Key messages

136 countries have agreed to global tax reforms to address challenges from the digitalisation of the economy and reduce tax competition. The reforms are due to be implemented from 2023.

Pillar One of the reforms will give countries new taxing rights over the largest multinationals regardless of physical presence. This will affect only the 100 largest multinationals and will have limited impact on overall tax revenues.

The Pillar Two global minimum tax of 15% will directly benefit high-income countries where multinationals are resident. The benefits to lower-income countries depend on multinationals reducing tax avoidance. OECD figures showing revenue gains likely overestimate this.

The reforms are significant but do not fundamentally change the system. Tax competition and tax avoidance will continue. Lower-income countries can respond in three ways. First, avoid taxing multinationals below the minimum 15% rate, although investor–state agreements could make this difficult. Second, use the new Subject to Tax Rule to tackle profit shifting from high-risk payments made to related parties. Third, continue to invest resources and build capacity to tackle international tax avoidance.
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About this publication

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<td>Automated Digital Services</td>
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<td>ATAF</td>
<td>African Tax Administration Forum</td>
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<td>CFB</td>
<td>Consumer Facing Business</td>
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<td>CIT</td>
<td>Corporate Income Tax</td>
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<td>DST</td>
<td>Digital Services Tax</td>
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<td>DTA</td>
<td>Double Taxation Agreement</td>
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<td>ETR</td>
<td>Effective Tax Rate</td>
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<td>G20</td>
<td>Group of 20</td>
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<td>GILTI</td>
<td>Global Intangible Low Tax Income</td>
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<td>Global anti-Base Erosion Rules</td>
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<td>IIR</td>
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<td>STTR</td>
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1 Introduction

On 8 October 2021, 136 countries’ agreed to a set of global tax reforms under the Inclusive Framework on Base Erosion and Profit Shifting (BEPS), an initiative led by the Group of 20 (G20) and the Organisation for Economic Co-operation and Development (OECD). The reforms, which have been developed over several years, were initially intended to address the tax challenges arising from the digitalisation of the economy, but have wider implications for both digital and non-digital businesses in countries around the world.

In this paper, we look at why a global deal was needed, explain how the reforms are likely to work in practice and set out the potential impacts of the global deal, with a focus on lower-income countries.\footnote{As of 8 October 2021.} We find that the reforms are significant but do not fundamentally change the international tax system, as other proposals would have done. The revenue impacts are uncertain but could be relatively modest. Tax competition and tax avoidance will continue. Lower-income countries can benefit from the reforms but will need to continue to build capacity to tackle international tax avoidance.

\footnote{In this paper we use the term 'lower-income countries' to refer to countries classified by the World Bank as either Low Income or Lower-Middle Income. In some instances, where data is not disaggregated between Lower-Middle Income and Upper-Middle Income countries, we present findings for Low-Income and Middle-Income countries.}
2 Why is a global deal needed?

2.1 Corporate income tax for the ‘bricks and mortar’ economy

The international approach to corporate income tax (CIT) was developed over 100 years ago during the League of Nations era. It was designed for the ‘bricks and mortar’ economy, where businesses operated out of physical premises (Figure 1). The key issue was how to allocate taxing rights over the profits of businesses that operated in more than one country and to avoid double-taxation, where the same profits could be taxed twice in two different countries.

The approach differentiated between the ‘resident’ country, where the business had its ultimate parent company, and the ‘source’ country, where it undertook activities such as selling finished goods to consumers. A source country would receive taxing rights only if the business had a physical presence in the source country, such as a place of business or employees, known as a ‘permanent establishment’. The source country could tax only profits attributable to the permanent establishment and withhold tax on outbound payments such as interest, royalties or dividends.

Figure 1 Example of international tax in the bricks and mortar economy

Source: Authors’ own representation
The resident country would provide relief from double-taxation, recognising that the source country had already taxed profits attributable to the permanent establishment and withheld tax on outbound payments. This double-taxation relief could be provided by either an exemption or credit. An exemption would enable the ultimate parent company to exclude from its taxable income in the resident country the profits of the permanent establishment that had already been taxed in the source country. A credit would enable the ultimate parent company to reduce its income tax in the resident country by the amount of income tax paid by the permanent establishment in the source country.

### 2.2 The rise of profit shifting and the race to the bottom

The approach to international CIT has come under strain as the activities of multinational companies have become more complex. Multinationals often divide their functions into separate, specialised affiliate companies, such as a manufacturing plant or a regional sales and marketing hub. These affiliate companies can be located in different intermediate countries to seek competitive advantages, such as the availability of skilled labour or proximity to large markets.

When affiliates of the same multinational transact with each other, they use a ‘transfer price’, which should be the same price as if they were unrelated businesses (the ‘arm’s length principle’). In practice the arm’s length principle can be difficult to apply. There is no single arm’s length price for a particular transaction, but a range that could be considered arm’s length. Sometimes it can be difficult to determine an appropriate arm’s length range, for example because there are no comparable transactions between unrelated parties that can be observed. This creates opportunities for multinationals to shift profits into countries that impose low or no CIT.

