profits. Indeed, in the numerous cases where the ROW entry is equal to 0, all the jurisdictions not present in the AMNE data are allocated 0 destination-based revenues, without any use of the gravity model.

The “output minus exports” approach to estimate destination-based revenues ignores direct exports to market jurisdictions. This is likely to be an important bias when approximating destination-based revenues of MNEs whose main activity is providing Automated Digital Services (ADS) (e.g. Alphabet, Meta. . .) for which remote digital sales are likely to represent a significant share of their destination-based revenues in most jurisdictions. Following the OECD Economic Impact Assessment OECD (2020), we directly compute these companies’ allocation keys across market jurisdictions with a different method that yields arguably better proxies for these companies’ allocation keys.

### 3.4 Allocation Keys

After determining the variable that will serve as a proxy for destination-based revenues derived in jurisdiction  $j$  by MNEs in sector  $s$  from headquarter jurisdiction  $h$ , we can compute the allocation key used to redistribute to jurisdiction  $j$  Global Revenues of Covered Group  $i$  in sector  $s$  and with headquarter jurisdiction  $h$  in the following way:

$$\text{Allocation Key}_{i \in (s,h),j} = \frac{\text{Destination-based revenues derived from jurisdiction } j \text{ by MNEs in sector } s \text{ with headquarter jurisdiction } h}{\sum_j \text{Destination-based revenues derived from jurisdiction } j \text{ by MNEs in sector } s \text{ with headquarter jurisdiction } h}$$

For Covered Groups whose main activity is providing Automated Digital Services (ADS) we estimate:

$$\text{Allocation Key}_{i \in \text{ADS},j} = \frac{(\text{Nb Internet users})_j \times (\text{Avg Consumption/capita})_j}{\sum_j (\text{Nb Internet users})_j \times (\text{Avg Consumption/capita})_j}$$

The data for internet users are taken from the World Bank and the International Telecom Union. The average consumption per capita is from the World Bank (households and NPISHs Final consumption expenditure per capita). Note that our method implies that two Covered Groups in the same sector and with the same headquarter jurisdiction will have the same distribution of their Amount A profits across market jurisdictions. When it comes to Covered Groups classified as ADS, they will all have the same distribution of their Amount A profits.

Before redistributing Amount A profits, we apply the Nexus test (in another scenario, we also account for tail-end revenues, see Appendix C). For that, we use the computed allocation keys

to redistribute Covered Groups’ consolidated revenues from Orbis across market jurisdictions. We obtain  $\text{Revenues}_{ji}$ , a proxy for the revenues derived by Covered Group  $i$  in jurisdiction  $j$ . We set  $\text{Revenues}_{ji}$  to 0 whenever it is inferior to €1 million and  $j$ ’s GDP is above €40 billion or  $\text{Revenues}_{ji}$  is inferior to €250 000 and  $j$ ’s GDP is below €40 billion. We then compute Allocation Key $_{ji}$  obtained after having applied the nexus test:

$$\text{Allocation Key}_{ji} = \frac{\text{Revenues}_{ji}}{i\text{'s Global Revenues}}$$

Finally, we can redistribute Covered Group  $i$ ’s Profits subject to Amount A across market jurisdictions using the Allocation Keys $_{ji}$  to obtain the reallocated profits for each jurisdiction  $j$ . Note that we do not apply any Marketing and Distribution Profits Safe Harbour adjustment whose design has not yet been fully determined. We then estimate the gross gains of jurisdiction  $j$  from Pillar One Amount A as the product between total reallocated profits to jurisdiction  $j$  and  $j$ ’s CIT rate.

### 3.5 Elimination of double taxation

Since Pillar One Amount A comes as an overlay over already existing profits distribution and taxation patterns, the Progress Report provides a mechanism to prevent double taxation on reallocated profits.

In order to determine the jurisdictions required to provide elimination of double taxation, we would ideally need data on MNEs’ profits, payroll, and depreciation on a country-by-country basis. Since we do not have firm-level data, we redistribute the total amount of Covered Groups’ profits, depreciation amount, and employees from Orbis using macro country-by-country data from the OECD (2017) CbCR in order to determine jurisdictions’ allocation keys. This method assumes that the distribution of profits, employees, and tangible assets is the same for all MNEs having the same headquarter jurisdiction. For example, if the Covered Group is French, we assume that the distribution of its profits, employees, and tangible assets across partner jurisdictions is the same as the distribution for French MNEs in general. A potential concern is that profits derived from extractive activities, which should be excluded from Amount A but are reported in OECD CbCR, may bias the allocation of Covered Groups’ profits toward some extractive-intensive jurisdictions. To address this concern, we modify the OECD CbCR profit table by multiplying every reported profit amount in jurisdiction  $j$  by one minus  $j$ ’s ratio of total natural resources rent over GDP, where the latter figure is taken from the World Bank. For some headquarter jurisdictions, CbCR data are simply broken down by regional aggregates and not by jurisdiction. In that case, regional aggregates are redistributed across jurisdictions using the gravity model presented in Appendix H.

Note that shares of tangible assets are used as allocation keys to redistribute total depreciation amounts, hence assuming a common rate of depreciation across jurisdictions. Once we obtain the number of employees by jurisdiction for each Covered Group  $i$ , we multiply the number of employees in jurisdiction  $j$  by the average wage in  $j$ , retrieved from the International Labor

Organization (2020) database, to obtain an approximation of the payroll amount of Covered Group  $i$  in jurisdiction  $j$ .

The jurisdictional return on depreciation and payroll of each Covered Group  $i$  in each jurisdiction  $j$  (RoDP $_{ji}$ ) is computed as:

$$\text{RoDP}_{ji} = \frac{\text{Profits}_{ji}}{\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}}$$

In line with OECD rules, specified jurisdictions with respect to Covered Group  $i$  are determined as the smallest group of jurisdictions making up at least 95% of global  $i$ 's before-tax profits. Any country where  $i$  has before-tax profits above €50 million also qualifies as a Specified Jurisdiction $_i$ . We then follow the “tiered” method described in Section 2 to redistribute OEDT across specified jurisdictions. Once the amount of OEDT $_{ji}$  is determined for each jurisdiction  $j$  with respect to each  $i$ , we assume that the gross losses from Pillar One Amount A for jurisdiction  $j$  is equal to the total of OEDT allocated to  $j$  multiplied by the average effective tax rate in  $j$ . For that purpose, we use the effective tax rates from the OECD CbCR data (ETR paid) defined as:

$$\text{ETR}_j = \frac{\text{Taxes paid}_j}{\text{Profits or loss before tax}_j}$$

To sum up, jurisdiction  $j$ 's net gain from Pillar One Amount A as computed with our methodology is:

$$\begin{aligned} \text{Net gain from Amount A}_j = & \underbrace{\sum_i [\text{Amount A profits}_i \times \text{Allocation Key}_{ji}] \times \text{CIT}_j}_{\text{Gross Gain}_j} \\ & - \underbrace{\sum_i \text{Obligation to Eliminate Double Taxation}_{ji} \times \text{ETR}_j}_{\text{Gross loss}_j} \end{aligned}$$

## 4 Results

The revenues from Amount A are estimated based on the identified sample of Covered Groups. After applying the revenue and profitability tests, we are able to identify 69 MNEs which are our selected “Covered Groups” as described in Section 3.1. Based on the UNCTAD classification, 7 of these Covered Groups are considered ADS MNEs selling mainly automated digital services: Accenture Public Limited Company, Alphabet inc, Meta Platforms inc, Microsoft Corporation, Oracle corp, SAP SE, and Tencent Holdings Limited.

The covered groups are headquartered in 13 different jurisdictions: the United States, China, France, Germany, Switzerland, Japan, South Korea, the United Kingdom, Hong Kong, Ireland, Spain, Canada, and Taiwan. Most of the Covered Groups are headquartered in developed economies. This is to be expected since Amount A applies to the largest and most profitable

Table 1: Descriptive Statistics on Covered Groups by headquarter jurisdiction

Headquarter jurisdiction	Covered groups	% of Covered groups	Turnover	% of Turnover	Amount A	% of Amount A
United States	31	44.9%	1 721 006	48.5%	52 853.1	56.0%
China	13	18.8%	633 052	17.8%	15 799.7	16.7%
France	5	7.2%	159 443	4.5%	3 818.2	4.0%
Switzerland	4	5.8%	199 597	5.6%	5 443.3	5.8%
Japan	3	4.3%	202 398	5.7%	2 419.3	2.6%
United Kingdom	3	4.3%	116 850	3.3%	3 353.8	3.6%
Germany	3	4.3%	87 351	2.5%	1 629.0	1.7%
South Korea	2	2.9%	201 266	5.7%	2 942.1	3.1%
Hong Kong	1	1.4%	96 841	2.7%	2 017.2	2.1%
Taiwan	1	1.4%	38 303	1.1%	3 221.4	3.4%
Ireland	1	1.4%	37 125	1.0%	490.4	0.5%
Spain	1	1.4%	33 821	1.0%	417.7	0.4%
Canada	1	1.4%	24 777	0.7%	44.6	0.0%
<b>Total</b>	<b>69</b>	<b>100%</b>	<b>3 551 830</b>	<b>100%</b>	<b>94 449.8</b>	<b>100%</b>

This table presents descriptive statistics of the covered groups that are subject to Pillar One. The figures are in million of euros for the Turnover and Amount A.

MNEs outside extractive and financial industries. Most of the Covered Groups are American (45%), and Chinese (19%). Table 1 presents the number of Covered Groups by headquarter jurisdiction. The profits that are reallocated under Amount A originate mostly from American and Chinese MNEs. For the full list of Covered Groups, see Appendix E.

Total Amount A profits are estimated to be around €94.4 billion. This amount is in line with the estimates presented by Devereux & Simmler (2021) who finds a total Amount A profits of around \$87 billion. In OECD’s 2023 Economic Impact Assessment, total Amount A profits for 2020 are estimated at \$113.5 billion (around €100 billion at 2020 average exchange rate). Reallocated profits are taxed using market jurisdictions’ statutory CIT rates, generating a gross revenue gain of €24 billion. Then, the elimination of double taxation is accounted for and gross losses are estimated using jurisdictions’ effective tax rates (ETR). This leads to a reduction of aggregated revenues of around €9 billion from gross to net, resulting in a €15 billion aggregated net gain. This amount is in the upper range of the aggregated net gains presented in the OECD 2023 Economic Impact Assessment for the year 2020, which are included between \$6 and \$23 billion (€5.3 and €20.2 billion). This is to be expected as we do not apply any MDSH adjustment when redistributing Amount A profits, while the OECD applies a MDSH with an offset of at least 25%.

Table 2 presents the revenue gains from Amount A for the top 20 countries with the largest net gains. The US, China, and Germany are the top 3 countries that would collect the most revenues, around 74% of total net gains. The net revenues that the EU would benefit from are around 2.6 billion euros, mostly collected by six EU countries: Germany, France, Italy, Spain, Netherlands, and Austria. Another important result relates to the losses incurred due to the elimination of double taxation. Countries classified as tax havens would bear most of

Table 2: Top Revenues from Pillar One

Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
United States	32 100.5	8 667.1	7 411.3	999.8	7 667.3	0.42%
China	21 253.9	5 313.5	11 128.3	2 092.1	3 221.4	0.31%
Germany	3 041.3	912.4	430.5	89.3	823.1	0.23%
Japan	4 678.9	1 450.5	3 186.4	725.2	725.2	0.05%
Korea	2 858.6	714.6	111.4	22.3	692.3	0.32%
United Kingdom	3 040.7	577.7	50.1	3.5	574.2	0.10%
France	2 371.0	663.9	415.5	92.7	571.2	0.10%
Brazil	1 705.8	580.0	147.3	33.3	546.6	0.33%
Canada	1 518.6	410.0	166.1	28.3	381.7	0.20%
Australia	1 087.0	326.1	126.4	18.3	307.8	0.12%
Italy	1 282.5	307.8	88.4	23.3	284.5	0.07%
Mexico	1 106.2	331.9	220.7	60.6	271.3	0.20%
Spain	1 067.1	266.8	49.6	6.2	260.5	0.17%
Netherlands	1 332.8	333.2	3 813.6	150.6	182.6	0.09%
Russia	854.0	170.8	45.5	10.1	160.7	0.11%
Malaysia	684.9	164.4	31.8	5.4	159.0	0.49%
Argentina	415.0	124.5	10.9	3.0	121.5	0.33%
Turkey	555.4	122.2	16.4	3.1	119.0	0.11%
Austria	470.0	117.5	5.0	0.6	116.9	0.13%
Belgium	441.0	127.9	57.0	11.5	116.4	0.12%
EU	12 826.2	3 222.6	8 339.9	659.1	2 563.5	0.10%
OECD	61 741.0	16 227.2	26 357.2	2 981.0	13 246.2	0.17%
Tax havens	6 403.4	1 193.6	61 993.6	2 418.7	-1 225.1	-0.07%
<b>Total</b>	<b>93 539.5</b>	<b>24 086.7</b>	<b>94 449.7</b>	<b>8 533.8</b>	<b>15 552.9</b>	<b>0.16%</b>

This Table presents details of net revenue gains from Pillar One for the top 20 countries. Gross gain is calculated as reallocated profits multiplied by the CIT rate. The loss is calculated as the Elimination multiplied by the ETR. The net gain is the difference between Gross gain and Loss. The figures are in million of euros. The net gains are presented as a percentage of total taxes.

the burden of Amount A, giving away taxing rights on around €62 billion which constitutes around 66% of total OEDT. As a consequence, tax havens are net losers of around €1.2 billion. However, it is worth noting that the €2.4 billion gross losses for tax havens are much lower than their €62 billion allocated OEDT. This is because the effective tax rates in tax havens are usually low. The losses of tax havens nonetheless constitute 200% of their gross gains. The EU and the OECD countries would see their gains from Amount A shrinking due to OEDT by 20% and 18% respectively. This is explained by the fact that the burden of the OEDT falls, by design, on jurisdictions where Covered Groups have their highest returns on depreciation and payroll among which we find European countries such as the Netherlands, Luxembourg, Ireland, Malta, and Hungary. For more revenue details on all countries in our sample, please see Table A.1. in Appendix A.

Table 3 presents the revenue gains by country type. Countries were classified into 3 categories: developed, developing, and least developed, following the UN country classification. Developed countries would collect more than 77% of the net revenues, with the G7 countries alone collecting 71% of the total net revenues of Amount A, driven mainly by the US collecting €7 billion. The developing countries would collect around 23% of the total net revenues, with

China collecting most of it. The remaining developing countries that would gain revenues above €100 million are : Argentina, Brazil, Korea, Malaysia, Mexico, Russia, and Turkey. In absolute terms, the least developed countries do not benefit much from Amount A, as their net revenues are almost null. In relative terms, gains from Amount A would represent 0.15% of total tax revenues for least developed countries while this figure is 0.15% for developing countries and 0.17% for developed countries (0.2% for G7 countries). We use the indicator tax revenue as a percentage of GDP from the World Bank (2020)World Bank to proxy for total tax revenue for countries.

Starkov and Jin (2022) estimates that Amount A would generate \$5.6 billion (€ 4.9 billion) in tax revenue for 53 out of the 55 Member Countries<sup>13</sup> of the South Center in 2020. For the same set of countries, our estimates are lower: €3.4 - 3.6 billion.

Table 3: Revenues from Pillar One by country classification type

Classification	Nb. of countries	Reallocated profits	Gross gain	Elimination	Loss	Net gain	% Taxes
Developed	36	56 761.1	14 914.1	26 159.0	2 894.4	12 019.7	0.17%
<i>of which G7</i>	7	48 033.5	12 989.4	11 748.4	1 962.2	11 027.3	0.20%
<i>of which Tax havens</i>	7	3 719.9	741.6	13 830.7	840.0	-98.4	-0.02%
<i>of which non-havens</i>	29	53 041.2	14 172.5	12 328.2	2 054.4	12 118.1	0.18%
Developing	94	36 611.2	9 116.5	68 140.4	5 614.7	3 501.8	0.15%
<i>of which tax havens</i>	28	2 683.5	452.0	48 162.8	1 578.7	-1 126.7	-2.03%
<i>of which non-havens</i>	66	33 927.7	8664.5	19 977.6	4036.0	4 628.5	0.16%
Least developed	12	167.2	56.1	150.4	24.6	31.5	0.15%
Total	142	93 539.5	24 086.7	94 449.7	8 533.8	15 552.9	0.16%

This table presents descriptive statistics of the covered groups that are subject to Pillar One. The figures are in million of euros for the Turnover and Amount A. The net gains are presented as a percentage of total taxes.

The results presented in Table 2 and Table 3 summarize our estimations for our benchmark scenario where jurisdictions are restricted to the Inclusive Framework (IF) member countries. We also estimate revenues from Amount A in two additional scenarios. The second scenario considers almost all jurisdictions in the world, moving from the 140 IF member jurisdictions to around 200 jurisdictions. Reallocated profits would then increase to €94.4 billion, higher than under the IF members-only scenario, and the net gains would slightly increase to €15.9 billion. Under this scenario, two countries would become part of the top jurisdictions with revenues above €100 million: Taiwan (€550 million) and Venezuela (€130 million). For detailed results see Table A.2. in Appendix A. In the third scenario, we consider the case where non-ADS Covered Groups would fail to source 5% of their total revenues in any market jurisdiction, giving rise to so-called "tail-end revenues". We allocate 5% of these revenues across least developed countries according to their total final consumption expenditure. This decreases the expected revenues for developed and developing countries by 0.5 and 0.4 billion respectively while increasing those of the least developed countries from €0.03 to 0.2 billion (for more details see Appendix C).

<sup>13</sup>The list of jurisdictions that are member countries of the South Center are presented in Appendix J .



Table E.1 in the Appendix E presents our revenue estimates by Covered Group, rather than by jurisdiction. For each Covered Group, the Amount A profits, the gross gains and losses, and the net effect of Amount A. For a given Covered Group, gross losses correspond to the sum of reallocated profits to each jurisdiction times these jurisdictions' CIT rates. At the aggregate level, they are logically the counterpart of jurisdictions' gross gains. The same reasoning applies to Covered Groups' gross gains, which correspond to the sum of the obligation to eliminate double taxation allocated to each jurisdiction times these jurisdictions' ETRs. At the aggregate level, it is the counterpart of jurisdictions' gross losses. The difference between Covered Groups' gross gains and losses gives the additional tax burden created by Amount A (jurisdictions' net gain). The latter varies depending on the size of Covered Groups' Amount A profits, the statutory tax rates of their market jurisdictions, and the effective tax rates of the jurisdictions providing them double tax relief. We observe that all but one Covered Group would be net losers from Amount A. This is to be expected since, by design, Amount A profits are generally reallocated to jurisdictions where CIT rates are relatively high while double tax reliefs are provided by jurisdictions where ETRs are relatively low. This explains the drop in the losses of Covered Groups (drop in net gains of countries) when a 15% minimum rate is applied in the scenario where Pillar Two is implemented as the mismatch between the rates at which Amount A profits are taxed and double tax reliefs are provided decreases (see Table A4.1). In sum, the most affected from Amount A are MNEs with large "residual" profits, that they locate in low-tax jurisdictions while having their consumers in high-tax jurisdictions.

## 5 Discussion

### 5.1 Sources of uncertainty

There are several differences in the methodology we apply in this work and the actual rules of Amount A. This might lead to overestimating or underestimating some of the results presented above. Most of the differences come from either lack of data or the uncertainty about the design of Amount A rules.

First, we only select Covered Groups based on consolidated data at the group level. Under the actual Amount A rules, a group might not be covered while one of its disclosed segments would if it passes the revenue and profitability tests. Consequently, the number of our Covered Groups is most likely a lower bound although we believe that the potential inclusion of Covered Segments will be marginal.