Over the last 30 years countries around the world have been reducing their CIT rates to attract and retain the activities of multinationals, a phenomenon known as the ‘race to the bottom’. This tax competition can be used to encourage multinationals to locate real economic activity in a country, such as labour-intensive manufacturing and services, which can have positive impacts on the economy. But some functions of multinationals are highly mobile and can be performed with limited real economic activity, such as intellectual property, branding and marketing. These ‘intangibles’ contribute a higher share of value to finished goods than they did 50 years ago, especially in the technology sector, and are particularly susceptible to tax competition. More profits of multinationals are now derived from intangibles located in low-tax intermediate countries, and fewer profits are recognised in source and resident countries that often have higher CIT rates. The OECD estimates that between $100 billion and $240 billion of tax revenue is lost each year to tax avoidance, equivalent to 4–10% of global CIT revenue.³

Box 1 Example of profit shifting using intangibles

A multinational locates its intellectual property in a subsidiary in a tax haven. Affiliated companies are charged a royalty by the intellectual property subsidiary for the right to use the multinationals’ brand name. The value of brand names is difficult to quantify and the subsidiary charges a particularly large royalty to a permanent establishment making sales under its brand name. The royalty reduces income tax paid in the source country because royalties are deductible from taxable income. A tax treaty between the source country and tax haven reduces the rate of withholding tax on royalties to zero, so the source country is unable to tax the outbound royalty payment. The profits that are shifted into the tax haven using the royalty are taxed at a very low rate. Using international tax planning, the multinational has reduced its income tax in the source country, avoided paying any withholding tax, and pays a very low tax rate on the profits shifted into the tax haven (Figure 2).

Figure 2 Example of profit shifting using intangibles

Source: Authors’ own representation
2.3 Challenges from the digital economy

The digitalisation of the economy has accelerated these trends and created new problems. Internet companies, such as digital marketplaces, search engines, social media and streaming services, are increasingly able to sell into countries in high volumes with little or no physical presence. This ‘scale without mass’ means that multinationals can generate revenues from consumers in source countries without forming a permanent establishment, and therefore without paying CIT in the source country.

Box 2 The ‘scale without mass’ problem

In the bricks and mortar economy a movie rental business would have loaned physical copies of movies from a network of stores. This would create a permanent establishment and the source country could tax the profits made on sales in its jurisdiction.

In the digital economy consumers can stream movies over the internet. Digital streaming companies charge rental fees or subscriptions and do not need stores or employees in a country to sell at volume to consumers. The business generates revenues and profits from consumers in a source country, but with no permanent establishment the source country is unable to tax those profits. The streaming company can locate its sales hub in a tax haven to pay low or no tax on its profits (Figure 3).

Figure 3 Example of international tax in the digital economy

Source: Authors’ own representation
In response to internet businesses being able to sell at scale into a source country with no permanent establishment, many countries have introduced unilateral ‘Digital Services Taxes’ (DSTs). These DSTs tax revenues of digital businesses attributed to the source country or define a form of digital permanent establishment that can be used to assert taxing rights over profits derived from source countries. These DSTs have become widespread, particularly in Europe and in populous countries that have many digital consumers but little or no corporate taxes paid by internet companies (Figure 4). The OECD has argued that DSTs could lead to trade and tax disputes, with negative effects on global gross domestic product (GDP), and that a multilateral approach could avoid this (OECD, 2020a).

**Figure 4** Prevalence of Digital Services Taxes

![Prevalence of Digital Services Taxes](image)

Source: KPMG (2021)

### 2.4 What was announced in the global deal?

The global deal attempts to address both scale without mass and the race to the bottom. As these are distinct issues the global deal includes two distinct solutions, known as ‘pillars’. Pillar One addresses the scale without mass problem by replacing unilateral DSTs with a multilateral system of new taxing rights for source countries on the largest multinationals regardless of physical presence. Pillar Two places a floor on the race to the bottom and addresses profit shifting issues that were not fully resolved in the first set of OECD BEPS Actions by introducing a global minimum tax of 15%. The combined effect of these two pillars will be to reallocate profits and taxing rights away from low-tax intermediate countries into source countries (Pillar One) and resident countries (Pillar Two) (Figure 5).
As we explain below, both pillars have deviated from these aims. Pillar One extends beyond digital businesses to include all consumer-facing businesses, while Pillar Two is unlikely to end the race to the bottom for real economic activity due to carve-outs based on employment and tangible assets.

**Figure 5** Reallocation of profits and taxing rights under the global deal

<table>
<thead>
<tr>
<th>Source country</th>
<th>Intermediate countries</th>
<th>Resident country</th>
</tr>
</thead>
<tbody>
<tr>
<td>High CIT</td>
<td>No CIT, low CIT or preferential regime</td>
<td>High CIT</td>
</tr>
<tr>
<td>Permanent establishment or subsidiary</td>
<td></td>
<td>Ultimate parent company</td>
</tr>
<tr>
<td>Internet sales with no permanent establishment</td>
<td>Manufacturing</td>
<td></td>
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<td></td>
<td>Intellectual property</td>
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<td></td>
<td>Sales</td>
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<td>Financing</td>
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**Pillar One**
New taxing rights for source countries over largest multinationals regardless of physical presence

**Pillar Two**
Global minimum tax of 15% usually imposed on ultimate parent company by resident country

Source: Authors’ own representation
3 Pillar One: new taxing rights for source countries

3.1 What was agreed under Pillar One?

Pillar One is a set of three proposals. The main proposal is new taxing rights for source countries on the largest multinationals regardless of physical presence, known as ‘Amount A’. The new taxing rights under Amount A will replace unilateral DSTs, with all 136 countries agreeing to remove DSTs whenAmount A is implemented. This is the most novel part of the Pillar One proposals as for the first time taxing rights over business profits will be allocated without reference to physical presence. However, this will be an adjunct to the system whereby only a portion of the profits of some of the very largest multinationals will be reallocated to source countries based on where revenues are generated. Most profits will continue to be accounted for under the current system based on permanent establishments.