Adding to that, following the OECD rules, revenues derived by Covered Groups from market jurisdictions must be defined on a transaction-by-transaction basis. However, since we use macro-level data, we reallocate Covered Groups' Amount A profits across market jurisdictions with respect to either the purchasing power of their internet users if the Covered Group classifies as ADS or with respect to the percentage of proxied destination-based revenues of MNEs in the same sector and with the same headquarter jurisdiction as the considered Covered Group. Therefore, we implicitly assume that Covered Groups have the same trade patterns across

market jurisdictions as MNEs in the same sector and with the same headquarter jurisdiction. Moreover, the AMNE data, used to calculate jurisdictions' market shares only report data for 59 jurisdictions. The remaining jurisdictions are reported under the ROW entries. That is why we employ a gravity model to estimate the revenue shares of other countries. This adds a layer of uncertainty to our estimates for jurisdictions not included in the AMNE database.

Another source of uncertainty comes from the allocation of the obligations to eliminate double taxation. We use macro CbCR data that report the amount of profits, employees, and tangible assets located in partner jurisdictions by MNEs with global turnover above €750 million from a given headquarter jurisdiction. Ideally, we would use detailed micro data on each Covered Group's distribution of profits, payroll and depreciation amount across jurisdictions, but we lack this data.

Moreover, it is not clear whether the reallocated profits will be taxed at market jurisdictions' statutory CIT rate nor whether OEDT were taxed at jurisdictions' effective tax rates. In our benchmark results, we employ statutory CIT rates to estimate gross gains and ETRs to determine gross losses. Moreover, we assume that double tax relief is provided following the exemption method, which has not yet been clarified in the rules. As a robustness check, we provide alternative results where we assume that OEDT were taxed at the statutory CIT rates and not the ETRs. Since statutory CIT rates tend to be much higher than the ETRs, the gross losses increase from €8.5 billion to 14.3 billion. This affects the aggregated net gains from Amount A which decrease from €15.6 billion to 9.8 billion (see Table B.1. and Table B.2. in Appendix B for more details).

The application of the Nexus test leads to the redistribution of a total of €94 444.4 million in profits, 5.4 million less than global Amount A profits. OEDT are nonetheless allocated with respect to Covered Groups' Amount A profits, which are generally slightly higher than the actual reallocated profits. When restricting the sample to IF member countries, the amount of redistributed profits decreases to €93 539.5 million.

The extent to which the "tail-end revenues" provision will affect the revenues of least-developed jurisdictions is not clear. In our scenario, we assumed that 5% of non-ADS Covered Groups' global revenues would be reallocated exclusively to least-developed countries. This is very much likely an upper bound.

A last important feature of Amount A that could significantly affect our results is the Marketing and Distribution Safe Harbour (MDSH). As the design of the latter is not yet been fully determined, we chose not to apply it. The MDSH is a capping mechanism that would reduce the profits reallocated to jurisdictions that already have taxing rights over Covered Groups' Amount A profits. It might potentially reduce the profits reallocated to headquarter countries, in particular in the US and China where most Covered Groups are headquartered and locate a significant share of their profits. However, one should keep in mind that the MDSH only applies to the extent that Covered Groups locate "residual profits" in a jurisdiction, which is

not necessarily the case for the US and China.

## 5.2 Pillar One vs. Digital Taxes

Several countries introduced digital taxes. In Europe, eight countries have already put in place such taxes: France, Hungary, Italy, Spain, Poland, Portugal, Austria, and the United Kingdom. In addition, there are several countries that have published proposals or announced a digital tax such as the Czech Republic, Denmark, Slovakia, Norway, and Slovenia (Asen and Bunn (2021)). More than 36 countries worldwide have started either implementing or proposing a digital tax such as Turkey, India, Vietnam, Indonesia, New Zealand, Argentina, Canada, Brazil, Columbia, Uruguay, Paraguay, Costa Rica, Pakistan, Sierra Leone, Laos, Nepal, Kenya, Nigeria, Tunisia and others (according to Asquith (2022)).

Table 4: Revenues from digital taxes and Pillar One for selected countries

Country	Amount A	Digital Tax	
		19/2020	Expected
France	571.2	277	670
United Kingdom	574.2	315	526
India	-22.9	243	458
Hungary	-19.9	18	.
Italy	284.5	250	.
Poland	70	.	49
Spain	260.5	.	500-968
EU	2 563.5	.	5 000

This Table compares net revenues from Pillar One with those of digital taxes. "Digital tax 19/2020" refers to revenues from digital taxes that were collected by tax administrations around the year 2019 or 2020. "Digital tax Expected" refers to digital tax estimations that are expected by tax administration for a certain year. The figures are in millions of euros.

If Pillar One is adopted, it would imply the removal of digital taxes by signing countries. Generally, digital service taxes (DSTs) apply a small rate (2-6%) on gross payments for digital services (or sales of digital companies). Comparing Amount A estimates with digital tax revenues is not straightforward. Amount A includes all sectors (except the financial, insurance, and extractives industries), whereas digital taxes target only the digital economy. Another difference is the thresholds applied to determine the companies in scope. Thresholds applied under Amount A are higher than those under digital taxes, leading to more in-scope companies under digital taxes. As shown in Table 4, Amount A would bring almost the same level of revenues as a digital tax for France<sup>14</sup>, the UK<sup>15</sup>, Poland<sup>16</sup>, and Italy<sup>17</sup>. Spain<sup>18</sup> is expected

<sup>14</sup>France: digital tax revenues for the year 2019 and expected revenues in 2023, [Source](#)

<sup>15</sup>UK: digital tax revenues for the year 2020 and expected revenues in 2023, [Source](#)

<sup>16</sup>Poland: expected revenues for 2021, [Source](#)

<sup>17</sup>Italy: digital tax revenues for the year 2020/2021, [Source](#)

<sup>18</sup>Spain: digital tax revenues expected for the year 2022, [Source](#)

to gain more with a digital tax. Hungary<sup>19</sup> and India<sup>20</sup> are worse off with Amount A as they have negative net gains. Adding to that, the European Commission estimated that €5 billion a year could be generated for Member States if the tax was applied at a rate of 3% (European Commission (2018)). Our estimates indicate that under Amount A the revenues would be halved to around €2.5 billion.

### 5.3 Pillar One and Pillar Two

The total revenues that could be derived from Pillar One are much more limited than the potential revenues under Pillar Two. Baraké et al. (2022) finds that the total revenues from Pillar Two could reach €130-150 billion with carve-outs where our estimated total net revenues from Pillar One are around €15.6 billion.

However, comparing Pillar One and Pillar Two independently of each other would overstate the overall gains compared to computing the joint effect of both pillars in a way that takes into account the interaction between them. In the impact assessment of the OECD, the interaction scenario considered is where Pillar One applies before Pillar Two. This would decrease the possible revenue gains from Pillar Two but does not affect our Pillar One estimates. In case the reallocation of profits would occur after collecting the minimum tax, this would lead to different results with regard to the tax rates used in calculating gains and losses. That is because MNEs would have paid in most countries a tax rate of 15% whereas, without the minimum tax, some jurisdictions have tax rates below 15%. On one side, this would increase the gains for countries with a tax rate below 15% in case they would like to apply a tax rate above 15% on the reallocated profits. On the other side, this would decrease the revenues from Pillar One for countries that are allocated OEDT and that have tax rates below 15%. We model the scenario where Pillar Two applies before Pillar One (see Table D.1. and Table D.2. in Appendix D). Pillar Two would raise the statutory CIT rates for countries that were taxing gains at a rate below 15%. The gross gains would therefore increase slightly, by around €36 million. In parallel, gross losses would also increase by €7 billion since ETRs would rise for countries with rates below 15%. As ETRs are generally much lower than statutory CIT rates, we find that the overall net gains from Pillar One Amount A would drop from €15.6 billion to €8.6 billion.

## 6 Conclusion

This paper presents country-specific estimates of the revenue arising from the Pillar One Amount A proposal. Using the latest rules, as have been negotiated by 136 jurisdictions in the G20/OECD Inclusive Framework on BEPS, we identify MNEs qualifying as Covered Groups and approximate their destination-based revenues in market jurisdictions using a variety of data sources. Amount A profits are then redistributed to jurisdictions based on their

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<sup>19</sup>Hungary: Digital tax for 2019, [Source: Advertising tax 2019](#)

<sup>20</sup>India: digital tax revenues for the year 2020 and expected revenues in 2022, [Source](#)

estimated share of Covered Groups’ destination-based revenues. We account for the elimination of double taxation following the mechanism provided in the OECD Progress Report to obtain net gains from Amount A. Lastly, we compare our revenue estimates for Amount A against revenue arising from digital taxes.

The main contribution of this paper is to provide first-round revenue effects from the implementation of Pillar One Amount A in a static framework. The total revenues to be redistributed (known as Amount A in BEPS terminology) is estimated to be €94.4 billion, resulting in €15.6 billion net revenues after accounting for the elimination of double taxation. An additional contribution is to provide country-specific estimates arising from the Amount A proposal. Revenue would be unequally distributed across the globe. We find that the largest beneficiaries will be the United States with €7.7 billion and China with €3.2 billion. The EU will gain around €2.6 billion. In absolute terms, developed and high-income countries would gain more than developing and low-income countries. In relative terms, we estimate that the additional tax revenues from Pillar One Amount A would represent around 0.17% of current tax revenues for developing countries and 0.15% for developing and least developed countries. Lastly, we provide a comparison to digital taxes, which have been introduced in a number of countries.

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# Appendix A. Revenues details of Pillar One

**Table A.1.** Pillar One Revenues for Inclusive Framework member countries (in €m)

Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Albania* <sup>◇</sup>	6.2	0.9	0.0	0.0	0.9	0.04%
Andorra* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	-
Angola*	19.4	5.8	0.0	0.0	5.8	0.12%
Anguilla* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	0.00%
Antigua and Barbuda* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	0.07%
Argentina	415.0	124.5	10.9	3.0	121.5	0.33%
Armenia* <sup>◇</sup>	5.7	1.0	0.0	0.0	1.0	0.04%
Aruba* <sup>◇</sup>	1.4	0.3	0.0	0.0	0.3	-
Australia	1 087.0	326.1	126.4	18.3	307.8	0.12%
Austria	470.0	117.5	5.0	0.6	116.9	0.13%
Azerbaijan* <sup>◇</sup>	22.4	4.5	0.0	0.0	4.5	0.08%
Bahamas* <sup>◇</sup>	5.5	0.0	0.0	0.0	0.0	0.00%
Bahrain*	13.1	0.0	0.0	0.0	0.0	0.00%
Barbados* <sup>◇</sup>	2.5	0.2	124.4	0.9	-0.8	-0.07%
Belarus* <sup>◇</sup>	24.8	4.5	0.0	0.0	4.5	0.07%
Belgium	441.0	127.9	57.0	11.5	116.4	0.12%
Belize* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	0.00%
Benin* <sup>◇</sup>	2.2	0.7	0.0	0.0	0.7	0.03%
Bermuda* <sup>◇</sup>	2.9	0.0	11 183.4	104.0	-104.0	-
Bosnia and Herzegovina* <sup>◇</sup>	9.3	0.9	0.0	0.0	0.9	0.03%
Botswana* <sup>◇</sup>	4.3	0.9	0.0	0.0	0.9	0.03%
Brazil	1 705.8	580.0	147.3	33.3	546.6	0.33%
Brunei Darussalam* <sup>◇</sup>	2.5	0.5	0.0	0.0	0.5	-
Bulgaria	35.1	3.5	0.0	0.0	3.5	0.03%
Burkina Faso* <sup>◇</sup>	2.1	0.6	0.0	0.0	0.6	0.03%
Cabo Verde* <sup>◇</sup>	0.6	0.1	0.0	0.0	0.1	0.04%
Cameroon*	7.8	2.6	0.0	0.0	2.6	0.07%
Canada	1 518.6	410.0	166.1	28.3	381.7	0.20%
Cayman Islands* <sup>◇</sup>	0.5	0.0	10 879.5	49.0	-49.0	-
Chile	164.7	44.5	13.8	2.0	42.5	0.12%
China	21 253.9	5 313.5	11 128.3	2 092.1	3 221.4	0.31%
Colombia	156.6	50.1	0.0	0.0	50.1	0.15%
Congo* <sup>◇</sup>	0.7	0.2	0.0	0.0	0.2	0.03%
Congo (Democratic Rep.)* <sup>◇</sup>	5.8	2.0	0.0	0.0	2.0	0.07%
Cook Islands*	0.0	0.0	0.0	0.0	0.0	-
Costa Rica	40.7	12.2	0.0	0.0	12.2	0.18%
Côte d'Ivoire*	10.9	2.7	0.0	0.0	2.7	0.04%
Croatia	58.7	10.6	0.0	0.0	10.6	0.10%
Curaçao* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	-
Czechia*	173.8	33.0	67.7	10.6	22.4	0.07%
Denmark*	154.5	34.0	0.0	0.0	34.0	0.03%
Djibouti* <sup>◇</sup>	0.8	0.2	0.0	0.0	0.2	-
Dominica* <sup>◇</sup>	0.1	0.0	0.0	0.0	0.0	0.03%
Dominican Republic* <sup>◇</sup>	34.4	9.3	0.0	0.0	9.3	0.11%
Egypt*	187.7	43.2	11.4	3.3	39.9	0.10%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	
Estonia <sup>◇</sup>	10.3	2.1	0.0	0.0	2.1	0.04%
Eswatini*	1.1	0.3	47.9	5.8	-5.5	-0.56%
Faroe Islands* <sup>◇</sup>	1.3	0.2	0.0	0.0	0.2	-
Finland	160.2	32.0	25.4	4.0	28.0	0.06%
France	2 371.0	663.9	415.5	92.7	571.2	0.10%
Gabon* <sup>◇</sup>	3.2	1.0	0.0	0.0	1.0	0.06%
Georgia* <sup>◇</sup>	7.9	1.2	0.0	0.0	1.2	0.04%
Germany*	3 041.3	912.4	430.5	89.3	823.1	0.23%
Gibraltar* <sup>◇</sup>	0.8	0.1	1 093.8	3.9	-3.9	-
Greece	100.8	24.2	0.0	0.0	24.2	0.06%
Greenland* <sup>◇</sup>	0.9	0.2	0.0	0.0	0.2	-
Grenada*	0.3	0.1	0.0	0.0	0.1	0.04%
Guernsey* <sup>◇</sup>	0.6	0.0	0.0	0.0	0.0	-
Haiti* <sup>◇</sup>	4.6	1.4	0.0	0.0	1.4	-
Honduras* <sup>◇</sup>	6.6	1.7	0.0	0.0	1.7	0.05%
Hong Kong	1 712.6	291.1	2 810.0	195.9	95.3	-
Hungary	144.9	13.0	193.6	33.0	-19.9	-0.06%
Iceland <sup>◇</sup>	7.0	1.4	0.0	0.0	1.4	0.03%
India	692.2	207.7	663.2	230.6	-22.9	-0.01%
Indonesia	290.4	72.6	151.9	41.8	30.8	0.04%
Ireland	771.9	100.3	1 933.3	199.5	-99.2	-0.16%
Isle of Man* <sup>◇</sup>	1.1	0.0	1 554.8	109.3	-109.3	-
Israel	317.5	73.0	16.1	3.1	69.9	0.09%
Italy	1 282.5	307.8	88.4	23.3	284.5	0.07%
Jamaica* <sup>◇</sup>	7.0	1.8	0.0	0.0	1.8	0.06 %
Japan	4 678.9	1 450.5	3 186.4	725.2	725.2	0.05%
Jersey*	1.0	0.0	2 471.7	19.0	-19.0	-
Jordan* <sup>◇</sup>	20.3	4.1	0.0	0.0	4.1	0.07%
Kazakhstan*	83.3	16.7	202.5	24.1	-7.5	-0.06%
Kenya*	19.4	5.8	0.0	0.0	5.8	0.05%
Korea	2 858.6	714.6	111.4	22.3	692.3	0.32%
Latvia	11.6	2.3	0.0	0.0	2.3	0.04%
Liberia* <sup>◇</sup>	1.2	0.4	0.0	0.0	0.4	0.11%
Liechtenstein* <sup>◇</sup>	1.7	0.2	8 303.1	607.8	-607.6	-
Lithuania <sup>◇</sup>	23.6	3.5	0.0	0.0	3.5	0.04%
Luxembourg	27.4	6.9	992.6	19.9	-13.0	-0.08%
Macao <sup>◇</sup>	10.9	1.3	52.6	12.2	-10.9	-0.22%
Malaysia*	684.9	164.4	31.8	5.4	159.0	0.49%
Maldives* <sup>◇</sup>	1.1	0.2	0.0	0.0	0.2	0.03%
Malta*	6.5	2.3	174.1	3.7	-1.4	-0.05%
Mauritania* <sup>◇</sup>	1.9	0.5	0.0	0.0	0.5	-
Mauritius*	5.1	0.8	259.9	6.8	-6.0	-0.29%
Mexico	1 106.2	331.9	220.7	60.6	271.3	0.20%
Monaco*	1.5	0.5	572.3	70.2	-69.7	-
Mongolia* <sup>◇</sup>	4.8	1.2	0.0	0.0	1.2	0.07%
Montenegro* <sup>◇</sup>	2.7	0.2	0.0	0.0	0.2	-
Montserrat*	0.0	0.0	0.0	0.0	0.0	-
Morocco	71.6	22.2	4.5	0.8	21.4	0.10%
Namibia* <sup>◇</sup>	3.2	1.0	0.0	0.0	1.0	0.04%

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<b>Country</b>	<b>Reallocated profits</b>	<b>Gross gain</b>	<b>Elimination</b>	<b>Loss</b>	<b>Net gain</b>	
Netherlands	1 332.8	333.2	3 813.6	150.6	182.6	0.09%
New Zealand	133.7	37.4	0.0	0.0	37.4	0.07%
Nigeria*	175.2	52.6	8.1	3.5	49.0	0.88%
North Macedonia* <sup>◇</sup>	6.2	0.6	0.0	0.0	0.6	0.04%
Norway	228.3	50.2	18.7	5.3	44.9	0.07%
Oman*	29.4	4.4	0.0	0.0	4.4	0.26%
Pakistan* <sup>◇</sup>	99.6	34.9	2.5	1.1	33.7	0.11%
Panama*	20.7	5.2	0.0	0.0	5.2	0.13%
Papua New Guinea* <sup>◇</sup>	6.7	2.0	0.0	0.0	2.0	0.08%
Paraguay* <sup>◇</sup>	18.5	1.8	0.0	0.0	1.8	0.06%
Peru*	92.4	27.7	1.0	0.3	27.5	0.12%
Poland	383.4	72.8	18.4	2.9	70.0	0.08%
Portugal	131.3	27.6	60.0	9.0	18.5	0.04%
Qatar*	62.8	6.3	247.0	36.6	-30.3	-0.16%
Romania	118.8	19.0	6.1	0.9	18.1	0.06%
Russia	854.0	170.8	45.5	10.1	160.7	0.11%
St Kitts & Nevis* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	0.06%
St Lucia* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	0.05%
St Vincent & Grenadines* <sup>◇</sup>	0.5	0.2	15.9	4.8	-4.6	-2.36%
Samoa* <sup>◇</sup>	4.2	1.1	0.0	0.0	1.1	0.62%
San Marino*	0.9	0.2	0.0	0.0	0.2	0.07%
Saudi Arabia	232.5	46.5	0.0	0.0	46.5	0.09%
Senegal*	8.2	2.5	0.0	0.0	2.5	0.07%
Serbia*	39.2	5.9	0.0	0.0	5.9	0.05%
Seychelles* <sup>◇</sup>	0.6	0.2	50.8	7.8	-7.6	-2.17%
Sierra Leone*	1.4	0.4	0.0	0.0	0.4	0.08%
Singapore	890.7	151.4	7 639.6	384.3	-232.8	-0.60%
Slovakia	56.1	11.8	0.0	0.0	11.8	0.07%
Slovenia <sup>◇</sup>	32.6	6.2	0.0	0.0	6.2	0.08%
South Africa	221.7	62.1	2 942.1	773.8	-711.7	-1.03%
Spain	1 067.1	266.8	49.6	6.2	260.5	0.17%
Sri Lanka*	21.1	5.9	153.6	18.1	-12.2	-0.21%
Sweden	418.9	88.0	9.0	1.4	86.5	0.07%
Switzerland	1 139.7	171.0	6 860.1	454.8	-283.9	-0.47%
Thailand	557.4	111.5	3 495.3	577.1	-465.6	-0.73%
Togo* <sup>◇</sup>	1.7	0.4	150.4	24.6	-24.2	-2.77%
Trinidad and Tobago* <sup>◇</sup>	24.3	7.3	0.0	0.0	7.3	0.20%
Tunisia*	30.4	7.6	0.0	0.0	7.6	0.10%
Turkey	555.4	122.2	16.4	3.1	119.0	0.11%
Turks and Caicos Islands* <sup>◇</sup>	0.2	0.0	0.0	0.0	0.0	-
Ukraine*	123.9	22.3	0.0	0.0	22.3	0.08%
United Arab Emirates*	126.3	69.5	288.7	81.9	-12.4	-0.59%
United Kingdom	3 040.7	577.7	50.1	3.5	574.2	0.10%
United States	32 100.5	8 667.1	7 411.3	999.8	7 667.3	0.42%
Uruguay*	39.2	9.8	0.0	0.0	9.8	0.11%
Viet Nam*	368.0	73.6	15.5	2.4	71.2	0.14%
Virgin Islands (British)*	7.1	0.0	1 151.0	2.9	-2.9	-
Zambia* <sup>◇</sup>	117.9	41.3	0.0	0.0	41.3	1.58%
<b>EU</b>	<b>12 826.2</b>	<b>3 222.6</b>	<b>8 339.9</b>	<b>659.1</b>	<b>2 563.5</b>	<b>0.10%</b>

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	
<b>OECD</b>	61 741.0	16 227.2	26 357.2	2 981.0	13 246.2	0.17%
<b>Tax havens</b>	6 403.4	1 193.6	61 993.6	2 418.7	-1 225.1	-0.07%
<b>Developed countries</b>	56 761.1	14 914.1	26 159.0	2 894.4	12 019.7	0.17%
<b>Developing countries</b>	36 611.2	9 116.5	68 140.4	5 614.7	3 501.8	0.15%
<b>Least dev. countries</b>	167.2	56.1	150.4	24.6	31.5	0.15%
<b>Total</b>	93 539.5	24 086.7	94 449.8	8 533.8	15 552.9	0.16 %

This Table presents revenues from Pillar One. Gross gains are calculated using Reallocated profits multiplied by the Statutory tax rate (CIT) while Loss is calculated as Elimination multiplied by the Effective tax rate (ETR).