The second component of Pillar One is a simplified approach to remuneration of baseline marketing and distribution activities based on the arm’s length principle (‘Amount B’). There are relatively few details on Amount B so far, with work on it due to be completed by the end of 2022. In theory, it could benefit lower-income countries by reducing some of the burden of transfer pricing audits and enforcement that can be resource-intensive and challenging for tax authorities. The OECD has not produced estimates of the revenue impacts due to data limitations and methodological challenges.

The final component of Pillar One is intended to provide tax certainty to multinationals. Those multinationals within the scope of Amount A will benefit from dispute prevention and resolution mechanisms. This is intended to avoid double taxation for Amount A, including all issues related to Amount A, such as transfer pricing and business profits disputes, in a mandatory and binding manner. This is controversial for some countries as it implies a loss of tax sovereignty. For example, the African Tax Administration Forum (ATAF) has publicly recognised the need to develop robust and effective tax dispute mechanisms, but does not support this being mandatory arbitration (ATAF, 2019). The deal provides for an elective binding dispute-resolution mechanism only for issues related to Amount A for some developing countries (OECD, 2021b).

3.2 Which companies will pay Amount A?

Amount A will only apply to multinationals with global revenues above €20 billion per year, although this could be reduced to €10 billion depending on the outcome of a review after seven years. The agreed global revenue threshold is more than 20 times higher than the €750 million proposed in the OECD Pillar One Blueprint (OECD, 2020b), and will significantly reduce the number of multinationals that will pay Amount A, from approximately 2,300 to just over 100.
(ATAF, 2021). Many notable internet businesses, such as Netflix, Uber and eBay, are currently below the €20 billion threshold and would therefore not pay Amount A.

The scope of Amount A extends beyond internet businesses (referred to as ‘automated digital services’ or ADSs) to include all consumer-facing businesses (CFBs). Although CFBs often operate with a physical presence in the countries they sell into, the OECD argues that digitalisation means they can engage with consumers in a meaningful way beyond having a local physical presence, and can thereby substantially improve the value of their products and increase their sales (OECD, 2020b). The current tax rules allow CFBs to earn residual profits from intangibles remotely and without a share of the value assigned to countries they sell into.

Regulated financial services and extractive industries are excluded from Amount A. In both these sectors multinationals are usually not able to operate in a country without a permanent establishment and so there is no problem of scale without mass. Excluding extractive industries will benefit lower-income countries that depend on revenues from natural resources, as it will ensure that taxes on profits will continue to be paid to the country that owns mineral resources. Had extractives been included in Amount A, some taxable income would have been reallocated to countries that import mineral resources, which would have been inconsistent with the principle that host countries as the owners of natural resources should be able to tax the profits from their extraction.

### 3.3 How much profit will be reallocated under Amount A?

For those multinationals that are within the scope of Amount A, only some of their global profits will be reallocated, referred to as ‘residual profits’. Residual profits are defined as profits above a 10% profit margin. For example, a business that generates €30 million profits on revenues of €100 million would have €20 million residual profits under Amount A, as the first €10 million profits would be below the 10% profit margin and not considered to be residual profits.

Under Amount A, only 25% of residual profits will be reallocated (OECD, 2021b). The OECD has stated that a minimum of $125 billion of global profits per year will be reallocated to source countries under Amount A. With a global average CIT rate of just under 24%, this implies reallocation of around $30 billion of CIT revenues between 136 countries.

### 3.4 How will Amount A be allocated between countries?

Residual profits will be reallocated between countries based on three factors: the ‘revenue sourcing’ rules, ‘nexus rules’ and approach to eliminating double taxation.

Revenue sourcing refers to how a multinational’s revenues will be sourced to the countries where goods and services are consumed. The detailed rules are still being developed and will vary for

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specific categories of transactions, but it is important to note that revenue sourcing for Amount A is different from where the multinational recognises revenue in its accounts. For example, a search engine multinational may record revenues from sales of advertising in a regional sales hub, but the revenue sourcing rules could allocate those revenues based on the countries in which users view the advertising.

Nexus rules determine whether a multinational sources sufficient revenue from a country for that country to qualify for an allocation of Amount A. For most countries, a multinational would need to source at least €1 million in revenues for it to receive an allocation. For smaller countries with GDP lower than €40 billion, the threshold is reduced to €250,000. This should ensure that smaller countries can still benefit from Amount A on the basis that a multinational may be sourcing a significant amount of revenue from the country relative to the size of the economy, even if the amount is small relative to the multinational’s overall revenues. The small country threshold will benefit low-income countries. The OECD has estimated that a €1 million threshold applied to the smallest 20% of countries – a group that includes some of the world’s poorest countries, such as Djibouti, Liberia and Sierra Leone – would have reduced the benefits of Amount A by between 13% and 61% on average for those countries (OECD, 2020a).

As Amount A can be due in countries where a multinational has no taxable entity, an overseas entity would need to pay Amount A on behalf of the multinational. The OECD has stated that the entity that will bear the liability will be drawn from those that earn residual profits (OECD, 2021b). And because Amount A is a reallocation of taxing rights rather than an additional tax on corporate profits, it requires relief from double taxation for the entities paying Amount A. This will be achieved by either an exemption or credit for the entity bearing the Amount A tax liability. For example, a multinational with an entity earning residual profits in Country A could use that entity to pay Amount A due in source countries B and C where it has no taxable entity. Country A could then provide relief from double taxation (Figure 6).

**Figure 6** Example payment of Amount A with relief from double taxation

![Figure 6](source: Authors’ own representation)
3.5 Who benefits from Amount A?

The OECD produced Pillar One estimates for a central scenario with a global revenue threshold of €750 million, underlining how high the €20 billion threshold is. With the lower €750 million threshold used and reallocation of 20% of residual profit (a 25% reallocation was not modelled) the main winners proportionally would be low-income countries, where current CIT revenues could increase by between 0.8% and 1.2%. Middle-income countries could see CIT revenues increase by 0.5% to 0.7%, while high-income countries could lose 0.1% in the low scenario, but potentially gain 0.5% in the high scenario.

It is not possible to determine how the €20 billion threshold would change these estimates as the OECD has not released the data. Multinationals’ profits are highly concentrated at the top, and the OECD does report that, with a €5 billion threshold, there would still be €405 billion of residual profit in scope. The higher threshold could also affect lower-income countries more than high-income countries if fewer regional multinationals meet the threshold. The largest African-listed multinational from an in-scope sector is MTN Group, a pan-African telecommunications provider. MTN Group has annual revenues of around €10 billion, half of the initial threshold. Lower-income countries in Latin America and Southeast Asia may also find that regional multinationals fall through the cracks.

The OECD also only compares Pillar One to current CIT revenues. However, the actual counterfactual should also include DSTs that have been implemented or announced, as these would have generated additional revenues but will be removed when Pillar One is implemented. DSTs could generate more revenues than Pillar One for some countries. For example, the Kenya Revenue Authority forecasts that its DST would raise 5 billion Kenyan shillings ($45 million) in revenue, equivalent to 1.5% of current corporate tax revenues. This is more than the estimated 0.5% to 0.7% of current CIT revenues for middle-income countries from Pillar One, although country-level results have not been released by the OECD. Kenya and Nigeria have both recently introduced DSTs and were among the four countries in the Inclusive Framework not to sign up to the agreement.

For reference, the OECD defines low-income countries to be roughly those with a gross national income (GNI) per capita of <$1,000, and high-income countries to be those with a GNI per capita of >$12,500. Using this definition, there are relatively few low-income countries (24), and most ‘developing’ countries would be in the middle-income category.

The lack of transparency around the OECD’s Impact Assessment has been criticised by Eden (2020). According to the OECD, 85% of residual profits for ADS firms are made by the top 10 firms, and 70% of profits for CFB firms are made by the top 50 firms.

Of course, there may be other factors in the debate between DSTs and Pillar One than just revenue. Turnover-based taxes are generally less efficient (Best et al., 2015), and the US has threatened trade retaliation against countries which continue to levy DSTs (OECD, 2020a).

See www.forbes.com/sites/taxnotes/2021/03/22/digital-services-taxes-may-be-difficult-to-remove/.
4 Pillar Two: a global minimum tax

4.1 What was agreed under Pillar Two?

There are two parts to Pillar Two that are intended to put a floor on the ‘race to the bottom’ and to address remaining issues of international tax avoidance. The first is a global minimum tax of 15%, that will be implemented under the ‘Global Anti-Base Erosion Rules’ (GloBE). The second part is a ‘Subject to Tax Rule’ (STTR), that would be incorporated into bilateral tax treaties.

4.2 How does the global minimum tax work?

The global minimum tax will apply to all multinationals with global revenues above €750 million. Some types of entity are outside the scope of the minimum tax, such as investment funds, pension funds, government entities and international organisations. Unlike Pillar One, all sectors are subject to the global minimum tax, including financial services and extractive industries. There are an estimated 8,000 multinational groups with global revenues above €750 million (OECD, 2020b), so the global minimum tax will apply to far more multinationals than the 100 or so largest multinationals that are within the scope of Pillar One.

Multinationals within the scope of Pillar Two will need to calculate the effective tax rate (ETR) they pay in each jurisdiction by dividing ‘covered taxes’ by the ‘GloBE tax base’. Covered taxes are any taxes on profits, including CIT, taxes on retained earnings or equity and taxes on distributed earnings. The GloBE tax base will be based on accounting standards but with some differences in allowable and non-allowable deductions and, as discussed below, will include ‘substance-based carve-outs’. This approach means the multinational must pay a minimum 15% ETR in every country it has an entity in. This is stricter than the United States’ Global Intangibles Low Tax Income (GILTI) rules for US-resident multinationals, as GILTI requires the multinational to prove they are paying a minimum 15% ETR globally, not in every country.