\*: Allocation Keys for destination-based sales partly obtained using a gravity model (all jurisdictions but the 59 countries in the OECD AMNE data) <sup>◊</sup>: Allocation Keys for Profits/Employees/Tangible Assets with respect to at least 6 of the 11 headquarter countries are obtained using a gravity model



**Table A.2.** Pillar One Revenues for all countries in sample (in €m)

Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	
Afghanistan* <sup>◇</sup>	4.2	0.8	0.0	0.0	0.8	0.1%
Albania* <sup>◇</sup>	6.1	0.9	0.0	0.0	0.9	0.0%
Algeria*	44.4	11.5	0.0	0.0	11.5	0.0%
American Samoa* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	-
Andorra* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	-
Angola*	19.1	5.7	0.0	0.0	5.7	0.1%
Anguilla* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	0.0%
Antigua and Barbuda* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	0.1%
Argentina	406.4	121.9	6.3	1.7	120.2	0.3%
Armenia* <sup>◇</sup>	5.6	1.0	0.0	0.0	1.0	0.0%
Aruba* <sup>◇</sup>	1.4	0.3	0.0	0.0	0.3	-
Australia	1 076.6	323.0	112.7	16.4	306.6	0.1%
Austria	460.7	115.2	5.0	0.6	114.6	0.1 %
Azerbaijan* <sup>◇</sup>	22.1	4.4	0.0	0.0	4.4	0.1%
Bahamas* <sup>◇</sup>	5.4	0.0	0.0	0.0	0.0	0.0%
Bahrain*	12.8	0.0	0.0	0.0	0.0	0.0%
Bangladesh* <sup>◇</sup>	48.3	12.1	0.0	0.0	12.1	0.1%
Barbados* <sup>◇</sup>	2.5	0.1	103.6	0.8	-0.6	-0.1%
Belarus* <sup>◇</sup>	24.2	4.3	0.0	0.0	4.3	0.1%
Belgium	424.9	123.2	92.1	18.5	104.7	0.1%
Belize* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	0.0%
Benin* <sup>◇</sup>	2.2	0.6	0.0	0.0	0.6	0.0%
Bermuda* <sup>◇</sup>	2.8	0.0	11 023.0	102.5	-102.5	-
Bhutan* <sup>◇</sup>	0.6	0.2	0.0	0.0	0.2	0.1%
Bolivia*	12.0	3.0	0.0	0.0	3.0	0.1%
Bosnia and Herzegovina* <sup>◇</sup>	9.1	0.9	0.0	0.0	0.9	0.0%
Botswana* <sup>◇</sup>	4.2	0.9	0.0	0.0	0.9	0.0%
Brazil	1 678.0	570.5	208.4	47.2	523.4	0.3%
Brunei Darussalam* <sup>◇</sup>	2.4	0.5	0.0	0.0	0.5	-
Bulgaria	34.6	3.5	0.0	0.0	3.5	0.0%
Burkina Faso* <sup>◇</sup>	2.1	0.6	0.0	0.0	0.6	0.0%
Burundi* <sup>◇</sup>	0.3	0.1	0.0	0.0	0.1	0.0%
Cabo Verde* <sup>◇</sup>	0.6	0.1	0.0	0.0	0.1	0.0%
Cambodia* <sup>◇</sup>	9.7	1.9	73.2	7.4	-5.5	-0.1%
Cameroon*	7.7	2.5	0.0	0.0	2.5	0.1%
Canada	1 495.6	403.8	117.8	20.1	383.7	0.2%
Cayman Islands*	0.5	0.0	10 371.9	46.7	-46.7	-
Central African Republic* <sup>◇</sup>	0.1	0.0	51.5	14.6	-14.6	-8.2%
Chad* <sup>◇</sup>	2.0	0.7	0.0	0.0	0.7	-
Chile	162.6	43.9	5.9	0.8	43.1	0.1%
China	19 199.3	4 799.8	11 076.8	2 082.4	2 717.4	0.3%
Christmas Island*	0.0	0.0	0.0	0.0	0.0	-
Colombia	153.8	49.2	0.0	0.0	49.2	0.1%
Comoros*	0.0	0.0	0.0	0.0	0.0	-
Congo* <sup>◇</sup>	0.7	0.2	0.0	0.0	0.2	0.0%
Congo (Democratic Rep.)* <sup>◇</sup>	5.5	1.9	0.0	0.0	1.9	0.1%
Cook Islands*	0.0	0.0	0.0	0.0	0.0	-
Costa Rica*	40.2	12.0	9.4	0.9	11.1	0.2%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	
Côte d'Ivoire*	10.7	2.7	0.0	0.0	2.7	0.0%
Croatia	50.3	9.1	0.0	0.0	9.1	0.1%
Cuba* <sup>◇</sup>	32.7	11.4	35.2	14.1	-2.7	-
Curaçao* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	-
Cyprus	16.2	2.1	0.0	0.0	2.1	0.0%
Czechia	152.5	29.0	65.3	10.3	18.7	0.1%
Denmark	152.7	33.6	0.0	0.0	33.6	0.0%
Djibouti* <sup>◇</sup>	0.8	0.2	0.0	0.0	0.2	-
Dominica* <sup>◇</sup>	0.1	0.0	0.0	0.0	0.0	0.0%
Dominican Republic*	34.0	9.2	0.0	0.0	9.2	0.1%
Ecuador*	35.1	8.8	0.0	0.0	8.8	0.1%
Egypt*	183.5	42.2	0.0	0.0	42.2	0.1%
El Salvador* <sup>◇</sup>	11.8	3.5	0.0	0.0	3.5	0.1%
Equatorial Guinea* <sup>◇</sup>	1.4	0.5	0.0	0.0	0.5	0.1%
Eritrea*	0.1	0.0	0.0	0.0	0.0	-
Estonia <sup>◇</sup>	10.3	2.1	0.0	0.0	2.1	0.0%
Eswatini* <sup>◇</sup>	1.0	0.3	46.5	5.6	-5.3	-0.5%
Ethiopia* <sup>◇</sup>	16.5	5.0	49.6	14.0	-9.0	-0.2%
Falkland Islands*	0.0	0.0	0.0	0.0	0.0	-
Faroe Islands* <sup>◇</sup>	1.3	0.2	0.0	0.0	0.2	-
Fiji* <sup>◇</sup>	1.3	0.3	0.0	0.0	0.3	0.0%
Finland	158.2	31.6	27.8	4.4	27.2	0.1%
France	2 270.4	635.7	568.0	126.7	509.0	0.1%
Gabon* <sup>◇</sup>	3.2	0.9	0.0	0.0	0.9	0.1%
Gambia* <sup>◇</sup>	0.4	0.1	0.0	0.0	0.1	na
Georgia* <sup>◇</sup>	7.7	1.2	0.0	0.0	1.2	0.0%
Germany	2 988.6	896.6	373.8	77.6	819.0	0.2%
Ghana*	20.7	5.2	0.0	0.0	5.2	0.1%
Gibraltar* <sup>◇</sup>	0.8	0.1	1 063.9	3.8	-3.7	-
Greece	100.0	24.0	0.0	0.0	24.0	0.1%
Greenland* <sup>◇</sup>	0.8	0.2	0.0	0.0	0.2	-
Grenada*	0.3	0.1	0.0	0.0	0.1	0.0%
Guam* <sup>◇</sup>	2.4	0.8	0.0	0.0	0.8	-
Guatemala*	24.3	6.1	0.0	0.0	6.1	0.1%
Guernsey* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	-
Guinea* <sup>◇</sup>	2.2	0.8	0.0	0.0	0.8	0.1%
Guinea-Bissau* <sup>◇</sup>	0.2	0.0	183.2	45.8	-45.7	-38.6%
Guyana* <sup>◇</sup>	1.4	0.4	0.0	0.0	0.4	-
Haiti* <sup>◇</sup>	4.6	1.4	0.0	0.0	1.4	-
Holy See*	0.0	0.0	0.0	0.0	0.0	-
Honduras* <sup>◇</sup>	6.5	1.6	0.0	0.0	1.6	0.1%
Hong Kong	1 686.9	286.8	2 699.1	188.1	98.6	-
Hungary	141.4	12.7	206.8	35.2	-22.5	-0.1%
Iceland <sup>◇</sup>	7.0	1.4	0.0	0.0	1.4	0.0%
India	674.5	202.4	615.2	213.9	-11.6	0.0%
Indonesia	286.3	71.6	68.2	18.8	52.8	0.1%
Iran* <sup>◇</sup>	145.2	36.3	0.0	0.0	36.3	0.2%
Iraq* <sup>◇</sup>	50.9	7.6	0.0	0.0	7.6	0.4%
Ireland	755.3	98.2	1 729.3	178.5	-80.3	-0.1%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	
Isle of Man* <sup>◇</sup>	0.9	0.0	1 510.3	106.2	-106.2	-
Israel*	312.3	71.8	10.4	2.0	69.8	0.1%
Italy*	1 262.5	303.0	144.0	37.9	265.1	0.1%
Jamaica* <sup>◇</sup>	6.9	1.7	0.0	0.0	1.7	0.1%
Japan	4 619.2	1 431.9	3 008.9	684.8	747.1	0.1%
Jersey*	0.9	0.0	2 400.0	18.5	-18.5	-
Jordan* <sup>◇</sup>	19.8	4.0	0.0	0.0	4.0	0.1%
Kazakhstan*	81.4	16.3	0.0	0.0	16.3	0.1%
Kenya*	18.6	5.6	0.0	0.0	5.6	0.0%
Kiribati* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	0.0%
Korea (South Korea)	2 806.4	701.6	85.1	17.1	684.5	0.3%
Korea (North Korea)* <sup>◇</sup>	4.9	1.0	689.7	170.0	-169.0	-
Kuwait*	48.4	7.3	0.0	0.0	7.3	-
Kyrgyzstan* <sup>◇</sup>	2.4	0.2	0.0	0.0	0.2	0.0%
Lao* <sup>◇</sup>	3.6	1.3	0.0	0.0	1.3	0.1%
Latvia	11.6	2.3	0.0	0.0	2.3	0.0%
Lebanon* <sup>◇</sup>	32.7	5.6	0.0	0.0	5.6	0.2%
Lesotho* <sup>◇</sup>	0.7	0.2	0.0	0.0	0.2	0.0%
Liberia* <sup>◇</sup>	1.2	0.4	0.0	0.0	0.4	0.1%
Libya* <sup>◇</sup>	7.3	1.5	0.0	0.0	1.5	-
Liechtenstein* <sup>◇</sup>	1.6	0.2	8 256.9	604.4	-604.2	-
Lithuania <sup>◇</sup>	23.6	3.5	0.0	0.0	3.5	0.0%
Luxembourg	27.3	6.8	627.1	12.5	-5.7	0.0%
Macao* <sup>◇</sup>	10.6	1.3	26.1	6.1	-4.8	-0.1%
Madagascar* <sup>◇</sup>	1.4	0.3	0.0	0.0	0.3	0.0%
Malawi* <sup>◇</sup>	2.1	0.6	0.0	0.0	0.6	0.1%
Malaysia	668.2	160.4	41.6	7.0	153.3	0.5%
Maldives* <sup>◇</sup>	1.1	0.2	0.0	0.0	0.2	0.0%
Mali* <sup>◇</sup>	3.3	1.2	0.0	0.0	1.2	0.1%
Malta	5.9	2.1	173.8	3.7	-1.6	-0.1%
Marshall Islands* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	0.0%
Mauritania* <sup>◇</sup>	1.8	0.5	0.0	0.0	0.5	-
Mauritius*	5.0	0.8	252.7	6.6	-5.9	-0.3%
Mexico	1 077.1	323.1	150.5	41.3	281.8	0.2%
Micronesia* <sup>◇</sup>	0.1	0.0	0.0	0.0	0.0	0.2%
Moldova* <sup>◇</sup>	5.5	0.7	0.0	0.0	0.7	0.0%
Monaco*	1.4	0.4	570.5	70.0	-69.6	-
Mongolia* <sup>◇</sup>	4.6	1.2	0.0	0.0	1.2	0.1%
Montenegro* <sup>◇</sup>	2.6	0.2	0.0	0.0	0.2	-
Montserrat*	0.0	0.0	0.0	0.0	0.0	-
Morocco	70.1	21.7	9.9	1.8	20.0	0.1%
Mozambique*	2.1	0.7	0.0	0.0	0.7	0.0%
Myanmar* <sup>◇</sup>	16.1	4.0	292.5	29.7	-25.6	-0.6%
Namibia* <sup>◇</sup>	3.1	1.0	0.0	0.0	1.0	0.0%
Nauru*	0.0	0.0	0.0	0.0	0.0	0.0%
Nepal* <sup>◇</sup>	9.6	2.4	0.0	0.0	2.4	0.1%
Netherlands	1 293.9	323.5	3 569.5	141.0	182.5	0.1%
New Zealand	132.3	37.0	0.0	0.0	37.0	0.1%
Nicaragua* <sup>◇</sup>	4.1	1.2	0.0	0.0	1.2	0.1%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	
Niger* <sup>◇</sup>	1.5	0.5	0.0	0.0	0.5	0.0%
Nigeria*	167.1	50.1	4.8	2.1	48.0	0.9%
Niue*	0.0	0.0	0.0	0.0	0.0	-
North Macedonia* <sup>◇</sup>	5.9	0.6	0.0	0.0	0.6	0.0%
Northern Mariana Islands* <sup>◇</sup>	0.3	0.1	0.0	0.0	0.1	-
Norway	226.5	49.8	52.5	14.9	34.9	0.1%
Oman*	28.3	4.2	0.0	0.0	4.2	0.3%
Pakistan* <sup>◇</sup>	92.9	32.5	1.5	0.7	31.8	0.1%
Palau* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	0.0%
Palestine, State of*	10.1	1.5	0.0	0.0	1.5	0.1%
Panama*	20.0	5.0	0.0	0.0	5.0	0.1%
Papua New Guinea* <sup>◇</sup>	6.4	1.9	0.0	0.0	1.9	0.1%
Paraguay* <sup>◇</sup>	17.9	1.8	0.0	0.0	1.8	0.1%
Peru*	89.4	26.8	0.2	0.0	26.8	0.1%
Philippines	270.9	81.3	8.1	1.7	79.6	0.2%
Pitcairn*	0.0	0.0	0.0	0.0	0.0	-
Poland	378.1	71.8	14.8	2.3	69.5	0.1%
Portugal	130.7	27.4	44.8	6.7	20.7	0.0%
Puerto Rico* <sup>◇</sup>	52.2	19.6	5 235.8	78.5	-59.0	-
Qatar*	58.8	5.9	254.2	37.6	-31.7	-0.2%
Romania	117.9	18.9	18.9	2.7	16.2	0.1%
Russia	843.3	168.7	46.5	10.3	158.4	0.1%
Rwanda* <sup>◇</sup>	2.8	0.8	0.0	0.0	0.8	0.1%
Saint Kitts and Nevis* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	0.1%
Saint Lucia* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	0.0%
St Vincent & the Grenadines* <sup>◇</sup>	0.5	0.1	1.3	0.4	-0.3	-0.1%
Samoa* <sup>◇</sup>	3.8	1.0	0.0	0.0	1.0	0.6 %
San Marino*	0.8	0.1	0.0	0.0	0.1	0.1%
Sao Tome and Principe* <sup>◇</sup>	0.1	0.0	0.0	0.0	0.0	0.0%
Saudi Arabia	229.0	45.8	0.0	0.0	45.8	0.1%
Senegal*	7.8	2.3	0.0	0.0	2.3	0.1%
Serbia*	37.0	5.6	0.0	0.0	5.6	0.1%
Seychelles* <sup>◇</sup>	0.6	0.2	49.3	7.5	-7.3	-2.1%
Sierra Leone* <sup>◇</sup>	1.3	0.4	0.0	0.0	0.4	0.1%
Singapore	863.8	146.9	7 012.1	352.7	-205.9	-0.5%
Slovakia	54.4	11.4	2.8	0.4	11.0	0.1%
Slovenia <sup>◇</sup>	32.4	6.1	0.0	0.0	6.1	0.1%
Solomon Islands* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	0.0%
Somalia* <sup>◇</sup>	1.5	0.4	0.0	0.0	0.4	0.3%
South Africa	215.3	60.3	2 942.1	773.8	-713.5	-1.0%
South Sudan* <sup>◇</sup>	2.9	0.3	0.0	0.0	0.3	-
Spain	1 056.9	264.2	114.6	14.4	249.8	0.2%
Sri Lanka*	20.4	5.7	0.0	0.0	5.7	0.1%
Sudan* <sup>◇</sup>	14.2	5.0	0.0	0.0	5.0	0.3%
Suriname* <sup>◇</sup>	1.8	0.7	0.0	0.0	0.7	0.1%
Sweden	415.0	87.1	8.7	1.4	85.8	0.1%
Switzerland	1 119.9	168.0	6 285.8	416.7	-248.8	-0.4%
Syrian Arab Republic* <sup>◇</sup>	7.5	2.1	0.0	0.0	2.1	-
Taiwan*	2 778.8	555.8	15.7	2.3	553.4	-