Where a multinational is paying less than the minimum ETR in a country, the GloBE rules assign first taxing rights on undertaxed income to the resident country. Under the ‘Income Inclusion Rule’ (IIR), the multinational’s ultimate parent company would pay a top-up tax in the resident country. If the ultimate parent company is in a country that has not implemented Pillar Two, the ‘Under Taxed Payments Rule’ (UTPR) would act as a backup, allowing countries where the multinational has subsidiaries to impose taxes on payments to the resident country so that the equivalent of the minimum tax is achieved. The allocation rules are complex and would require substantial coordination between countries, but the presence of the UTPR has helped the negotiation process. So long as enough major economies can credibly commit to adopting the UTPR, the benefits of not signing up to the proposals rapidly diminish.

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10 The global minimum tax will co-exist with the US GILTI rules. Around 6,200 multinationals would be covered under Pillar Two (OECD, 2020a).
4.3 Who benefits from the global minimum tax?

Estimating the impacts of the global minimum tax is complex. The revenue impacts can be broken down into ‘direct effects’ and ‘indirect effects’. Direct effects show what would happen if the rules were applied but multinationals and governments do not change their behaviour. Indirect effects include both the response from multinationals reducing profit shifting and investment, and from governments reducing tax exemptions and increasing CIT rates.

The direct effects, without any responses from multinationals or governments, mainly benefit resident countries that will gain first taxing rights under the IIR. As the ultimate parent companies of multinationals are often resident in high-income countries, the direct effects will mainly benefit high-income countries. The OECD estimates that direct effects could increase CIT revenues by between 2.2% and 4% in high-income countries, compared to between 1.0% and 1.8% in middle-income countries, and 1.2% to 2% in low-income countries (OECD, 2020a)."
4.4 How will multinationals respond to the global minimum tax?

There has never been a reform to global corporate tax on the scale of these OECD proposals, so predicting how multinationals will respond is difficult. There are two likely responses from multinationals. First, they could reduce profit shifting because the tax rate differential between higher-tax and lower-tax countries is reduced by the minimum tax. Second, they could reduce real investment as higher tax rates reduce the after-tax return on investment.

4.4.1 Will multinationals reduce profit shifting?

Without a global minimum tax, a multinational operating in a country with a 25% tax rate has a strong incentive to shift profits to a tax haven with a 0% tax rate as the tax rate differential is 25 percentage points (pp). With a global minimum tax of 15%, the same multinational can only reduce its effective tax rate (ETR) from 25% to 15%, a 10pp differential. The multinational still has an incentive to shift profits, but the financial benefits will be lower. Profit shifting comes at a cost – shell companies need to be set up, accountants and lawyers paid, and public-facing companies can face reputational damage. Multinationals will need to decide whether the benefits of profit shifting with the lower 10pp differential still exceed the costs of doing so.

The OECD estimates that low- and middle-income countries will gain relatively more when including the reduced profit shifting by multinationals. High-income countries would increase current CIT revenues by between 3.8% and 5.5%, middle-income countries by 2.0% and 3.0%, and low-income countries by 2.5% to 4.2%.

There are considerable uncertainties to these estimates. The OECD assumes that a 1pp increase in the tax rate differential between two countries will lead to an increase in the rate of profit shifting by 1%. However, evidence suggests that profit shifting is two to three times more intense for lower-income countries than for high-income countries for a given tax rate differential differential (Fuest and Riedel, 2010; Johannesen et al., 2020), as tax administrations in lower-income countries tend to have weaker defences against profit shifting.

The OECD’s model also assumes that the amount of profit shifting increases linearly with the tax rate differential. It assumes that a 10pp increase in the tax rate differential from 0% to 10% leads to a 10% increase in profit shifting, and an additional 10pp increase from 10% to 20% results in a further 10% increase in profit shifting. However, profit shifting could be non-linear. As the tax rate differential increases from 0, multinationals increase profit shifting substantially. Once the tax rate differential is already high, multinationals may have shifted all of the profits that they are able to, and may not be able to increase profit shifting by much in response to a further increase in the

12 This is close to the midpoint of estimates in the literature (Beer et al., 2018) that assume a linear tax-shifting model.
differential. This is shown in Figure 8. In both diagrams, it is assumed that a tax haven country has a 0% CIT rate, and the non-haven country a tax rate of 25%. The effect of the 15% minimum tax would be to reduce the tax rate differential from 25pp to 10pp.

**Figure 8** Linear versus non-linear models of profit shifting

![Figure 8: Linear versus non-linear models of profit shifting](image_url)

- **Linear profit shifting**
- **Non-linear profit shifting**

Source: Authors' own representation
Research has found that tax avoidance in the real world looks more like the non-linear model than the OECD’s linear model (Dowd et al., 2017; Garcia-Bernardo and Jansky, 2021). This means the OECD forecasts are likely to substantially overestimate revenue gains for lower-income countries. This intuitively makes sense considering only large multinationals, with operations across many countries and complex ownership structures, have the capacity to shift profits. For example, the 10 largest foreign-owned subsidiaries operating in South Africa accounted for 50% of estimated tax avoidance in the country (Wier and Reynolds, 2018). The millions of dollars these large companies could save in taxes from just a 1pp reduction in the tax rate differential are likely to dwarf the cost of hiring lawyers and accountants to run the tax avoidance scheme.

Tax avoidance may also be a one-way street. Many of the costs associated with running an international tax avoidance scheme – reorganising corporate structure, setting up shell companies, moving intellectual property – have already been incurred as a one-off investment. Decreasing the tax rate differential now may deter some multinationals from setting up new tax avoidance schemes (even under a non-linear world), but for multinationals with tax avoidance structures already in place, it may make financial sense to continue to operate these, even if the financial gains are lower due to the minimum tax.

The response of multinationals to the global minimum tax is crucial for governments in lower-income countries because they are unlikely to benefit much from the direct effects. Lower-income countries are reliant on multinationals deciding that the benefits of profit shifting with a 15% global minimum tax, relative to paying a statutory rate of between 20% and 30% in the lower-income country, no longer exceed the costs of tax avoidance. There is not enough evidence to accurately say so, but the OECD probably overstates the indirect revenue benefits.

4.4.2 Will multinationals reduce real economic activity?

The global minimum tax means multinationals will face a higher ETR. This could have negative economic consequences if multinationals respond by reducing investment and wages or increasing prices. The OECD estimates that Pillar Two will only increase average ETRs by 0.4pp, which is small relative to the global average CIT rate of 24% (Hanappi and González Cabral, 2020). The impact on global investment is therefore expected to be relatively muted.

13 The OECD does present results from a non-linear model and finds that, for a 15% minimum rate, the increase in global revenues is exactly the same as for a linear model. However, it does not present breakdowns based on country groupings, even though the main effect of switching models from a non-linear to a linear model would be a redistribution from low-income countries to high-income countries (multinationals would probably book profits at the 15% rate in high-income countries, as most existing tax havens are in high-income countries, or if firms book profits in a country at a rate below 15%, then the high-income parent country would have IIR taxing rights). The OECD also is not transparent on what type of non-linear model it uses.

14 Tax avoidance is measured by the difference between the profitability of firms with parents in non-haven countries relative to haven countries.

15 This number is GDP-weighted, but it does not vary substantially between multinationals based in high-income countries, and multinationals based in low- and middle-income countries.
However, the OECD only presents an average increase in ETRs for all firms above the €750 million threshold. Profit shifting is heavily concentrated in the largest and most profitable multinationals, which is hidden by a simple average. For the largest multinationals, it would be hoped that their ETRs increase by far more than 0.4pp, otherwise the OECD’s main finding of a 3% to 5% increase in CIT revenues due to Pillar Two seems implausible.

On the other hand, the OECD argues that the largest and most profitable multinationals are the least sensitive, in terms of real activity, to changes in the ETR. The OECD also does not model the effects of convergence in tax rates between countries and between domestic and multinational companies that could lead to a better allocation of resources and an increase in real economic activity.

4.5 How will governments respond to the global minimum tax?

Forecasting how governments will respond to the global minimum tax is even more difficult. Tax havens with ETRs below 15% have a strong incentive to increase their tax rates to 15%. If they do not, another country would get to tax the profits arising in their country using the GloBE rules. This response is important for the distribution of revenues between tax havens and (the usually high-income) countries where multinationals are resident. If tax havens do not increase their tax rates, resident countries gain revenues. If tax havens increase their ETRs to 15%, resident countries would not gain revenues. The OECD assumed that half of tax havens would increase their ETRs to 15%. In hindsight, this could have been a slight underestimate – all of the countries that the OECD has termed an ‘investment hub’ have signed up to the proposals. 16

For lower-income countries, the key government response is how they deal with tax incentives and exemptions. While statutory CIT rates are higher on average in lower-income countries, these incentives can reduce ETRs significantly and mean that some multinationals have an ETR below the minimum rate. In a sample of nine low- and middle-income countries that the TaxDev project has access to micro-data on, between 7% and 87% of firms in the top percentile of firm size (many of which are likely to be multinationals) have an ETR less than 15%, with a median of 23% of firms.

The global minimum tax would mean that undertaxed profits in lower-income countries due to tax incentives would be taxed in the multinational’s resident country, usually a high-income country. Despite evidence to suggest that tax incentives are often expensive and ineffective (Abramovsky et al., 2014), and a near-consensus among economists, the use of tax incentives remains stubbornly common in lower-income countries. Even where the political will to remove incentives exists, many lower-income countries will have their hands tied by contractual agreements between investors and states. These investor–state agreements often contain ‘stabilisation clauses’ preventing governments from increasing taxes on investors. The Inclusive Framework

16 This likely reflects the fact that investment hubs have a strong incentive to sign up to the proposals, as the UTPR means that multinationals resident in these low-tax countries will be taxed anyway.
should consider how to support lower-income countries with substantial tax exemptions with a multilateral approach, so that they are not trapped between a rock and a hard place – having high-income countries collect taxes under Pillar Two on profits arising in their countries, or facing international arbitration from investors if they attempt to remove incentives.

4.6 The impact of substance-based carve-outs

The minimum tax rate of 15% could be far lower than 15% in practice due to substance-based carve-outs. These carve-outs are intended to exclude returns from real economic activity in a country performed by employees or using tangible assets (such as equipment and machinery), as these factors are expected to be less mobile and less likely to lead to tax-induced distortions. This focuses the global minimum tax on ‘excess income’ from intangibles that are more susceptible to tax avoidance. The carve-outs will allow a multinational to exclude from its income used to calculate the ETR 5% of payroll costs and 5% of the carrying value of tangible assets.\(^{17}\)

The carve-outs limit the effectiveness of the global minimum tax at reducing tax competition and ending the race to the bottom, at least for ‘real’ economic activity. Multinationals with significant payroll and assets in a country can continue to pay far below the 15% global minimum tax, and countries can continue to compete using low tax rates or preferential regimes for these activities.