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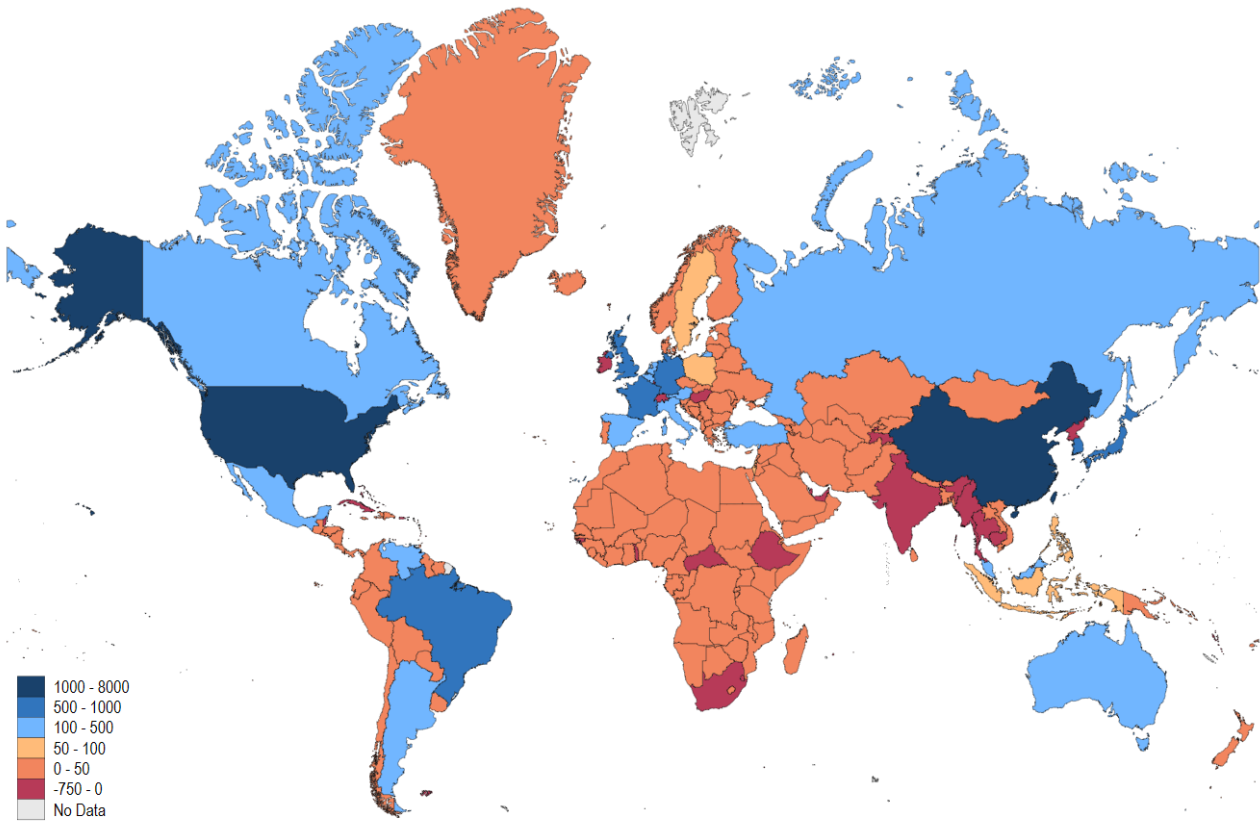
Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	
Tajikistan* <sup>◇</sup>	2.8	0.4	539.8	124.2	-123.7	-17.7%
Tanzania*	16.8	5.0	0.0	0.0	5.0	0.1%
Thailand	524.4	104.9	2 176.3	359.3	-254.4	-0.4%
Timor Leste* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	0.0%
Togo* <sup>◇</sup>	1.5	0.4	144.3	23.6	-23.2	-2.7%
Tokelau*	0.0	0.0	0.0	0.0	0.0	na
Tonga* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	0.1%
Trinidad and Tobago* <sup>◇</sup>	23.9	7.2	0.0	0.0	7.2	0.2%
Tunisia*	28.8	7.2	0.0	0.0	7.2	0.1%
Turkey	550.4	121.1	22.4	4.3	116.8	0.1%
Turkmenistan* <sup>◇</sup>	15.4	3.1	0.0	0.0	3.1	-
Turks and Caicos Islands* <sup>◇</sup>	0.2	0.0	0.0	0.0	0.0	-
Tuvalu*	0.0	0.0	0.0	0.0	0.0	-
Uganda*	12.3	3.7	0.0	0.0	3.7	0.1%
Ukraine*	115.3	20.8	0.0	0.0	20.8	0.1%
United Arab Emirates*	123.2	67.8	263.3	74.6	-6.9	-0.3%
United Kingdom	3 015.8	573.0	148.1	10.4	562.6	0.1%
United States	31 505.4	8 506.5	5 227.5	705.2	7 801.3	0.4%
Uruguay*	37.5	9.4	0.0	0.0	9.4	0.1%
Uzbekistan* <sup>◇</sup>	50.5	4.0	0.0	0.0	4.0	0.1%
Vanuatu* <sup>◇</sup>	2.5	0.0	0.0	0.0	0.0	0.0%
Venezuela*	386.3	131.4	0.0	0.0	131.4	-
Viet Nam	194.9	39.0	15.3	2.3	36.7	0.1 %
Virgin Islands (British)*	6.4	0.0	989.0	2.5	-2.5	-
Yemen* <sup>◇</sup>	131.4	26.3	0.0	0.0	26.3	-
Zambia* <sup>◇</sup>	105.8	37.0	0.0	0.0	37.0	1.4%
Zimbabwe* <sup>◇</sup>	142.7	34.2	0.0	0.0	34.2	2.5%
<b>EU</b>	12 526.1	3 144.8	7 787.0	674.7	2 470.1	0.10%
<b>OECD</b>	60 602.2	15 926.5	22 831.4	2 603.4	13 323.1	0.17%
<b>Tax havens</b>	6 356.6	1 191.8	64 043.2	2 366.3	-1 174.5	-0.05%
<b>Developed countries</b>	55 724.9	14 639.3	22 740.4	2 543.3	12 096.0	0.17%
<b>Developing countries</b>	38 256.4	9 432.7	70 915.1	5 613.3	3 819.4	0.12%
<b>Least dev. countries</b>	463.0	125.8	794.2	135.1	-9.4	-0.04%
<b>Total</b>	94 444.4	24 197.8	94 449.8	8 291.7	15 906.1	0.2%

This Table presents revenues from Pillar One. Gross gains are calculated using Reallocated profits multiplied by the Statutory rates (CIT) and similarly Loss is calculated as Elimination multiplied by the CIT.

\*: Allocation Keys for destination-based sales partly obtained using a gravity model (all jurisdictions but the 59 countries in the OECD AMNE data) <sup>◇</sup>: Allocation Keys for Profits/Employees/Tangible Assets with respect to at least 6 of the 11 headquarter countries are obtained using a gravity model



Figure 2: Pillar One Revenues all countries



This figure presents revenues from Pillar One in the scenario that considers all countries in the world. The scale starts with revenues between 1 000 - 8 000 million euros and ends with negative revenues between 0 and -750 million.

## Appendix B. Revenues of Pillar One with CIT

Table B.1. Pillar One Revenues IF countries with CIT

Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Albania <sup>*◇</sup>	6.2	0.9	0.0	0.0	0.9	0.04%
Andorra <sup>*◇</sup>	0.5	0.1	0.0	0.0	0.1	-
Angola <sup>*</sup>	19.4	5.8	0.0	0.0	5.8	0.12%
Anguilla <sup>*◇</sup>	0.0	0.0	0.0	0.0	0.0	0.00%
Antigua and Barbuda <sup>*◇</sup>	0.5	0.1	0.0	0.0	0.1	0.07%
Argentina	415.0	124.5	10.9	3.3	121.2	0.33%
Armenia <sup>*◇</sup>	5.7	1.0	0.0	0.0	1.0	0.04%
Aruba <sup>*◇</sup>	1.4	0.3	0.0	0.0	0.3	-
Australia	1 087.0	326.1	126.4	37.9	288.2	0.11%
Austria	470.0	117.5	5.0	1.3	116.2	0.13%
Azerbaijan <sup>*◇</sup>	22.4	4.5	0.0	0.0	4.5	0.08%
Bahamas <sup>*◇</sup>	5.5	0.0	0.0	0.0	0.0	0.00%
Bahrain <sup>*</sup>	13.1	0.0	0.0	0.0	0.0	0.00%
Barbados <sup>*◇</sup>	2.5	0.2	124.4	7.5	-7.3	-0.65%
Belarus <sup>*◇</sup>	24.8	4.5	0.0	0.0	4.5	0.07%
Belgium	441.0	127.9	57.0	16.5	111.4	0.11%
Belize <sup>*◇</sup>	0.5	0.0	0.0	0.0	0.0	0.00%
Benin <sup>*◇</sup>	2.2	0.7	0.0	0.0	0.7	0.03%
Bermuda <sup>*◇</sup>	2.9	0.0	11 183.4	0.0	0.0	-
Bosnia and Herzegovina <sup>*◇</sup>	9.3	0.9	0.0	0.0	0.9	0.03%
Botswana <sup>*◇</sup>	4.3	0.9	0.0	0.0	0.9	0.03%
Brazil	1 705.8	580.0	147.3	50.1	529.9	0.32%
Brunei Darussalam <sup>*◇</sup>	2.5	0.5	0.0	0.0	0.5	-
Bulgaria	35.1	3.5	0.0	0.0	3.5	0.03%
Burkina Faso <sup>*◇</sup>	2.1	0.6	0.0	0.0	0.6	0.03%
Cabo Verde <sup>*◇</sup>	0.6	0.1	0.0	0.0	0.1	0.04%
Cameroon <sup>*</sup>	7.8	2.6	0.0	0.0	2.6	0.07%
Canada	1 518.6	410.0	166.1	44.8	365.2	0.19%
Cayman Islands <sup>*</sup>	0.5	0.0	10 879.5	0.0	0.0	-
Chile	164.7	44.5	13.8	3.7	40.7	0.11%
China	21 253.9	5 313.5	11 128.3	2 782.1	2 531.4	0.24%
Colombia	156.6	50.1	0.0	0.0	50.1	0.15%
Congo <sup>*◇</sup>	0.7	0.2	0.0	0.0	0.2	0.03%
Congo (Democratic Rep.) <sup>*◇</sup>	5.8	2.0	0.0	0.0	2.0	0.07%
Cook Islands <sup>*</sup>	0.0	0.0	0.0	0.0	0.0	-
Costa Rica	40.7	12.2	0.0	0.0	12.2	0.18%
Côte d'Ivoire <sup>*</sup>	10.9	2.7	0.0	0.0	2.7	0.04%
Croatia	58.7	10.6	0.0	0.0	10.6	0.10%
Curaçao <sup>*◇</sup>	0.5	0.1	0.0	0.0	0.1	-
Czechia	173.8	33.0	67.7	12.9	20.2	0.07%
Denmark	154.5	34.0	0.0	0.0	34.0	0.03%
Djibouti <sup>*◇</sup>	0.8	0.2	0.0	0.0	0.2	-
Dominica <sup>*◇</sup>	0.1	0.0	0.0	0.0	0.0	0.03%
Dominican Republic <sup>*◇</sup>	34.4	9.3	0.0	0.0	9.3	0.11%
Egypt <sup>*</sup>	187.7	43.2	11.4	2.6	40.6	0.10%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Estonia <sup>◇</sup>	10.3	2.1	0.0	0.0	2.1	0.04%
Eswatini* <sup>◇</sup>	1.1	0.3	47.9	13.4	-13.1	-1.34%
Faroe Islands* <sup>◇</sup>	1.3	0.2	0.0	0.0	0.2	-
Finland	160.2	32.0	25.4	5.1	26.9	0.06%
France	2 371.0	663.9	415.5	116.3	547.5	0.10%
Gabon* <sup>◇</sup>	3.2	1.0	0.0	0.0	1.0	0.06%
Georgia* <sup>◇</sup>	7.9	1.2	0.0	0.0	1.2	0.04%
Germany	3 041.3	912.4	430.5	129.1	783.2	0.22%
Gibraltar* <sup>◇</sup>	0.8	0.1	1 093.8	109.4	-109.3	-
Greece	100.8	24.2	0.0	0.0	24.2	0.06%
Greenland* <sup>◇</sup>	0.9	0.2	0.0	0.0	0.2	-
Grenada*	0.3	0.1	0.0	0.0	0.1	0.04%
Guernsey* <sup>◇</sup>	0.6	0.0	0.0	0.0	0.0	-
Haiti* <sup>◇</sup>	4.6	1.4	0.0	0.0	1.4	-
Honduras* <sup>◇</sup>	6.6	1.7	0.0	0.0	1.7	0.05%
Hong Kong	1 712.6	291.1	2 810.0	477.7	-186.6	-
Hungary	144.9	13.0	193.6	17.4	-4.4	-0.01%
Iceland <sup>◇</sup>	7.0	1.4	0.0	0.0	1.4	0.03%
India	692.2	207.7	663.2	198.9	8.7	0.00%
Indonesia	290.4	72.6	151.9	38.0	34.6	0.04%
Ireland	771.9	100.3	1 933.3	251.3	-151.0	-0.25%
Isle of Man* <sup>◇</sup>	1.1	0.0	1 554.8	0.0	0.0	-
Israel	317.5	73.0	16.1	3.7	69.3	0.09%
Italy	1 282.5	307.8	88.4	21.2	286.6	0.07%
Jamaica* <sup>◇</sup>	7.0	1.8	0.0	0.0	1.8	0.06%
Japan	4 678.9	1 450.5	3 186.4	987.8	462.7	0.03%
Jersey*	1.0	0.0	2 471.7	0.0	0.0	-
Jordan* <sup>◇</sup>	20.3	4.1	0.0	0.0	4.1	0.07%
Kazakhstan*	83.3	16.7	202.5	40.5	-23.8	-0.19%
Kenya*	19.4	5.8	0.0	0.0	5.8	0.05%
Korea	2 858.6	714.6	111.4	27.9	686.8	0.32%
Latvia	11.6	2.3	0.0	0.0	2.3	0.04%
Liberia* <sup>◇</sup>	1.2	0.4	0.0	0.0	0.4	0.11%
Liechtenstein* <sup>◇</sup>	1.7	0.2	8 303.1	1 079.4	-1 079.2	-
Lithuania <sup>◇</sup>	23.6	3.5	0.0	0.0	3.5	0.04%
Luxembourg	27.4	6.9	992.6	248.2	-241.3	-1.48%
Macao* <sup>◇</sup>	10.9	1.3	52.6	6.3	-5.0	-0.10%
Malaysia*	684.9	164.4	31.8	7.6	156.7	0.49%
Maldives* <sup>◇</sup>	1.1	0.2	0.0	0.0	0.2	0.03%
Malta	6.5	2.3	174.1	60.9	-58.6	-1.89%
Mauritania* <sup>◇</sup>	1.9	0.5	0.0	0.0	0.5	-
Mauritius*	5.1	0.8	259.9	39.0	-38.2	-1.85%
Mexico	1 106.2	331.9	220.7	66.2	265.7	0.19%
Monaco*	1.5	0.5	572.3	188.9	-188.4	-
Mongolia* <sup>◇</sup>	4.8	1.2	0.0	0.0	1.2	0.07%
Montenegro* <sup>◇</sup>	2.7	0.2	0.0	0.0	0.2	-
Montserrat*	0.0	0.0	0.0	0.0	0.0	-
Morocco	71.6	22.2	4.5	1.4	20.8	0.10%
Namibia*	3.2	1.0	0.0	0.0	1.0	0.04%

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<b>Country</b>	<b>Reallocated profits</b>	<b>Gross gain</b>	<b>Elimination</b>	<b>Loss</b>	<b>Net gain</b>	<b>%Taxes</b>
Netherlands	1 332.8	333.2	3 813.6	953.4	-620.2	-0.32%
New Zealand	133.7	37.4	0.0	0.0	37.4	0.07%
Nigeria*	175.2	52.6	8.1	2.4	50.1	0.90%
North Macedonia* <sup>◇</sup>	6.2	0.6	0.0	0.0	0.6	0.04%
Norway	228.3	50.2	18.7	4.1	46.1	0.07%
Oman*	29.4	4.4	0.0	0.0	4.4	0.26%
Pakistan* <sup>◇</sup>	99.6	34.9	2.5	0.9	34.0	0.11%
Panama*	20.7	5.2	0.0	0.0	5.2	0.13%
Papua New Guinea* <sup>◇</sup>	6.7	2.0	0.0	0.0	2.0	0.08%
Paraguay* <sup>◇</sup>	18.5	1.8	0.0	0.0	1.8	0.06%
Peru*	92.4	27.7	1.0	0.3	27.4	0.12%
Poland	383.4	72.8	18.4	3.5	69.3	0.08%
Portugal	131.3	27.6	60.0	12.6	15.0	0.03%
Qatar*	62.8	6.3	247.0	24.7	-18.4	-0.10%
Romania*	118.8	19.0	6.1	1.0	18.0	0.06%
Russia	854.0	170.8	45.5	9.1	161.7	0.11%
St Kitts and Nevis* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	0.06%
St Lucia* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	0.05%
St Vincent & Grenadines* <sup>◇</sup>	0.5	0.2	15.9	4.8	-4.6	-2.36%
Samoa* <sup>◇</sup>	4.2	1.1	0.0	0.0	1.1	0.62%
San Marino*	0.9	0.2	0.0	0.0	0.2	0.07%
Saudi Arabia	232.5	46.5	0.0	0.0	46.5	0.09%
Senegal*	8.2	2.5	0.0	0.0	2.5	0.07%
Serbia*	39.2	5.9	0.0	0.0	5.9	0.05%
Seychelles* <sup>◇</sup>	0.6	0.2	50.8	16.8	-16.6	-4.76%
Sierra Leone* <sup>◇</sup>	1.4	0.4	0.0	0.0	0.4	0.08%
Singapore	890.7	151.4	7 639.6	1 298.7	-1 147.3	-2.95%
Slovakia	56.1	11.8	0.0	0.0	11.8	0.07%
Slovenia <sup>◇</sup>	32.6	6.2	0.0	0.0	6.2	0.08%
South Africa	221.7	62.1	2 942.1	823.8	-761.7	-1.11%
Spain	1 067.1	266.8	49.6	12.4	254.4	0.17%
Sri Lanka*	21.1	5.9	153.6	43.0	-37.1	-0.65%
Sweden	418.9	88.0	9.0	1.9	86.1	0.07%
Switzerland	1 139.7	171.0	6 860.1	1 029.0	-858.1	-1.41%
Thailand	557.4	111.5	3 495.3	699.1	-587.6	-0.93%
Togo* <sup>◇</sup>	1.7	0.4	150.4	40.6	-40.2	-4.60%
Trinidad and Tobago* <sup>◇</sup>	24.3	7.3	0.0	0.0	7.3	0.20%
Tunisia*	30.4	7.6	0.0	0.0	7.6	0.10%
Turkey	555.4	122.2	16.4	3.6	118.6	0.11%
Turks and Caicos Islands* <sup>◇</sup>	0.2	0.0	0.0	0.0	0.0	-
Ukraine*	123.9	22.3	0.0	0.0	22.3	0.08%
United Arab Emirates*	126.3	69.5	288.7	158.8	-89.3	-4.28%
United Kingdom	3 040.7	577.7	50.1	9.5	568.2	0.10%
United States	32 100.5	8 667.1	7 411.3	2 001.1	6 666.1	0.37%
Uruguay*	39.2	9.8	0.0	0.0	9.8	0.11%
Viet Nam	368.0	73.6	15.5	3.1	70.5	0.14%
Virgin Islands (British)*	7.1	0.0	1 151.0	0.0	0.0	-
Zambia* <sup>◇</sup>	117.9	41.3	0.0	0.0	41.3	1.58%
<b>EU</b>	<b>12 826.2</b>	<b>3 222.6</b>	<b>8 339.9</b>	<b>1 865.1</b>	<b>1 357.5</b>	<b>0.05%</b>

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<b>Country</b>	<b>Reallocated profits</b>	<b>Gross gain</b>	<b>Elimination</b>	<b>Loss</b>	<b>Net gain</b>	<b>%Taxes</b>
<b>OECD</b>	61 741.0	16 227.2	26 357.2	6 022.5	10 204.7	0.13%
<b>Tax havens</b>	6 403.4	1 193.6	61 993.6	5 787.7	-4 594.1	-0.62%
<b>Developed countries</b>	56 761.1	14 914.1	26 158.9	5 979.3	8 934.8	0.13%
<b>Developing countries</b>	36 611.2	9 116.5	68 140.4	8 236.6	879.9	0.08%
<b>Least dev. countries</b>	167.2	56.1	150.4	40.6	15.5	0.07%
<b>Total</b>	93 539.5	24 086.7	94 449.8	14 256.5	9 830.2	0.11%

This Table presents revenues from Pillar One with a prior Pillar two implementation. Thus, this scenario assumes that Pillar Two is implemented and the 15 percent minimum tax is used for computing both the Gross gain and Loss in case their CIT or ETR is less than 15%.

\*: Allocation Keys for destination-based sales partly obtained using a gravity model (all jurisdictions but the 59 countries in the OECD AMNE data) ∘: Allocation Keys for Profits/Employees/Tangible Assets with respect to at least 6 of the 11 headquarter countries are obtained using a gravity model

**Table B.2.** Pillar One Revenues with CIT for all countries (in €m)

Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Afghanistan* <sup>◇</sup>	4.2	0.8	0.0	0.0	0.8	0.05%
Albania* <sup>◇</sup>	6.1	0.9	0.0	0.0	0.9	0.04%
Algeria*	44.4	11.5	0.0	0.0	11.5	0.02%
American Samoa* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	-
Andorra* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	-
Angola*	19.1	5.7	0.0	0.0	5.7	0.12%
Anguilla* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	0.00%
Antigua and Barbuda* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	0.07%
Argentina	406.4	121.9	6.3	1.9	120.0	0.33%
Armenia*	5.6	1.0	0.0	0.0	1.0	0.04%
Aruba* <sup>◇</sup>	1.4	0.3	0.0	0.0	0.3	-
Australia	1 076.6	323.0	112.7	33.8	289.2	0.11%
Austria	460.7	115.2	5.0	1.2	113.9	0.12%
Azerbaijan* <sup>◇</sup>	22.1	4.4	0.0	0.0	4.4	0.08%
Bahamas* <sup>◇</sup>	5.4	0.0	0.0	0.0	0.0	0.00%
Bahrain*	12.8	0.0	0.0	0.0	0.0	0.00%
Bangladesh* <sup>◇</sup>	48.3	12.1	0.0	0.0	12.1	0.05%
Barbados* <sup>◇</sup>	2.5	0.1	103.6	6.2	-6.1	-0.54%
Belarus* <sup>◇</sup>	24.2	4.3	0.0	0.0	4.3	0.07%
Belgium	424.9	123.2	92.1	26.7	96.5	0.10%
Belize* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	0.00%
Benin* <sup>◇</sup>	2.2	0.6	0.0	0.0	0.6	0.03%
Bermuda* <sup>◇</sup>	2.8	0.0	11 023.0	0.0	0.0	-
Bhutan* <sup>◇</sup>	0.6	0.2	0.0	0.0	0.2	0.07%
Bolivia*	12.0	3.0	0.0	0.0	3.0	0.06%
Bosnia and Herzegovina* <sup>◇</sup>	9.1	0.9	0.0	0.0	0.9	0.03%
Botswana* <sup>◇</sup>	4.2	0.9	0.0	0.0	0.9	0.03%
Brazil	1 678.0	570.5	208.4	70.9	499.7	0.30%
Brunei Darussalam* <sup>◇</sup>	2.4	0.5	0.0	0.0	0.5	-
Bulgaria	34.6	3.5	0.0	0.0	3.5	0.03%
Burkina Faso* <sup>◇</sup>	2.1	0.6	0.0	0.0	0.6	0.03%
Burundi* <sup>◇</sup>	0.3	0.1	0.0	0.0	0.1	0.03%
Cabo Verde* <sup>◇</sup>	0.6	0.1	0.0	0.0	0.1	0.04%
Cambodia* <sup>◇</sup>	9.7	1.9	73.2	14.6	-12.7	-0.31%
Cameroon*	7.7	2.5	0.0	0.0	2.5	0.07%
Canada	1 495.6	403.8	117.8	31.8	372.0	0.19%
Cayman Islands*	0.5	0.0	10 371.9	0.0	0.0	-
Central African Republic* <sup>◇</sup>	0.1	0.0	51.5	15.5	-15.4	-8.69%
Chad* <sup>◇</sup>	2.0	0.7	0.0	0.0	0.7	-
Chile	162.6	43.9	5.9	1.6	42.3	0.12%
China	19 199.3	4 799.8	11 076.8	2 769.2	2 030.6	0.20%
Christmas Island*	0.0	0.0	0.0	0.0	0.0	-
Colombia	153.8	49.2	0.0	0.0	49.2	0.15%
Comoros*	0.0	0.0	0.0	0.0	0.0	-
Congo* <sup>◇</sup>	0.7	0.2	0.0	0.0	0.2	0.03%
Congo (Democratic Rep.)* <sup>◇</sup>	5.5	1.9	0.0	0.0	1.9	0.06%
Cook Islands*	0.0	0.0	0.0	0.0	0.0	-
Costa Rica	40.2	12.0	9.4	2.8	9.2	0.14%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Côte d'Ivoire*	10.7	2.7	0.0	0.0	2.7	0.04%
Croatia	50.3	9.1	0.0	0.0	9.1	0.09%
Cuba* <sup>◇</sup>	32.7	11.4	35.2	12.3	-0.9	-
Curaçao* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	-
Cyprus	16.2	2.1	0.0	0.0	2.1	0.04%
Czechia	152.5	29.0	65.3	12.4	16.6	0.05%
Denmark	152.7	33.6	0.0	0.0	33.6	0.03%
Djibouti* <sup>◇</sup>	0.8	0.2	0.0	0.0	0.2	-
Dominica* <sup>◇</sup>	0.1	0.0	0.0	0.0	0.0	0.03%
Dominican Republic* <sup>◇</sup>	34.0	9.2	0.0	0.0	9.2	0.11%
Ecuador*	35.1	8.8	0.0	0.0	8.8	0.08%
Egypt*	183.5	42.2	0.0	0.0	42.2	0.11%
El Salvador* <sup>◇</sup>	11.8	3.5	0.0	0.0	3.5	0.09%
Equatorial Guinea* <sup>◇</sup>	1.4	0.5	0.0	0.0	0.5	0.07%
Eritrea*	0.1	0.0	0.0	0.0	0.0	-
Estonia <sup>◇</sup>	10.3	2.1	0.0	0.0	2.1	0.04%
Eswatini* <sup>◇</sup>	1.0	0.3	46.5	13.0	-12.7	-1.30%
Ethiopia* <sup>◇</sup>	16.5	5.0	49.6	14.9	-9.9	-0.17%
Falkland Islands*	0.0	0.0	0.0	0.0	0.0	-
Faroe Islands* <sup>◇</sup>	1.3	0.2	0.0	0.0	0.2	-
Fiji* <sup>◇</sup>	1.3	0.3	0.0	0.0	0.3	0.03%
Finland	158.2	31.6	27.8	5.6	26.1	0.06%
France	2 270.4	635.7	568.0	159.0	476.7	0.08%
Gabon* <sup>◇</sup>	3.2	0.9	0.0	0.0	0.9	0.06%
Gambia* <sup>◇</sup>	0.4	0.1	0.0	0.0	0.1	-
Georgia* <sup>◇</sup>	7.7	1.2	0.0	0.0	1.2	0.04%
Germany	2 988.6	896.6	373.8	112.1	784.5	0.22%
Ghana*	20.7	5.2	0.0	0.0	5.2	0.07%
Gibraltar* <sup>◇</sup>	0.8	0.1	1 063.9	106.4	-106.3	-
Greece	100.0	24.0	0.0	0.0	24.0	0.06%
Greenland* <sup>◇</sup>	0.8	0.2	0.0	0.0	0.2	-
Grenada*	0.3	0.1	0.0	0.0	0.1	0.04%
Guam* <sup>◇</sup>	2.4	0.8	0.0	0.0	0.8	-
Guatemala*	24.3	6.1	0.0	0.0	6.1	0.09%
Guernsey* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	-
Guinea* <sup>◇</sup>	2.2	0.8	0.0	0.0	0.8	0.05%
Guinea-Bissau* <sup>◇</sup>	0.2	0.0	183.2	45.8	-45.7	-38.57%
Guyana* <sup>◇</sup>	1.4	0.4	0.0	0.0	0.4	-
Haiti* <sup>◇</sup>	4.6	1.4	0.0	0.0	1.4	-
Holy See*	0.0	0.0	0.0	0.0	0.0	-
Honduras* <sup>◇</sup>	6.5	1.6	0.0	0.0	1.6	0.05%
Hong Kong	1 686.9	286.8	2 699.1	458.8	-172.1	-
Hungary	141.4	12.7	206.8	18.6	-5.9	-0.02%
Iceland <sup>◇</sup>	7.0	1.4	0.0	0.0	1.4	0.03%
India	674.5	202.4	615.2	184.6	17.8	0.01%
Indonesia	286.3	71.6	68.2	17.0	54.5	0.07%
Iran* <sup>◇</sup>	145.2	36.3	0.0	0.0	36.3	0.24%
Iraq* <sup>◇</sup>	50.9	7.6	0.0	0.0	7.6	0.35%
Ireland	755.3	98.2	1 729.3	224.8	-126.6	-0.21%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Isle of Man* <sup>◇</sup>	0.9	0.0	1 510.3	0.0	0.0	-
Israel	312.3	71.8	10.4	2.4	69.4	0.09%
Italy	1 262.5	303.0	144.0	34.5	268.5	0.07%
Jamaica* <sup>◇</sup>	6.9	1.7	0.0	0.0	1.7	0.06%
Japan	4 619.2	1 431.9	3 008.9	932.8	499.2	0.03%
Jersey*	0.9	0.0	2 400.0	0.0	0.0	-
Jordan <sup>◇</sup>	19.8	4.0	0.0	0.0	4.0	0.06%
Kazakhstan*	81.4	16.3	0.0	0.0	16.3	0.13%
Kenya*	18.6	5.6	0.0	0.0	5.6	0.04%
Kiribati* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	0.00%
Korea (South)	2 806.4	701.6	85.1	21.3	680.3	0.32%
Korea (North)* <sup>◇</sup>	4.9	1.0	689.7	137.9	-137.0	-
Kuwait*	48.4	7.3	0.0	0.0	7.3	-
Kyrgyzstan* <sup>◇</sup>	2.4	0.2	0.0	0.0	0.2	0.02%
Lao* <sup>◇</sup>	3.6	1.3	0.0	0.0	1.3	0.08%
Latvia	11.6	2.3	0.0	0.0	2.3	0.04%
Lebanon* <sup>◇</sup>	32.7	5.6	0.0	0.0	5.6	0.23%
Lesotho* <sup>◇</sup>	0.7	0.2	0.0	0.0	0.2	0.05%
Liberia* <sup>◇</sup>	1.2	0.4	0.0	0.0	0.4	0.11%
Libya* <sup>◇</sup>	7.3	1.5	0.0	0.0	1.5	-
Liechtenstein* <sup>◇</sup>	1.6	0.2	8 256.9	1 073.4	-1 073.2	-
Lithuania <sup>◇</sup>	23.6	3.5	0.0	0.0	3.5	0.04%
Luxembourg	27.3	6.8	627.1	156.8	-150.0	-0.92%
Macao* <sup>◇</sup>	10.6	1.3	26.1	3.1	-1.9	-0.04%
Madagascar* <sup>◇</sup>	1.4	0.3	0.0	0.0	0.3	0.02%
Malawi <sup>◇</sup>	2.1	0.6	0.0	0.0	0.6	0.05%
Malaysia	668.2	160.4	41.6	10.0	150.4	0.47%
Maldives* <sup>◇</sup>	1.1	0.2	0.0	0.0	0.2	0.02%
Mali* <sup>◇</sup>	3.3	1.2	0.0	0.0	1.2	0.05%
Malta	5.9	2.1	173.8	60.8	-58.8	-1.89%
Marshall Islands* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	-
Mauritania* <sup>◇</sup>	1.8	0.5	0.0	0.0	0.5	-
Mauritius*	5.0	0.8	252.7	37.9	-37.2	-1.80%
Mexico	1 077.1	323.1	150.5	45.1	278.0	0.20%
Micronesia* <sup>◇</sup>	0.1	0.0	0.0	0.0	0.0	0.17%
Moldova* <sup>◇</sup>	5.5	0.7	0.0	0.0	0.7	0.04%
Monaco*	1.4	0.4	570.5	188.3	-187.8	-
Mongolia* <sup>◇</sup>	4.6	1.2	0.0	0.0	1.2	0.07%
Montenegro* <sup>◇</sup>	2.6	0.2	0.0	0.0	0.2	-
Montserrat*	0.0	0.0	0.0	0.0	0.0	-
Morocco	70.1	21.7	9.9	3.1	18.7	0.09%
Mozambique*	2.1	0.7	0.0	0.0	0.7	0.03%
Myanmar* <sup>◇</sup>	16.1	4.0	292.5	73.1	-69.1	-1.55%
Namibia* <sup>◇</sup>	3.1	1.0	0.0	0.0	1.0	0.03%
Nauru*	0.0	0.0	0.0	0.0	0.0	-
Nepal* <sup>◇</sup>	9.6	2.4	0.0	0.0	2.4	0.05%
Netherlands	1 293.9	323.5	3 569.5	892.4	-568.9	-0.29%
New Zealand	132.3	37.0	0.0	0.0	37.0	0.07%
Nicaragua* <sup>◇</sup>	4.1	1.2	0.0	0.0	1.2	0.07%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Niger* <sup>◇</sup>	1.5	0.5	0.0	0.0	0.5	0.03%
Nigeria*	167.1	50.1	4.8	1.4	48.7	0.87%
Niue*	0.0	0.0	0.0	0.0	0.0	-
North Macedonia* <sup>◇</sup>	5.9	0.6	0.0	0.0	0.6	0.03%
Northern Mariana Islands* <sup>◇</sup>	0.3	0.1	0.0	0.0	0.1	-
Norway	226.5	49.8	52.5	11.6	38.3	0.06%
Oman*	28.3	4.2	0.0	0.0	4.2	0.25%
Pakistan* <sup>◇</sup>	92.9	32.5	1.5	0.5	32.0	0.11%
Palau* <sup>◇</sup>	0.0	0.0	0.0	0.0	0.0	0.00%
Palestine, State of*	10.1	1.5	0.0	0.0	1.5	0.06%
Panama*	20.0	5.0	0.0	0.0	5.0	0.12%
Papua New Guinea* <sup>◇</sup>	6.4	1.9	0.0	0.0	1.9	0.08%
Paraguay* <sup>◇</sup>	17.9	1.8	0.0	0.0	1.8	0.06%
Peru*	89.4	26.8	0.2	0.1	26.8	0.11%
Philippines	270.9	81.3	8.1	2.4	78.8	0.18%
Pitcairn*	0.0	0.0	0.0	0.0	0.0	-
Poland	378.1	71.8	14.8	2.8	69.0	0.08%
Portugal	130.7	27.4	44.8	9.4	18.0	0.04%
Puerto Rico* <sup>◇</sup>	52.2	19.6	5 235.8	1 963.4	-1 943.8	-
Qatar*	58.8	5.9	254.2	25.4	-19.5	-0.11%
Romania	117.9	18.9	18.9	3.0	15.8	0.05%
Russia	843.3	168.7	46.5	9.3	159.4	0.11%
Rwanda* <sup>◇</sup>	2.8	0.8	0.0	0.0	0.8	0.06%
St Kitts & Nevis* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	0.06%
Saint Lucia* <sup>◇</sup>	0.5	0.1	0.0	0.0	0.1	0.05%
St Vincent & Grenadines* <sup>◇</sup>	0.5	0.1	1.3	0.4	-0.3	-0.13%
Samoa* <sup>◇</sup>	3.8	1.0	0.0	0.0	1.0	0.55%
San Marino*	0.8	0.1	0.0	0.0	0.1	0.06%
Sao Tome and Principe* <sup>◇</sup>	0.1	0.0	0.0	0.0	0.0	0.04%
Saudi Arabia	229.0	45.8	0.0	0.0	45.8	0.09%
Senegal*	7.8	2.3	0.0	0.0	2.3	0.07%
Serbia*	37.0	5.6	0.0	0.0	5.6	0.05%
Seychelles* <sup>◇</sup>	0.6	0.2	49.3	16.3	-16.1	-4.62%
Sierra Leone* <sup>◇</sup>	1.3	0.4	0.0	0.0	0.4	0.08%
Singapore	863.8	146.9	7 012.1	1 192.1	-1 045.2	-2.68%
Slovakia	54.4	11.4	2.8	0.6	10.8	0.06%
Slovenia <sup>◇</sup>	32.4	6.1	0.0	0.0	6.1	0.08%
Solomon Islands* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	0.02%
Somalia* <sup>◇</sup>	1.5	0.4	0.0	0.0	0.4	0.26%
South Africa	215.3	60.3	2 942.1	823.8	-763.5	-1.11%
South Sudan* <sup>◇</sup>	2.9	0.3	0.0	0.0	0.3	-
Spain	1 056.9	264.2	114.6	28.7	235.6	0.16%
Sri Lanka*	20.4	5.7	0.0	0.0	5.7	0.10%
Sudan* <sup>◇</sup>	14.2	5.0	0.0	0.0	5.0	0.28%
Suriname* <sup>◇</sup>	1.8	0.7	0.0	0.0	0.7	0.13%
Sweden	415.0	87.1	8.7	1.8	85.3	0.07%
Switzerland	1 119.9	168.0	6 285.8	942.9	-774.9	-1.28%
Syrian Arab Republic* <sup>◇</sup>	7.5	2.1	0.0	0.0	2.1	-
Taiwan	2 778.8	555.8	15.7	3.1	552.6	-

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<b>Country</b>	<b>Reallocated profits</b>	<b>Gross gain</b>	<b>Elimination</b>	<b>Loss</b>	<b>Net gain</b>	<b>%Taxes</b>
Tajikistan* <sup>◇</sup>	2.8	0.4	539.8	81.0	-80.6	-11.52%
Tanzania*	16.8	5.0	0.0	0.0	5.0	0.08%
Thailand	524.4	104.9	2 176.3	435.3	-330.4	-0.52%
Timor Leste* <sup>◇</sup>	0.5	0.0	0.0	0.0	0.0	0.01%
Togo* <sup>◇</sup>	1.5	0.4	144.3	39.0	-38.5	-4.42%
Tokelau*	0.0	0.0	0.0	0.0	0.0	-
Tonga* <sup>◇</sup>	0.2	0.1	0.0	0.0	0.1	0.06%
Trinidad and Tobago* <sup>◇</sup>	23.9	7.2	0.0	0.0	7.2	0.20%
Tunisia*	28.8	7.2	0.0	0.0	7.2	0.09%
Turkey	550.4	121.1	22.4	4.9	116.1	0.10%
Turkmenistan* <sup>◇</sup>	15.4	3.1	0.0	0.0	3.1	-
Turks and Caicos Islands* <sup>◇</sup>	0.2	0.0	0.0	0.0	0.0	-
Tuvalu*	0.0	0.0	0.0	0.0	0.0	-
Uganda*	12.3	3.7	0.0	0.0	3.7	0.10%
Ukraine*	115.3	20.8	0.0	0.0	20.8	0.08%
United Arab Emirates*	123.2	67.8	263.3	144.8	-77.1	-3.69%
United Kingdom	3 015.8	573.0	148.1	28.1	544.9	0.09%
United States	31 505.4	8 506.5	5 227.5	1 411.4	7 095.0	0.39%
Uruguay*	37.5	9.4	0.0	0.0	9.4	0.11%
Uzbekistan* <sup>◇</sup>	50.5	4.0	0.0	0.0	4.0	0.05%
Vanuatu* <sup>◇</sup>	2.5	0.0	0.0	0.0	0.0	0.00%
Venezuela*	386.3	131.4	0.0	0.0	131.4	-
Viet Nam	194.9	39.0	15.3	3.1	35.9	0.07%
Virgin Islands (British)*	6.4	0.0	989.0	0.0	0.0	-
Yemen* <sup>◇</sup>	131.4	26.3	0.0	0.0	26.3	-
Zambia* <sup>◇</sup>	105.8	37.0	0.0	0.0	37.0	1.42%
Zimbabwe* <sup>◇</sup>	142.7	34.2	0.0	0.0	34.2	2.52%
<b>EU</b>	12 526.1	3 144.8	7 787.0	1 751.4	1 393.4	0.05%
<b>OECD</b>	60 602.2	15 926.5	22 831.4	5 158.0	10 768.4	0.14%
<b>Tax havens</b>	6 356.6	1 191.8	64 043.2	7 350.7	-6 158.9	-0.54%
<b>Developed</b>	55 724.9	14 639.3	22 740.4	5 143.7	9 495.6	0.13%
<b>Developing countries</b>	37 035.1	9 202.5	70 328.7	9 784.3	-581.8	0.08%
<b>Least dev. Countries</b>	463.0	125.8	794.2	202.8	-77.1	-0.12%
<b>Total</b>	94 444.3	24 197.8	94 449.8	15 221.2	8 976.6	0.11%

This Table presents revenues from Pillar One with a prior Pillar two implementation. Thus, this scenario assumes that Pillar Two is implemented and the 15 percent minimum tax is used for computing both the Gross gain and Loss in case their CIT or ETR is less than 15%.