The carve-outs might also create a new profit-shifting loophole. Multinationals that benefit from large carve-outs in a country could have headroom against the minimum tax rate. That headroom could be used to shift more profits into the country that would be taxed at an ETR below the minimum rate. This would mean the pattern of profit shifting changes rather than reduces, with multinationals likely increasing profit shifting into low-tax countries (such as the Netherlands, Singapore, Poland and Hungary) where they already have their headquarters or manufacturing hubs and can use large substance-based carve-outs.

The tangible asset carve-out could be particularly prone to abuse, as multinationals can inflate the value of tangible assets by purchasing them from affiliates or by capitalising excessive interest on related-party loans into asset values. This is similar to the current problems of transfer pricing, where related parties pay market price for assets that have already been used by an affiliate so that the multinational benefits twice from depreciation deductions, or where tax authorities find it difficult to assess the value of firm-specific assets that do not have a market price and are not regularly sold.

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17 The carve-out rate will initially be 8% for tangible assets and 10% for payroll, and will taper over 10 years to 5% for both (OECD, 2021b). The rate is lower than previously expected. The OECD modelled a rate of 10% in the impact assessment.
Box 3 How substance-based carve-outs can reduce the ETR below 15% and lead to further profit shifting

A multinational has a subsidiary in Country A with a 10% statutory CIT rate. The subsidiary pays €10 million in taxes on profits of €100 million. This gives an ETR of 10%, below the global minimum tax rate of 15%. However, the subsidiary has payroll costs of €200 million and tangible assets worth €1 billion in Country A. The multinational uses substance-based carve-outs to reduce its GloBE profits by €10 million for its payroll (5% of €200 million) and €50 million for its tangible assets (5% of €1 billion). The profits used to calculate the ETR under the global minimum tax are reduced from €100 million to €40 million. The €10 million taxes paid now meet the requirement for a minimum 15% ETR on GloBE profits of €40 million after carve-outs.

The multinational realises that, after carve-outs, the ETR measured on a Pillar Two basis is 25%, and it therefore has headroom to shift profits into Country A. Profits shifted into Country A would be taxed at the 10% statutory rate, below the 15% global minimum. Provided the ETR after carve-outs remains above 15%, it is compliant with the global minimum tax and no top-up tax is imposed under the IIR. It uses intangibles to shift €60 million of profits into Country A and pays €6 million of tax on those profits at the 10% statutory rate. It now pays €16 million of tax on GloBE profits of €100 million (the original €40 million GloBE profits plus the €60 million shifted with intangibles). The ETR for Pillar Two is now 16%, still above the minimum rate, even though the shifted profits are taxed at only 10%.

Even without carve-outs, tax avoidance could continue with multinationals finding new ways to exploit the GloBE rules. The ultimate parent company is responsible for calculating the ETR in every country it has operations in. This requires constructing covered taxes and GloBE profits from operations in countries with different taxes and accounting standards. Tax havens could move from competing on tax rates to competing to find loopholes in the definitions of covered taxes and GloBE tax bases. The OECD will likely have to update continuously the GloBE rules to ensure they remain effective.

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18 A wage bill double that of profits is in line with the fact that the labour share of production is around 70% in high-income economies (ILO et al., 2015).

19 This assumes a 10% return on (tangible) capital employed, which is roughly the level of the return on capital employed for UK manufacturing firms (ONS, 2020).

20 As a simplification rule, the ETR calculation only has to be done for jurisdictions in which the multinational has made more than €10 million in revenue and €1 million in profits.
4.7 The Subject to Tax Rule

The Subject to Tax Rule (STTR) can be used when a subsidiary of a multinational makes payments of royalties, interest and other high-risk payments to an affiliate that pays taxes below the STTR minimum rate. The STTR minimum rate will be 9% (OECD, 2021b). The STTR will enable the tax authority in the source country to tax the outbound payment at a rate up to the difference between the STTR minimum rate and the nominal tax rate paid in the recipient country. Figure 9 shows how the STTR could be used to tackle profit shifting from royalty payments into a tax haven where a tax treaty reduces the rate of withholding tax to zero.

Importantly, the STTR applies before the other Pillar Two rules, and can be used even if the ETR in the country using the STTR is above 15%. It is therefore an opportunity for lower-income countries to gain revenues without relying on behavioural responses. While Pillar Two generally moves taxing rights toward high-income countries where multinationals are resident, the STTR allocates some taxing rights to capital-importing source countries for a specific channel of profit shifting using high-risk payments. Within the OECD negotiations, lower-income countries have been keen to gain additional taxing rights under the STTR, especially given the legacy of perceived unequal double tax treaties (Hearson, 2020).

Figure 9 Example use of the STTR to address profit shifting

Source: Authors’ own representation
There are some caveats to the STTR. The OECD suggests that existing withholding taxes on outbound payments would count towards the STTR rate (OECD, 2020c). This narrows applicability to instances where a high-risk payment is made to an affiliate in a low-tax country and the existing withholding tax rate plus the tax rate in the recipient country combined are below the STTR minimum rate. Between 40% and 60% of lower-income countries do not have any double taxation treaties with withholding tax rates on interest or royalties below the 9% STTR rate.\(^1\) The agreement also does not specify whether other ‘high-risk’ payments, such as management fees and technical service fees,\(^2\) will be included within the scope of the STTR.