\*: Allocation Keys for destination-based sales partly obtained using a gravity model (all jurisdictions but the 59 countries in the OECD AMNE data) <sup>◇</sup>: Allocation Keys for Profits/Employees/Tangible Assets with respect to at least 6 of the 11 headquarter countries are obtained using a gravity model

## Appendix C. Tail end revenues

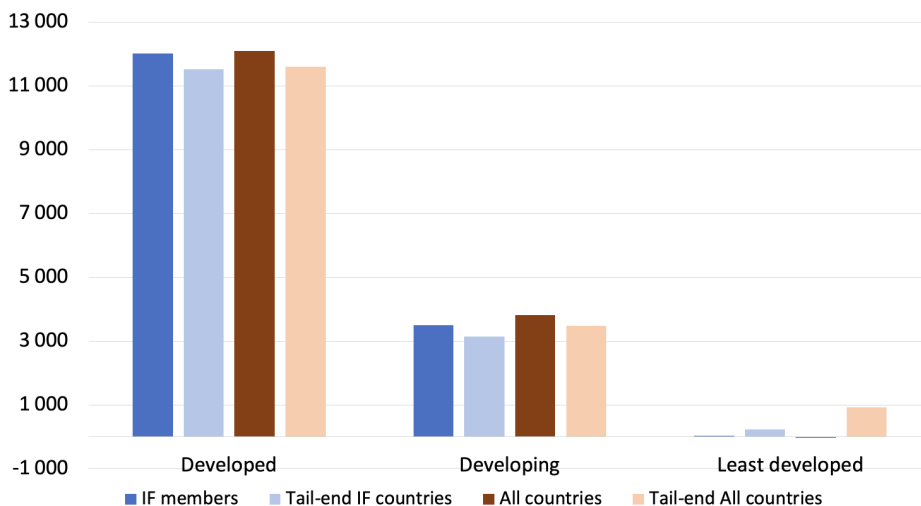
According to Pillar One rules, there might be 5% of revenues of MNEs that would be redistributed to least developed countries. Therefore, we consider a scenario where MNEs fail to redistribute all of their revenues based on sales and assume that only 95% are going to be redistributed. The remaining 5% are assigned to least developed countries.

Before, redistributing Amount A profits, we apply the Nexus test as well as our adjustment for tail-end revenues. For that purpose, we use the computed allocation keys to redistribute Covered Groups' consolidated revenues from Orbis across market jurisdictions. For all Covered Groups except the ones classified as ADS companies, we redistribute that way only 95% of global revenues. We then redistribute the remaining 5% across least-developed jurisdictions using their Low-Income Jurisdiction Allocation Keys:

$$\text{Low-Income Jurisdiction Allocation Key}_j = \frac{\text{Total final consumption expenditure}_j}{\sum_{j \in \text{Low Income}} \text{Total final consumption expenditure}_j}$$

As a result, the revenues expected for developed countries decrease from €12 to 11.5 billion and for developing countries from €3.5 to 3.1 billion while increasing those of the least developed countries from €0.03 to 0.2 billion. Since the Pillar One rules affect the IF member countries, the additional revenues from the 5% tail-end affect only 12 countries: Angola, Benin, Burkina Faso, Congo (Democratic Rep.), Djibouti, Haiti, Liberia, Mauritania, Senegal, Sierra Leone, Togo and Zambia. In case Pillar One would be extended to all countries in the world, there would be more least developed countries that would have a redistribution right on these 5% unallocated revenues. This would increase the number of least developed countries from 12 to 45 countries and revenues from 0.2 to €0.9 billion. However, it should be noted that there is uncertainty around tail end revenues and it might depend on the reallocation decisions of each MNE. We assume in this scenario that all MNEs reallocate 5% of the revenues to least developed countries.

**Figure C.3.** Pillar One Revenues all countries



## Appendix D. Pillar One and Pillar Two Interaction

Table D.1. Pillar One Revenues IF countries with Pillar Two interaction

Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Albania	6.2	0.9	0.0	0.0	0.9	0.04%
Andorra	0.5	0.1	0.0	0.0	0.1	0.00%
Angola	19.4	5.8	0.0	0.0	5.8	0.12%
Anguilla	0.0	0.0	0.0	0.0	0.0	0.00%
Antigua and Barbuda	0.5	0.1	0.0	0.0	0.1	0.07%
Argentina	415.0	124.5	10.9	3.0	121.5	0.33%
Armenia	5.7	1.0	0.0	0.0	1.0	0.04%
Aruba	1.4	0.3	0.0	0.0	0.3	0.00%
Australia	1 087.0	326.1	126.4	19.0	307.2	0.12%
Austria	470.0	117.5	5.0	0.8	116.7	0.13%
Azerbaijan	22.4	4.5	0.0	0.0	4.5	0.08%
Bahamas	5.5	0.8	0.0	0.0	0.8	0.05%
Bahrain	13.1	2.0	0.0	0.0	2.0	0.22%
Barbados	2.5	0.4	124.4	18.7	-18.3	-1.63%
Belarus	24.8	4.5	0.0	0.0	4.5	0.07%
Belgium	441.0	127.9	57.0	11.5	116.4	0.12%
Belize	0.5	0.1	0.0	0.0	0.1	0.02%
Benin	2.2	0.7	0.0	0.0	0.7	0.03%
Bermuda	2.9	0.4	11 183.4	1 677.5	-1 677.1	0.00%
Bosnia and Herzegovina	9.3	1.4	0.0	0.0	1.4	0.04%
Botswana	4.3	0.9	0.0	0.0	0.9	0.03%
Brazil	1 705.8	580.0	147.3	33.3	546.6	0.33%
Brunei Darussalam	2.5	0.5	0.0	0.0	0.5	0.00%
Bulgaria	35.1	5.3	0.0	0.0	5.3	0.04%
Burkina Faso	2.1	0.6	0.0	0.0	0.6	0.03%
Cabo Verde	0.6	0.1	0.0	0.0	0.1	0.04%
Cameroon	7.8	2.6	0.0	0.0	2.6	0.07%
Canada	1 518.6	410.0	166.1	28.3	381.7	0.20%
Cayman Islands	0.5	0.1	10 879.5	1 631.9	-1 631.9	0.00%
Chile	164.7	44.5	13.8	2.1	42.4	0.12%
China	21 253.9	5 313.5	11 128.3	2 092.1	3 221.4	0.31%
Colombia	156.6	50.1	0.0	0.0	50.1	0.15%
Congo	0.7	0.2	0.0	0.0	0.2	0.03%
Congo (Democratic Rep.)	5.8	2.0	0.0	0.0	2.0	0.07%
Costa Rica	40.7	12.2	0.0	0.0	12.2	0.18%
Côte d'Ivoire	10.9	2.7	0.0	0.0	2.7	0.04%
Croatia	58.7	10.6	0.0	0.0	10.6	0.10%
Curaçao	0.5	0.1	0.0	0.0	0.1	0.00%
Czechia	173.8	33.0	67.7	10.6	22.4	0.07%
Denmark	154.5	34.0	0.0	0.0	34.0	0.03%
Djibouti	0.8	0.2	0.0	0.0	0.2	0.00%
Dominica	0.1	0.0	0.0	0.0	0.0	0.03%
Dominican Republic	34.4	9.3	0.0	0.0	9.3	0.11%
Egypt	187.7	43.2	11.4	3.3	39.9	0.10%
Estonia	10.3	2.1	0.0	0.0	2.1	0.04%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	% Taxes
Eswatini	1.1	0.3	47.9	7.2	-6.9	-0.70%
Faroe Islands	1.3	0.2	0.0	0.0	0.2	0.00%
Finland	160.2	32.0	25.4	4.0	28.0	0.06%
France	2 371.0	663.9	415.5	92.7	571.2	0.10%
Gabon	3.2	1.0	0.0	0.0	1.0	0.06%
Georgia	7.9	1.2	0.0	0.0	1.2	0.04%
Germany	3 041.3	912.4	430.5	89.3	823.1	0.23%
Gibraltar	0.8	0.1	1 093.8	164.1	-163.9	0.00%
Greece	100.8	24.2	0.0	0.0	24.2	0.06%
Greenland	0.9	0.2	0.0	0.0	0.2	0.00%
Grenada	0.3	0.1	0.0	0.0	0.1	0.04%
Guernsey	0.6	0.1	0.0	0.0	0.1	0.00%
Haiti	4.6	1.4	0.0	0.0	1.4	0.00%
Honduras	6.6	1.7	0.0	0.0	1.7	0.05%
Hong Kong	1 712.6	291.1	2 810.0	421.5	-130.4	0.00%
Hungary	144.9	21.7	193.6	33.0	-11.2	-0.04%
Iceland	7.0	1.4	0.0	0.0	1.4	0.03%
India	692.2	207.7	663.2	230.6	-22.9	-0.01%
Indonesia	290.4	72.6	151.9	41.8	30.8	0.04%
Ireland	771.9	115.8	1 933.3	290.0	-174.2	-0.28%
Isle of Man	1.1	0.2	1 554.8	233.2	-233.1	0.00%
Israel	317.5	73.0	16.1	3.1	69.9	0.09%
Italy	1 282.5	307.8	88.4	23.3	284.5	0.07%
Jamaica	7.0	1.8	0.0	0.0	1.8	0.06%
Japan	4 678.9	1 450.5	3 186.4	725.2	725.2	0.05%
Jersey	1.0	0.2	2 471.7	370.8	-370.6	0.00%
Jordan	20.3	4.1	0.0	0.0	4.1	0.07%
Kazakhstan	83.3	16.7	202.5	30.4	-13.7	-0.11%
Kenya	19.4	5.8	0.0	0.0	5.8	0.05%
Korea	2 858.6	714.6	111.4	22.3	692.3	0.32%
Latvia	11.6	2.3	0.0	0.0	2.3	0.04%
Liberia	1.2	0.4	0.0	0.0	0.4	0.11%
Liechtenstein	1.7	0.3	8 303.1	1 245.5	-1 245.2	0.00%
Lithuania	23.6	3.5	0.0	0.0	3.5	0.04%
Luxembourg	27.4	6.9	992.6	148.9	-142.0	-0.87%
Macao	10.9	1.6	52.6	12.2	-10.6	-0.22%
Malaysia	684.9	164.4	31.8	5.4	159.0	0.49%
Maldives	1.1	0.2	0.0	0.0	0.2	0.03%
Malta	6.5	2.3	174.1	26.1	-23.8	-0.77%
Mauritania	1.9	0.5	0.0	0.0	0.5	0.00%
Mauritius	5.1	0.8	259.9	39.0	-38.2	-1.85%
Mexico	1 106.2	331.9	220.7	60.6	271.3	0.20%
Monaco	1.5	0.5	572.3	85.8	-85.4	0.00%
Mongolia	4.8	1.2	0.0	0.0	1.2	0.07%
Montenegro	2.7	0.4	0.0	0.0	0.4	0.00%
Morocco	71.6	22.2	4.5	0.8	21.4	0.10%
Namibia	3.2	1.0	0.0	0.0	1.0	0.04%
Netherlands	1 332.8	333.2	3 813.6	572.0	-238.8	-0.12%
New Zealand	133.7	37.4	0.0	0.0	37.4	0.07%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	% Taxes
Nigeria	175.2	52.6	8.1	3.5	49.0	0.88%
North Macedonia	6.2	0.9	0.0	0.0	0.9	0.05%
Norway	228.3	50.2	18.7	5.3	44.9	0.07%
Oman	29.4	4.4	0.0	0.0	4.4	0.26%
Pakistan	99.6	34.9	2.5	1.1	33.7	0.11%
Panama	20.7	5.2	0.0	0.0	5.2	0.13%
Papua New Guinea	6.7	2.0	0.0	0.0	2.0	0.08%
Paraguay	18.5	2.8	0.0	0.0	2.8	0.09%
Peru	92.4	27.7	1.0	0.3	27.5	0.12%
Poland	383.4	72.8	18.4	2.9	70.0	0.08%
Portugal	131.3	27.6	60.0	9.0	18.5	0.04%
Qatar	62.8	9.4	247.0	37.1	-27.6	-0.15%
Romania	118.8	19.0	6.1	0.9	18.1	0.06%
Russia	854.0	170.8	45.5	10.1	160.7	0.11%
St Kitts & Nevis	0.2	0.1	0.0	0.0	0.1	0.06%
St Lucia	0.5	0.1	0.0	0.0	0.1	0.05%
St Vincent & Grenadines	0.5	0.2	15.9	4.8	-4.6	-2.36%
Samoa	4.2	1.1	0.0	0.0	1.1	0.62%
San Marino	0.9	0.2	0.0	0.0	0.2	0.07%
Saudi Arabia	232.5	46.5	0.0	0.0	46.5	0.09%
Senegal	8.2	2.5	0.0	0.0	2.5	0.07%
Serbia	39.2	5.9	0.0	0.0	5.9	0.05%
Seychelles	0.6	0.2	50.8	7.8	-7.6	-2.17%
Sierra Leone	1.4	0.4	0.0	0.0	0.4	0.08%
Singapore	890.7	151.4	7 639.6	1 145.9	-994.5	-2.55%
Slovakia	56.1	11.8	0.0	0.0	11.8	0.07%
Slovenia	32.6	6.2	0.0	0.0	6.2	0.08%
South Africa	221.7	62.1	2 942.1	773.8	-711.7	-1.03%
Spain	1 067.1	266.8	49.6	7.4	259.3	0.17%
Sri Lanka	21.1	5.9	153.6	23.0	-17.1	-0.30%
Sweden	418.9	88.0	9.0	1.4	86.5	0.07%
Switzerland	1 139.7	171.0	6 860.1	1 029.0	-858.1	-1.41%
Thailand	557.4	111.5	3 495.3	577.1	-465.6	-0.73%
Togo	1.7	0.4	150.4	24.6	-24.2	-2.77%
Trinidad and Tobago	24.3	7.3	0.0	0.0	7.3	0.20%
Tunisia	30.4	7.6	0.0	0.0	7.6	0.10%
Turkey	555.4	122.2	16.4	3.1	119.0	0.11%
Turks and Caicos Islands	0.2	0.0	0.0	0.0	0.0	0.00%
Ukraine	123.9	22.3	0.0	0.0	22.3	0.08%
United Arab Emirates	126.3	69.5	288.7	81.9	-12.4	-0.59%
United Kingdom	3 040.7	577.7	50.1	7.5	570.2	0.10%
United States	32 100.5	8 667.1	7 411.3	1 111.7	7 555.4	0.42%
Uruguay	39.2	9.8	0.0	0.0	9.8	0.11%
Viet Nam	368.0	73.6	15.5	2.4	71.2	0.14%
Virgin Islands (British)	7.1	1.1	1 151.0	172.6	-171.6	0.00%
Zambia	117.9	41.3	0.0	0.0	41.3	1.58%
Total	93 539.5	24 123.1	94 449.8	15 555.0	8 568.1	0.14%

This table presents Pillar One revenues for IF member countries with Pillar Two minimum tax rate of 15%. Any CIT or ETR below 15% have been set to 15. We do not account for any other behavioral responses due to Pillar Two.

**Table D.2.** Pillar One Revenues IF countries with Pillar Two interaction

Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Afghanistan	4.2	0.8	0.0	0.0	0.8	0.05 %
Albania	6.1	0.9	0.0	0.0	0.9	0.04%
Algeria	44.4	11.5	0.0	0.0	11.5	0.02%
American Samoa	0.2	0.1	0.0	0.0	0.1	-
Andorra	0.5	0.1	0.0	0.0	0.1	-
Angola	19.1	5.7	0.0	0.0	5.7	0.12%
Anguilla	0.0	0.0	0.0	0.0	0.0	0.00%
Antigua and Barbuda	0.5	0.1	0.0	0.0	0.1	0.07%
Argentina	406.4	121.9	6.3	1.7	120.2	0.33%
Armenia	5.6	1.0	0.0	0.0	1.0	0.04%
Aruba	1.4	0.3	0.0	0.0	0.3	-
Australia	1 076.6	323.0	112.7	16.9	306.1	0.12%
Austria	460.7	115.2	5.0	0.7	114.4	0.12%
Azerbaijan	22.1	4.4	0.0	0.0	4.4	0.08%
Bahamas	5.4	0.8	0.0	0.0	0.8	0.05%
Bahrain	12.8	1.9	0.0	0.0	1.9	0.21%
Bangladesh	48.3	12.1	0.0	0.0	12.1	0.05%
Barbados	2.5	0.4	103.6	15.5	-15.2	-1.35%
Belarus	24.2	4.3	0.0	0.0	4.3	0.07%
Belgium	424.9	123.2	92.1	18.5	104.7	0.10%
Belize	0.5	0.1	0.0	0.0	0.1	0.02%
Benin	2.2	0.6	0.0	0.0	0.6	0.03%
Bermuda	2.8	0.4	11 023.0	1 653.4	-1 653.0	-
Bhutan	0.6	0.2	0.0	0.0	0.2	0.07%
Bolivia	12.0	3.0	0.0	0.0	3.0	0.06%
Bosnia and Herzegovina	9.1	1.4	0.0	0.0	1.4	0.04%
Botswana	4.2	0.9	0.0	0.0	0.9	0.03%
Brazil	1 678.0	570.5	208.4	47.2	523.4	0.32%
Brunei Darussalam	2.4	0.5	0.0	0.0	0.5	-
Bulgaria	34.6	5.2	0.0	0.0	5.2	0.04%
Burkina Faso	2.1	0.6	0.0	0.0	0.6	0.03%
Burundi	0.3	0.1	0.0	0.0	0.1	0.03%
Cabo Verde	0.6	0.1	0.0	0.0	0.1	0.04%
Cambodia	9.7	1.9	73.2	11.0	-9.0	-0.22%
Cameroon	7.7	2.5	0.0	0.0	2.5	0.07%
Canada	1 495.6	403.8	117.8	20.1	383.7	0.20%
Cayman Islands	0.5	0.1	10 371.9	1 555.8	-1 555.7	-
Central African Republic	0.1	0.0	51.5	14.6	-14.6	-8.21%
Chad	2.0	0.7	0.0	0.0	0.7	-
Chile	162.6	43.9	5.9	0.9	43.0	0.12%
China	19 199.3	4 799.8	11 076.8	2 082.4	2 717.4	0.26%
Christmas Island	0.0	0.0	0.0	0.0	0.0	-
Colombia	153.8	49.2	0.0	0.0	49.2	0.15%
Comoros	0.0	0.0	0.0	0.0	0.0	-
Congo	0.7	0.2	0.0	0.0	0.2	0.03%
Congo (Democratic Rep.)	5.5	1.9	0.0	0.0	1.9	0.06%
Cook Islands	0.0	0.0	0.0	0.0	0.0	-
Costa Rica	40.2	12.0	9.4	1.4	10.6	0.16%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Côte d'Ivoire	10.7	2.7	0.0	0.0	2.7	0.04%
Croatia	50.3	9.1	0.0	0.0	9.1	0.09%
Cuba	32.7	11.4	35.2	5.3	6.2	-
Curaçao	0.5	0.1	0.0	0.0	0.1	-
Cyprus	16.2	2.4	0.0	0.0	2.4	0.05%
Czechia	152.5	29.0	65.3	10.3	18.7	0.06%
Denmark	152.7	33.6	0.0	0.0	33.6	0.03%
Djibouti	0.8	0.2	0.0	0.0	0.2	-
Dominica	0.1	0.0	0.0	0.0	0.0	0.03%
Dominican Republic	34.0	9.2	0.0	0.0	9.2	0.11%
Ecuador	35.1	8.8	0.0	0.0	8.8	0.08%
Egypt	183.5	42.2	0.0	0.0	42.2	0.11%
El Salvador	11.8	3.5	0.0	0.0	3.5	0.09%
Equatorial Guinea	1.4	0.5	0.0	0.0	0.5	0.07%
Eritrea	0.1	0.0	0.0	0.0	0.0	-
Estonia	10.3	2.1	0.0	0.0	2.1	0.04%
Eswatini	1.0	0.3	46.5	7.0	-6.7	-0.68 %
Ethiopia	16.5	5.0	49.6	14.0	-9.0	-0.15 %
Falkland Islands	0.0	0.0	0.0	0.0	0.0	-
Faroe Islands	1.3	0.2	0.0	0.0	0.2	-
Fiji	1.3	0.3	0.0	0.0	0.3	0.03%
Finland	158.2	31.6	27.8	4.4	27.2	0.06%
France	2 270.4	635.7	568.0	126.7	509.0	0.09%
Gabon	3.2	0.9	0.0	0.0	0.9	0.06%
Gambia	0.4	0.1	0.0	0.0	0.1	-
Georgia	7.7	1.2	0.0	0.0	1.2	0.04%
Germany	2 988.6	896.6	373.8	77.6	819.0	0.23%
Ghana	20.7	5.2	0.0	0.0	5.2	0.07%
Gibraltar	0.8	0.1	1 063.9	159.6	-159.5	-
Greece	100.0	24.0	0.0	0.0	24.0	0.06%
Greenland	0.8	0.2	0.0	0.0	0.2	-
Grenada	0.3	0.1	0.0	0.0	0.1	0.04%
Guam	2.4	0.8	0.0	0.0	0.8	-
Guatemala	24.3	6.1	0.0	0.0	6.1	0.09%
Guernsey	0.5	0.1	0.0	0.0	0.1	-
Guinea	2.2	0.8	0.0	0.0	0.8	0.05%
Guinea-Bissau	0.2	0.0	183.2	45.8	-45.7	-38.57%
Guyana	1.4	0.4	0.0	0.0	0.4	-
Haiti	4.6	1.4	0.0	0.0	1.4	-
Holy See	0.0	0.0	0.0	0.0	0.0	-
Honduras	6.5	1.6	0.0	0.0	1.6	0.05%
Hong Kong	1 686.9	286.8	2 699.1	404.9	-118.1	-
Hungary	141.4	21.2	206.8	35.2	-14.0	-0.04%
Iceland	7.0	1.4	0.0	0.0	1.4	0.03%
India	674.5	202.4	615.2	213.9	-11.6	0.00%
Indonesia	286.3	71.6	68.2	18.8	52.8	0.07%
Iran	145.2	36.3	0.0	0.0	36.3	0.24%
Iraq	50.9	7.6	0.0	0.0	7.6	0.35%
Ireland	755.3	113.3	1 729.3	259.4	-146.1	-0.24%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Isle of Man	0.9	0.1	1 510.3	226.6	-226.4	-
Israel	312.3	71.8	10.4	2.0	69.8	0.09%
Italy	1 262.5	303.0	144.0	37.9	265.1	0.06%
Jamaica	6.9	1.7	0.0	0.0	1.7	0.06%
Japan	4 619.2	1 431.9	3 008.9	684.8	747.1	0.05%
Jersey	0.9	0.1	2 400.0	360.0	-359.9	-
Jordan	19.8	4.0	0.0	0.0	4.0	0.06%
Kazakhstan	81.4	16.3	0.0	0.0	16.3	0.13%
Kenya	18.6	5.6	0.0	0.0	5.6	0.04%
Kiribati	0.0	0.0	0.0	0.0	0.0	0.00%
Korea (South)	2 806.4	701.6	85.1	17.1	684.5	0.32%
Korea (North)	4.9	0.7	689.7	170.0	-169.3	-
Kuwait	48.4	7.3	0.0	0.0	7.3	-
Kyrgyzstan	2.4	0.4	0.0	0.0	0.4	0.04%
Lao	3.6	1.3	0.0	0.0	1.3	0.08%
Latvia	11.6	2.3	0.0	0.0	2.3	0.04%
Lebanon	32.7	5.6	0.0	0.0	5.6	0.23%
Lesotho	0.7	0.2	0.0	0.0	0.2	0.05%
Liberia	1.2	0.4	0.0	0.0	0.4	0.11%
Libya	7.3	1.5	0.0	0.0	1.5	-
Liechtenstein	1.6	0.2	8 256.9	1 238.5	-1 238.3	-
Lithuania	23.6	3.5	0.0	0.0	3.5	0.04%
Luxembourg	27.3	6.8	627.1	94.1	-87.2	-0.54%
Macao	10.6	1.6	26.1	6.1	-4.5	-0.09%
Madagascar	1.4	0.3	0.0	0.0	0.3	0.02%
Malawi	2.1	0.6	0.0	0.0	0.6	0.05%
Malaysia	668.2	160.4	41.6	7.0	153.3	0.48%
Maldives	1.1	0.2	0.0	0.0	0.2	0.02%
Mali	3.3	1.2	0.0	0.0	1.2	0.05%
Malta	5.9	2.1	173.8	26.1	-24.0	-0.77%
Marshall Islands	0.0	0.0	0.0	0.0	0.0	0.00%
Mauritania	1.8	0.5	0.0	0.0	0.5	-
Mauritius	5.0	0.8	252.7	37.9	-37.2	-1.80%
Mexico	1 077.1	323.1	150.5	41.3	281.8	0.21%
Micronesia	0.1	0.0	0.0	0.0	0.0	0.17%
Moldova	5.5	0.8	0.0	0.0	0.8	0.05%
Monaco	1.4	0.4	570.5	85.6	-85.1	-
Mongolia	4.6	1.2	0.0	0.0	1.2	0.07%
Montenegro	2.6	0.4	0.0	0.0	0.4	-
Montserrat	0.0	0.0	0.0	0.0	0.0	-
Morocco	70.1	21.7	9.9	1.8	20.0	0.09%
Mozambique	2.1	0.7	0.0	0.0	0.7	0.03%
Myanmar	16.1	4.0	292.5	43.9	-39.9	-0.90%
Namibia	3.1	1.0	0.0	0.0	1.0	0.03%
Nauru	0.0	0.0	0.0	0.0	0.0	0.00%
Nepal	9.6	2.4	0.0	0.0	2.4	0.05%
Netherlands	1 293.9	323.5	3 569.5	535.4	-212.0	-0.11%
New Zealand	132.3	37.0	0.0	0.0	37.0	0.07%
Nicaragua	4.1	1.2	0.0	0.0	1.2	0.07%

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Country	Reallocated profits	Gross gain	Elimination	Loss	Net gain	%Taxes
Niger	1.5	0.5	0.0	0.0	0.5	0.03%
Nigeria	167.1	50.1	4.8	2.1	48.0	0.86%
Niue	0.0	0.0	0.0	0.0	0.0	-
North Macedonia	5.9	0.9	0.0	0.0	0.9	0.05%
Northern Mariana Islands	0.3	0.1	0.0	0.0	0.1	-
Norway	226.5	49.8	52.5	14.9	34.9	0.05%
Oman	28.3	4.2	0.0	0.0	4.2	0.25%
Pakistan	92.9	32.5	1.5	0.7	31.8	0.11%
Palau	0.0	0.0	0.0	0.0	0.0	0.01%
Palestine, State of	10.1	1.5	0.0	0.0	1.5	0.06%
Panama	20.0	5.0	0.0	0.0	5.0	0.12%
Papua New Guinea	6.4	1.9	0.0	0.0	1.9	0.08%
Paraguay	17.9	2.7	0.0	0.0	2.7	0.09%
Peru	89.4	26.8	0.2	0.0	26.8	0.11%
Philippines	270.9	81.3	8.1	1.7	79.6	0.18%
Pitcairn	0.0	0.0	0.0	0.0	0.0	-
Poland	378.1	71.8	14.8	2.3	69.5	0.08%
Portugal	130.7	27.4	44.8	6.7	20.7	0.05%
Puerto Rico	52.2	19.6	5 235.8	785.4	-765.8	-
Qatar	58.8	8.8	254.2	38.1	-29.3	-0.16%
Romania	117.9	18.9	18.9	2.8	16.0	0.05%
Russia	843.3	168.7	46.5	10.3	158.4	0.11%
Rwanda	2.8	0.8	0.0	0.0	0.8	0.06%
St Kitts & Nevis	0.2	0.1	0.0	0.0	0.1	0.06%
St Lucia	0.5	0.1	0.0	0.0	0.1	0.05%
St Vincent & Grenadines	0.5	0.1	1.3	0.4	-0.3	-0.13%
Samoa	3.8	1.0	0.0	0.0	1.0	0.55%
San Marino	0.8	0.1	0.0	0.0	0.1	0.06%
Sao Tome and Principe	0.1	0.0	0.0	0.0	0.0	0.04%
Saudi Arabia	229.0	45.8	0.0	0.0	45.8	0.09%
Senegal	7.8	2.3	0.0	0.0	2.3	0.07%
Serbia	37.0	5.6	0.0	0.0	5.6	0.05%
Seychelles	0.6	0.2	49.3	7.5	-7.3	-2.11%
Sierra Leone	1.3	0.4	0.0	0.0	0.4	0.08%
Singapore	863.8	146.9	7 012.1	1 051.8	-905.0	-2.32%
Slovakia	54.4	11.4	2.8	0.4	11.0	0.06%
Slovenia	32.4	6.1	0.0	0.0	6.1	0.08%
Solomon Islands	0.2	0.1	0.0	0.0	0.1	0.02%
Somalia	1.5	0.4	0.0	0.0	0.4	0.26%
South Africa	215.3	60.3	2 942.1	773.8	-713.5	-1.04%
South Sudan	2.9	0.4	0.0	0.0	0.4	-
Spain	1 056.9	264.2	114.6	17.2	247.0	0.16%
Sri Lanka	20.4	5.7	0.0	0.0	5.7	0.10%
Sudan	14.2	5.0	0.0	0.0	5.0	0.28%
Suriname	1.8	0.7	0.0	0.0	0.7	0.13%
Sweden	415.0	87.1	8.7	1.4	85.8	0.07%
Switzerland	1 119.9	168.0	6 285.8	942.9	-774.9	-1.28%
Syrian Arab Republic	7.5	2.1	0.0	0.0	2.1	-
Taiwan	2 778.8	555.8	15.7	2.4	553.4	-

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<b>Country</b>	<b>Reallocated profits</b>	<b>Gross gain</b>	<b>Elimination</b>	<b>Loss</b>	<b>Net gain</b>	<b>%Taxes</b>
Tajikistan	2.8	0.4	539.8	124.2	-123.7	-17.69%
Tanzania	16.8	5.0	0.0	0.0	5.0	0.08%
Thailand	524.4	104.9	2 176.3	359.3	-254.4	-0.40%
Timor Leste	0.5	0.1	0.0	0.0	0.1	0.02%
Togo	1.5	0.4	144.3	23.6	-23.2	-2.66%
Tokelau	0.0	0.0	0.0	0.0	0.0	-
Tonga	0.2	0.1	0.0	0.0	0.1	0.06%
Trinidad and Tobago	23.9	7.2	0.0	0.0	7.2	0.20%
Tunisia	28.8	7.2	0.0	0.0	7.2	0.09%
Turkey	550.4	121.1	22.4	4.3	116.8	0.10%
Turkmenistan	15.4	3.1	0.0	0.0	3.1	-
Turks and Caicos Islands	0.2	0.0	0.0	0.0	0.0	-
Tuvalu	0.0	0.0	0.0	0.0	0.0	-
Uganda	12.3	3.7	0.0	0.0	3.7	0.10%
Ukraine	115.3	20.8	0.0	0.0	20.8	0.08%
United Arab Emirates	123.2	67.8	263.3	74.6	-6.9	-0.33%
United Kingdom	3 015.8	573.0	148.1	22.2	550.8	0.09%
United States	31 505.4	8 506.5	5 227.5	784.1	7 722.3	0.42%
Uruguay	37.5	9.4	0.0	0.0	9.4	0.11%
Uzbekistan	50.5	7.6	0.0	0.0	7.6	0.10%
Vanuatu	2.5	0.4	0.0	0.0	0.4	0.33%
Venezuela	386.3	131.4	0.0	0.0	131.4	-
Viet Nam	194.9	39.0	15.3	2.3	36.7	0.07%
Virgin Islands (British)	6.4	1.0	989.0	148.3	-147.4	-
Yemen	131.4	26.3	0.0	0.0	26.3	-
Zambia	105.8	37.0	0.0	0.0	37.0	1.42%
Zimbabwe	142.7	34.2	0.0	0.0	34.2	2.52%
<b>Total</b>	<b>94 444.3</b>	<b>24 237.5</b>	<b>94 449.8</b>	<b>15 644.8</b>	<b>8 592.7</b>	<b>0.14%</b>

This table presents Pillar One revenues for all countries with Pillar Two minimum tax rate of 15%. Any CIT or ETR below 15% have been set to 15. We do not account for any other behavioral responses due to Pillar Two.

## Appendix E. Change in tax for the covered groups

**Table E.1.** Change in tax for covered groups under Pillar One

Covered group	Gross loss	Gross gain	Net
3M COMPANY	189.6	33.4	-156.1
ABBOTT LABORATORIES	80.7	10.9	-69.8
ACCENTURE PUBLIC LIMITED COMPANY	124.0	62.4	-61.6
ALIBABA GROUP HOLDING LIMITED	818.8	438.8	-380.0
ALPHABET INC.	1 536.3	371.9	-1 164.4
ALTRIA GROUP, INC.	231.3	57.2	-174.2
AMGEN INCORPORATED	299.3	80.5	-218.8
ANHUI CONCH GROUP CO.LTD	153.0	67.0	-86.0
APPLE INC.	2 179.3	480.8	-1 698.5
BRITISH AMERICAN TOBACCO PLC	386.3	264.0	-122.3
C.H. BOEHRINGER SOHN AG & CO. KG	133.2	63.5	-69.7
CHINA ELECTRONIC TECHNOLOGY GROUP CORPORATION	107.1	50.5	-56.6
CHINA ENERGY INVESTMENT CORPORATION LIMITED	379.2	162.3	-216.9
CHINA MOBILE LIMITED	412.8	244.3	-168.5
CHINA NATIONAL BUILDING MATERIAL GROUP CO., LTD.	82.4	24.1	-58.3
CHINA NATIONAL NUCLEAR CORPORATION	24.0	7.0	-16.9
CHINA POLY GROUP CORP	187.9	83.7	-104.2
CISCO SYSTEMS INC	491.1	115.7	-375.4
CK HUTCHISON HOLDINGS LIMITED	98.5	45.1	-53.3
COCA-COLA COMPANY (THE)	348.9	82.0	-266.9
COMCAST CORPORATION	201.4	29.5	-171.8
CRRG GROUP	21.4	6.3	-15.1
DANONE	8.5	3.9	-4.6
DEERE & CO	18.8	1.2	-17.5
ENBRIDGE INC	12.0	1.2	-10.8
ENTERPRISE PRODUCTS PARTNERS L P	55.8	8.9	-46.9
FRESENIUS SE & CO. KGAA	3.8	0.3	-3.5
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI	72.1	27.7	-44.4
GSK PLC	241.6	154.4	-87.3
HCA HEALTHCARE, INC.	15.0	1.2	-13.9
HOLCIM LTD.	24.2	0.9	-23.4
HOME DEPOT INC	202.8	8.2	-194.6
HONEYWELL INTERNATIONAL INC	152.5	23.3	-129.2
HUAWEI INVESTMENT & HOLDING CO., LTD	984.8	514.8	-470.1
IBERDROLA SA	105.8	51.3	-54.5
INTEL CORP	907.0	247.3	-659.7
JOHNSON & JOHNSON	441.1	74.7	-366.4
KDDI CORPORATION	293.9	190.3	-103.6
L'OREAL	131.1	54.7	-76.4
LOCKHEED MARTIN CORP	92.2	4.1	-88.1
LVMH MOET HENNESSY LOUIS VUITTON	186.5	73.3	-113.3
MEDTRONIC PUBLIC LIMITED COMPANY	68.8	9.3	-59.5
MERCK & CO., INC.	91.6	13.8	-77.8
META PLATFORMS, INC.	1 266.2	377.8	-888.3
MICROSOFT CORPORATION	2 186.2	625.2	-1 561.0
MIDEA GROUP CO.,LTD.	24.2	7.1	-17.1
MONDELEZ INTERNATIONAL, INC.	39.2	2.4	-36.9
NESTLE S.A.	406.2	15.2	-391.0
NIPPON TELEGRAPH AND TELEPHONE CORPORATION	266.4	167.5	-98.9
NORTHROP GRUMMAN CORPORATION	2.5	0.0	-2.5
NOVARTIS AG	243.7	8.9	-234.8
ORACLE CORP	462.9	117.0	-345.9
PARAMOUNT GLOBAL	32.4	2.2	-30.2
PEPSICO INC	110.0	6.1	-103.9
PFIZER INC	153.7	25.2	-128.5
PHILIP MORRIS INTERNATIONAL INC.	437.5	111.4	-326.0
PROCTER & GAMBLE CO	512.7	95.2	-417.5
ROCHE HOLDING AG	700.0	41.1	-659.0

*Continued on next page*

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<b>Covered group</b>	<b>Gross loss</b>	<b>Gross gain</b>	<b>Net</b>
SAMSUNG ELECTRONICS CO.,LTD.	595.6	623.7	28.1
SANOFI	661.1	332.7	-328.5
SAP SE	283.0	159.8	-123.2
SCHNEIDER ELECTRIC SE	18.9	8.8	-10.1
SK HYNIX INC.	143.3	150.1	6.8
SONY GROUP CORPORATION	155.9	104.5	-51.4
TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	790.5	472.2	-318.3
TENCENT HOLDINGS LIMITED	1 013.5	575.9	-437.5
THERMO FISHER SCIENTIFIC INC.	210.0	39.7	-170.3
UNILEVER PLC	169.9	118.7	-51.2
VERIZON COMMUNICATIONS INC	604.7	99.5	-505.2
Total	24 086.7	8 533.8	-15 552.9

This table presents Pillar One revenues for all covered MNEs in the benchmark scenario restricted to the Inclusive Framework member countries. The "Gross loss" represents the amount MNE has to reallocate (Gross income to countries). The "Gross gain" represents the amount of tax reliefs that the MNE will be able to collect from countries (the tax reliefs or elimination of double taxation countries need to offer) .