The STTR will also depend on the capacity of tax authorities in source countries. It needs to be implemented through tax treaties, which could potentially limit its application, although all 136 countries in the global deal have agreed to amend bilateral treaties with developing countries if the developing country requests it. Even then, the tax authority in the source country will need to identify whether an outbound payment is eligible (e.g. of a type covered by the STTR and made to an affiliate company), and whether the tax rate applied in the recipient country is below the STTR minimum rate, requiring cooperation between tax authorities in different countries.

The OECD did not produce estimates of the revenue impacts of the STTR, and a lack of data makes it difficult to quantify high-risk payments between affiliates. It’s therefore not yet clear whether the STTR will genuinely help lower-income countries to tackle profit shifting and increase tax revenues.

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1. Data from the ICTD’s Tax Treaty Explorer.
2. Withholding tax rates on technical service fees are often below the 7.5% to 9% STTR minimum rate.
5 Conclusions: three things lower-income countries can do

5.1 Three things lower-income countries can do to benefit from the global deal

The benefits for lower-income countries from the global deal are highly uncertain. They may gain far less than the OECD estimates of between 3% and 5% of current CIT revenue. For some lower-income countries, DSTs could raise more revenue than Pillar One, albeit with an increased risk of retaliatory measures. Lower-income countries are unlikely to see much additional revenue from the global minimum tax as the direct benefits will go to high-income countries where multinationals are resident, and substance-based carve-outs will mean ETRs below 15% will continue to be possible. There are three things that lower-income countries can do to increase their benefits from the reforms.

5.1.1 Avoid taxing subsidiaries of multinationals below 15%

Taxing multinationals at an ETR below 15%, or below a carved-out 15%, means that high-income countries will be able to apply the IIR to tax profits sourced from lower-income countries. Lower-income countries could remove tax incentives and exemptions to ensure they don’t cede taxing rights to high-income countries where not constrained by investor–state agreements. The Inclusive Framework can also consider how best to update investor–state agreements to reflect the new reality of the global minimum tax, using a multilateral approach that does not expose lower-income countries to international arbitration.

5.1.2 Use the Subject to Tax Rule to tackle profit shifting

Overall, Pillar Two gives taxing rights to higher-income countries, and lower-income countries are reliant on companies reducing profit shifting in response to the Pillar Two rules, which is highly uncertain. The STTR is the only part of Pillar Two which directly gives taxing rights to lower-income countries. Lower-income countries need to develop the taxing capacity to maximise the STTR’s benefits.

5.1.3 Continue to build capacity to tackle base erosion and profit shifting

While the global deal is undoubtedly a major reform, it does not fundamentally change the current system of global corporate taxes as other proposals, such as global formulary apportionment.  

See, for example, https://voxeu.org/article/understanding-destination-based-approach-business-taxation.
or a destination-based cash-flow tax\textsuperscript{24} would have done. Pillar One is an adjunct that reallocates only some residual profits of the very largest multinationals. Most global profits for the majority of multinationals will continue to be allocated based on existing concepts of residency, with transfer pricing used for transactions between related parties. Pillar Two will not result in all multinationals paying a minimum 15% rate in all countries because of substance-based carve-outs. Tax competition and profit shifting are likely to continue, and any additional corporate tax revenue is likely to be fairly low, especially for lower-income countries.

Lower-income countries already lose more revenue from tax avoidance than high-income countries in relative terms, likely due to weaker regulations and lower administrative capacity. Lower-income countries will therefore need to continue to invest resources and build capacity to tackle tax avoidance. Although it has been somewhat overshadowed by the recent global deal, the original BEPS process launched in 2015 resulted in a number of action items that lower-income countries can implement (OECD, 2014). For example, better transfer pricing rules and audit capacity are a high priority for lower-income countries, and investment in transfer pricing capacity have been shown to have benefit–cost ratios of between 10:1 and 100:1 in sub-Saharan Africa (Moore and Prichard, 2017).

\textbf{5.2 Final thoughts for lower-income countries}

The negotiations have not delivered everything that lower-income countries were looking for. The £20 billion threshold for Amount A is far higher than was originally set out, and the 25% profit reallocation is lower than hoped. This will directly reduce the transfer of revenue from the mostly high-income countries where multinationals are headquartered, to lower-income countries where they are not.

There remains little chance of the 15% Pillar Two minimum rate being increased in the near-future. The July announcement was for a minimum tax of ‘at least’ 15% (OECD 2021a), but the October announcement is for a 15% rate only (OECD, 2021b), suggesting for many countries this is now viewed as a final settlement. Lower-income countries depend on multinationals deciding that the tax rate differential is too small to shift further profits. At 15%, it is likely that many multinationals will conclude that the benefits of profit shifting continue to outweigh the costs. ATAF had been pushing for a rate of at least 20% (ATAF, 2021).

The rules are set to be reviewed regularly. Lower-income countries may accept the deal as it stands now, but could push in the long term to make the terms more favourable. If revenue increases are smaller than the OECD’s already low revenue forecasts, this may strengthen the case for amendment. But given the time and effort going into the current deal, we’re unlikely to see changes any time soon.

\textsuperscript{24} See, for example, www.nber.org/papers/w23881.