## Appendix F. Exclusion of financial and extractives groups

We exclude extractives industry companies that have the following NACE core code:

- 05 Mining of coal and lignite
- 06 Extraction of crude petroleum and natural gas
- 07 Mining of metal ores
- 08 Other mining and quarrying 9
- 09 Mining support service activities
- 19 Manufacture of coke and refined petroleum products
- 20.11 Manufacture of industrial gases
- 20.13 Manufacture of other inorganic basic chemicals
- 20.14 Manufacture of other organic basic chemicals
- 20.16 Manufacture of plastics in primary forms
- 20.59 Manufacture of other chemical products n.e.c.

We also exclude the Regulated Financial Services (RFS), with the following NACE:

- 64 Financial service activities, except insurance and pension funding
- 65 Insurance, reinsurance and pension funding, except compulsory social security

## Appendix G. Correspondence between NACE Rev.2 codes and sectors in AMNE data:

NACE Rev.2	AMNE
01,02,03	A
05,06,07,08,09	B
10,11,12	C10T12
13,14,15,16	C13T15
16	C16
17,18	C17T18
19	C19
20,21	C20T21
22	C22
23	C23
24	C24
25	C25
26	C26
27	C27
28	C28
29	C29
30	C30
31,32,33	C31T33
35,36,37,38,39	DTE
41,42,43	F
45,46,47	G
49,50,51,52,53	H
55,56	I
58,59,60	J58T60
61	J61
62,63	J62T63
64,65,66	K
68	L
69,70,71,72,73,74,75,76,77,78,79,80,81,82	MTN
84	O
85	P
86,87,88	Q
90,91,92,93,94,95,96	RTS
97,98	T

## Appendix H. Gravity model to redistribute the Rest of the World entries (AMNE) and Regional aggregates (CbCR)

For host countries that are not included in the AMNE/CbCR databases, we redistribute the Rest of the World entries/Regional aggregates using a gravity model together with the CEPII database:

$$\frac{\text{destination-based revenues}_{hj(s)}/\text{profits}_{hj}/\text{employees}_{hj}/\text{assets}_{hj}}{GDP_j} = \beta X_{hj(s)} + \varepsilon_{hj(s)}$$

$X_{hj(s)}$  = (industry), distance and its square, common official, language, colonial relationship prior to 1945, population in the headquarter (parent) and host countries and their squares, GDP per capita in the headquarter and host countries and their squares, entry cost in the host country and its square, bilateral trade flow and its square.

Importantly, note that the absolute values of destination-based revenues $_{hj(s)}$ , profits $_{hj}$ , employees $_{hj}$ , and assets $_{hj}$  (obtained after re-multiplying by  $GDP_j$ ) are not used as such. They are simply taken to form allocation keys that are then employed to reallocate the ROW entries and regional aggregates across jurisdictions not included in the AMNE or CbCR databases. What we expect from our gravity models is thus not to perfectly predict the absolute values but rather to be correct about the relative amounts between jurisdictions that are not included in the databases.



# Appendix I. “Waterfall method” to allocate Obligation to eliminate double taxation:

Specified Jurisdiction  $s \in \text{Tier 1}$  if:

$$\underbrace{\frac{\text{Elimination Profit or Loss}_{si}}{\text{Depreciation Amount}_{si} + \text{Payroll Amount}_{si}}}_{\text{Jurisdictional Return on Depreciation and Payroll}_{si}} \geq 15 \times \underbrace{\frac{\sum_j \text{Elimination Profit or Loss}_{ji}}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}_{\text{Return on Depreciation and Payroll}_i}$$

- if: Tier 1 =  $\emptyset \Rightarrow$  go directly to Step ( $n_1 + 1$ ), otherwise

Rank each Specified Jurisdiction  $s$  within Tier 1 according to their Jurisdictional Return on Depreciation and Payroll <sub>$si$</sub>  ( $s = 1$  for the Specified Jurisdiction in Tier 1 with the highest Jurisdictional Return on Depreciation and Payroll <sub>$si$</sub> ). Let's denote  $n_1$  the number of Specified Jurisdiction  $s$  such that  $s \in \text{Tier 1}$ .

**Step (1):** We start with Specified Jurisdiction  $s = 1$

Total Obligation to Eliminate Double Taxation <sub>$i$</sub> (1) ( $x_i(1)$ ) =  
Obligation to Eliminate Double Taxation <sub>$1i$</sub> (1) ( $x_{1i}(1)$ ) =

$$\text{MIN} \left[ \tilde{x}_{1i}(1) \text{ st. } \frac{\text{Elimination Profit or Loss}_{1i} - \tilde{x}_{1i}(1)}{\text{Depreciation Amount}_{1i} + \text{Payroll Amount}_{1i}} = \frac{\text{Elimination Profit or Loss}_{2i}}{\text{Depreciation Amount}_{2i} + \text{Payroll Amount}_{2i}} \right],$$

Amount A Profit <sub>$i$</sub>  ,

$$\hat{x}_{1i}(1) \text{ st. } \frac{\text{Elimination Profit or Loss}_{1i} - \hat{x}_{1i}(1)}{\text{Depreciation Amount}_{1i} + \text{Payroll Amount}_{1i}} = 15 \times \frac{\sum_j \text{Elimination Profit or Loss}_{ji}}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}$$

- if:  $x_i(1) = \text{Amount A Profit}_i \Rightarrow$  Stop because all Obligation to Eliminate Double Taxation <sub>$si$</sub>  have been allocated

- if:  $x_i(1) = \hat{x}_{1i}(1) \Rightarrow$  go directly to Step ( $n_1 + 1$ ) because there is no longer any Obligation to Eliminate Double Taxation <sub>$si$</sub>  to be allocated for Specified Jurisdictions in Tier 1

- if:  $x_i(1) = \tilde{x}_{1i}(1)$ , Amount A Profit <sub>$i$</sub>  -  $\tilde{x}_{1i}(1) > 0$ ,  $\{\text{Tier 1} - 1\} \neq \emptyset \Rightarrow$  go to Step (2)

**Step (2):** Now Specified Jurisdictions  $s = 1$  and  $s = 2$  are considered

Total Obligation to Eliminate Double Taxation <sub>$i$</sub> (2) ( $x_i(2)$ ) =

$$\text{MIN} \left[ \tilde{x}_i(2) = \tilde{x}_{1i}(2) + \tilde{x}_{2i}(2) \text{ st. } \frac{\text{Elimination Profit or Loss}_{1i} - x_{1i}(1) - \tilde{x}_{1i}(2)}{\text{Depreciation Amount}_{1i} + \text{Payroll Amount}_{1i}} = \frac{\text{Elimination Profit or Loss}_{3i}}{\text{Depreciation Amount}_{3i} + \text{Payroll Amount}_{3i}} \right]$$

$$\text{and } \frac{\text{Elimination Profit or Loss}_{2i} - \tilde{x}_{2i}(2)}{\text{Depreciation Amount}_{2i} + \text{Payroll Amount}_{2i}} = \frac{\text{Elimination Profit or Loss}_{3i}}{\text{Depreciation Amount}_{3i} + \text{Payroll Amount}_{3i}},$$

Amount A Profit <sub>$i$</sub>  -  $x_i(1)$  ,

$$\hat{x}_i(2) = \hat{x}_{1i}(2) + \hat{x}_{2i}(2) \text{ st. } \frac{\text{Elimination Profit or Loss}_{1i} - x_{1i}(1) - \hat{x}_{1i}(2)}{\text{Depreciation Amount}_{1i} + \text{Payroll Amount}_{1i}} = 15 \times \frac{\sum_j \text{Elimination Profit or Loss}_{ji}}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}$$

$$\text{and } \frac{\text{Elimination Profit or Loss}_{1i} - \hat{x}_{2i}(2)}{\text{Depreciation Amount}_{1i} + \text{Payroll Amount}_{1i}} = 15 \times \frac{\sum_j \text{Elimination Profit or Loss}_{ji}}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}$$

$$\text{Obligation to Eliminate Double Taxation}_{1i}(2) (x_{1i}(2)) = x_i(2) \times \frac{\hat{x}_{1i}}{\hat{x}_{1i} + \hat{x}_{2i}}$$

$$\text{Obligation to Eliminate Double Taxation}_{2i}(2) (x_{2i}(2)) = x_i(2) \times \frac{\hat{x}_{1i}}{\hat{x}_{1i} + \hat{x}_{2i}}$$

- if:  $x_i(2) = \text{Amount A Profit}_i - x_i(1) \Rightarrow$  Stop because all Obligation to Eliminate Double Taxation<sub>si</sub> have been allocated
- if:  $x_i(2) = \hat{x}_i(2) \Rightarrow$  go directly to Step  $(n_1 + 1)$  because there is no longer any Obligation to Eliminate Double Taxation<sub>si</sub> to be allocated for Specified Jurisdictions in Tier 1
- if:  $x_i(2) = \tilde{x}_i(2)$ ,  $\text{Amount A Profit}_i - x_i(1) - x_i(2) > 0$ ,  $\{\text{Tier 1 } -1 - 2\} \neq \emptyset \Rightarrow$  go to Step (3)

Proceeding iteratively:

⋮

**Step (n):** Specified Jurisdictions 1, 2, ..., n are considered

Total Obligation to Eliminate Double Taxation<sub>i</sub>(n)  $(x_i(n)) =$

$$\text{MIN}[\tilde{x}_i(n) = \sum_{s=1}^n \tilde{x}_{si}(n)$$

$$\text{st. } \frac{\text{Elimination Profit or Loss}_{1i} - \sum_{u=1}^{n-1} x_{si}(u) - \tilde{x}_{si}(n)}{\text{Depreciation Amount}_{1i} + \text{Payroll Amount}_{1i}} = \frac{\text{Elimination Profit or Loss}_{n+1,i}}{\text{Depreciation Amount}_{n+1,i} + \text{Payroll Amount}_{n+1,i}} \forall s \in \{1, \dots, n\},$$

$$\text{Amount A Profit}_i - \sum_{u=1}^{n-1} x_i(u) \quad ,$$

$$\hat{x}_i(n) = \sum_{s=1}^n \hat{x}_{si}(n)$$

$$\text{st. } \frac{\text{Elimination Profit or Loss}_{1i} - \sum_{u=1}^{n-1} x_{si}(u) - \hat{x}_{si}(n)}{\text{Depreciation Amount}_{1i} + \text{Payroll Amount}_{1i}} = 15 \times \frac{\sum_j \text{Elimination Profit or Loss}_{ji}}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]} \forall s \in \{1, \dots, n\}$$

Obligation to Eliminate Double Taxation<sub>si</sub>(n)  $(x_{si}(n)) = x_i(n) \times \frac{\hat{x}_{si}}{\sum_{s=1}^n \hat{x}_{si}} \forall s \in \{1, \dots, n\}$

- if:  $x_i(n) = \text{Amount A Profit}_i - \sum_{u=1}^{n-1} x_i(u) \Rightarrow$  Stop because all Obligation to Eliminate Double Taxation<sub>si</sub> have been allocated
- if:  $x_i(n) = \hat{x}_i(n) \Rightarrow$  go directly to Step  $(n_1 + 1)$  because there is no longer any Obligation to Eliminate Double Taxation<sub>si</sub> to be allocated for Specified Jurisdictions in Tier 1
- if:  $x_i(n) = \tilde{x}_i(n)$ ,  $\text{Amount A Profit}_i - \sum_{u=1}^n x_i(u) > 0$ ,  $\{\text{Tier 1 } -1 - 2 - \dots - n\} \neq \emptyset \Rightarrow$  go to Step  $(n + 1)$

Proceed iteratively until Step  $(n_1)$  where either:

- $\text{Amount A Profit}_i - \sum_{u=1}^{n_1} x_i(u) = 0$ , or
- $\forall s \in \text{Tier 1: } \frac{\text{Elimination Profit or Loss}_{si} - x_{si}}{\text{Depreciation Amount}_{si} + \text{Payroll Amount}_{si}} = 15 \times \frac{\sum_j \text{Elimination Profit or Loss}_{ji}}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}$

**Specified Jurisdiction  $s \in \text{Tier 2}$  if:**

$$\underbrace{\frac{\text{Elimination Profit or Loss}_{si} - \sum_{u=1}^{n_1} x_{si}(u)}{\text{Depreciation Amount}_{si} + \text{Payroll Amount}_{si}}}_{\substack{\text{Jurisdictional Return on Depreciation and Payroll}_{si} \\ \text{adjusted for already allocated tax relief}}} \geq 1.5 \times \frac{\sum_j \text{Elimination Profit or Loss}_{ji}}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}$$

**Step ( $n_1 + 1$ ):**

- if: Tier 2 =  $\emptyset \Rightarrow$  go directly to Step ( $n_1 + 2$ ), otherwise

Total Obligation to Eliminate Double Taxation <sub>$i$</sub>  ( $x_i(n_1 + 1)$ ) =

MIN[(Amount A Profit <sub>$i$</sub>  -  $\sum_{u=1}^{n_1} x_i(u)$ ) ,

$$st. \frac{\hat{x}_i(n_1 + 1) = \sum_s \hat{x}_{si}(n_1 + 1)}{\text{Depreciation Amount}_{si} + \text{Payroll Amount}_{si}} = 1.5 \times \frac{\sum_j \text{Elimination Profit or Loss}_{ji}}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]} \quad \forall s \in \text{Tier 2}]$$

Obligation to Eliminate Double Taxation <sub>$si$</sub> ( $n_1 + 1$ ) ( $x_{si}(n_1 + 1)$ ) =

$$x_i(n_1 + 1) \times \frac{\hat{x}_{si}(n_1 + 1)}{\sum_s \hat{x}_{si}(n_1 + 1)_{si}}$$

**Specified Jurisdiction  $s \in$  Tier 3A if:**

$$\frac{\text{Elimination Profit or Loss}_{si} - \sum_{u=1}^{n_1+1} x_{si}(u)}{\text{Depreciation Amount}_{si} + \text{Payroll Amount}_{si}} \geq \text{MAX} \left[ \frac{\text{Revenues}_i \times 10\%}{\underbrace{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}_{\text{Elimination Threshold Return on Depreciation and Payroll}_i}}, 40\% \right]$$

**Step ( $n_1 + 2$ ):**

- if: Tier 3A =  $\emptyset \Rightarrow$  go directly to Step ( $n_1 + 3$ ), otherwise

Total Obligation to Eliminate Double Taxation <sub>$i$</sub>  ( $x_i(n_1 + 2)$ ) =

MIN[(Amount A Profit <sub>$i$</sub>  -  $\sum_{u=1}^{n_1+1} x_i(u)$ ) ,

$$st. \frac{\hat{x}_i(n_1 + 2) = \sum_s \hat{x}_{si}(n_1 + 2)}{\text{Depreciation Amount}_{si} + \text{Payroll Amount}_{si}} = \text{MAX} \left[ \frac{\text{Revenues}_i \times 10\%}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}, 40\% \right] \quad \forall s$$

Obligation to Eliminate Double Taxation <sub>$si$</sub> ( $n_1 + 2$ ) ( $x_{si}(n_1 + 2)$ ) =

$$x_i(n_1 + 2) \times \frac{\hat{x}_{si}(n_1 + 2)}{\sum_s \hat{x}_{si}(n_1 + 2)}$$

**Specified Jurisdiction  $s \in$  Tier 3B if:**

$$\frac{\text{Elimination Profit or Loss}_{si} - \sum_{u=1}^{n_1+2} x_{si}(u)}{\text{Depreciation Amount}_{si} + \text{Payroll Amount}_{si}} \geq \frac{\text{Revenues}_i \times 10\%}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]}$$

**Step ( $n_1 + 3$ ):**

Total Obligation to Eliminate Double Taxation <sub>$i$</sub>  ( $x_i(n_1 + 3)$ ) =

$$\text{MIN} \left[ (\text{Amount A Profit}_i - \sum_{u=1}^{n_1+2} x_i(u)) \quad , \right.$$

$$\hat{x}_i(n_1 + 3) = \sum_s \hat{x}_{si}(n_1 + 3)$$

$$st. \left. \frac{\text{Elimination Profit or Loss}_{si} - \sum_{u=1}^{n_1+2} x_{si}(u) - \hat{x}_{si}(n_1+3)}{\text{Depreciation Amount}_{si} + \text{Payroll Amount}_{si}} = \frac{\text{Revenues}_i \times 10\%}{\sum_j [\text{Depreciation Amount}_{ji} + \text{Payroll Amount}_{ji}]} \quad \forall s \right]$$

$$\text{Obligation to Eliminate Double Taxation}_{si}(n_1 + 3) (x_{si}(n_1 + 3)) =$$

$$x_i(n_1 + 3) \times \frac{\hat{x}_{si}(n_1 + 3)}{\sum_s \hat{x}_{si}(n_1 + 3)}$$

Finally:

$\text{Obligation to Eliminate Double Taxation}_{si} = \sum_{u=1}^{n_1+3} \text{Obligation to Eliminate Double Taxation}_{si}(u)$
---

## Appendix J. List of countries

- **List of Tax Haven countries**

We consider the following countries as Tax Havens based on Tørsløv et al. (2018): Andorra, Anguilla, Antigua and Barbuda, Aruba, Bahamas, Bahrain, Barbados, Belgium, Belize, Bermuda, Bonaire sint eustatius and saba, British Virgin Islands, Cayman Islands, Curacao, Cyprus, Gibraltar, Grenada, Guernsey, Hong Kong, Ireland, Isle of man, Jersey, Lebanon, Liechtenstein, Luxembourg, Macau, Malta, Marshall Islands, Mauritius, Monaco, Netherlands, Panama, Puerto Rico, Seychelles, Singapore, Sint Maarten, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Switzerland and Turks and Caicos.

- **List of Inclusive Framework member countries**

Albania Andorra, Angola, Anguilla, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bosnia and Herzegovina, Botswana, Brazil, British Virgin Islands, Brunei Darussalam, Bulgaria, Burkina Faso, Cabo Verde, Cameroon, Canada, Cayman Islands, Chile, China, Colombia, Congo, Cook Islands, Costa Rica, Côte d'Ivoire, Croatia, Curaçao, Czechia, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, Egypt, Estonia, Eswatini, Faroe Islands, Finland, France, Gabon, Georgia, Germany, Gibraltar, Greece, Greenland, Grenada, Guernsey, Haiti, Honduras, Hong Kong, China, Hungary, Iceland, India, Indonesia, Ireland, Isle of Man, Israel, Italy, Jamaica, Japan, Jersey, Jordan, Kazakhstan, Kenya, Korea, Latvia, Liberia, Liechtenstein, Lithuania, Luxembourg, Macau (China), Malaysia, Maldives, Malta, Mauritania, Mauritius, Mexico, Monaco, Mongolia, Montenegro, Montserrat, Morocco, Namibia, Netherlands, New Zealand, Nigeria, North Macedonia, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Poland, Portugal, Qatar, Romania, Russian Federation, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Slovak Republic, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Togo, Trinidad and Tobago, Tunisia, Türkiye, Turks and Caicos Islands, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Viet Nam and Zambia

- **List of South Center member countries**

Algeria, Angola, Argentina, Barbados, Benin, Bolivia, Brazil, Burundi, Cabo Verde, Cambodia, China, Colombia, Côte d'Ivoire, Cuba, Democratic People's Republic of Korea, Dominican Republic, Ecuador, Egypt, Gabon, Ghana, Guyana, Honduras, India, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Liberia, Malawi, Malaysia, Mali, Mauritius, Micronesia (Federated States of), Morocco, Mozambique, Namibia, Nicaragua, Nigeria, Pakistan, Panama, Philippines, Seychelles, Sierra Leone, South Africa, Sri Lanka, State of Libya, State of Palestine, Sudan, Suriname, Uganda, United Republic of Tanzania, Venezuela (Bolivarian Republic of), Viet Nam and Zimbabwe.