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Comparing Proposals to Tax Some Profit in the Market Country

This article compares and contrasts three specific proposals that allocate taxing rights to market countries: (i) the OECD's "Unified Approach" (Pillar One); (ii) the United Nations' "Article 12B"; and (iii) Devereux et al.'s "residual profit allocation by income". The article aims to identify the similarities and differences between these proposals and their consequent strengths and weaknesses. More specifically, it has two objectives. First, it aims to identify the strengths and weaknesses that are particular to each proposal, distinguishing between features that are inherent to each proposal (that cannot be altered without altering its fundamental nature) and those that are not inherent (that can be altered without altering its fundamental nature). This lays the foundations for the second objective: to show how these proposals can be improved by drawing on the most useful features of each other, or how alternative proposals can be designed by combining these features.

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1. Introduction

A primary function of the international tax system is to allocate taxing rights over business profits among countries. Politically sensitive and economically consequential, the fundamentals of the current allocation methods have been largely fixed for a century. Recently, however, several proposals have been made to alter them. The common feature of these proposals is that they all seek to increase the taxing rights of the market country. The authors define the market country broadly as the location of either the direct or indirect purchaser (either a business or an individual) of a good or service, or of the user of certain digital platforms.[1] They identify where there is an important distinction between these concepts and what they imply for the location of a market.

This article aims to compare and contrast three specific proposals. The most well-known and most detailed of these proposals for reform is the OECD's "Unified Approach", or "Pillar One", which was agreed on by 132 members of the Inclusive Framework (IF) in July 2021.[2] At the time of writing, the most extensive version of this proposal was published in October 2020 and had 230 pages, but the brief statement released in July 2021 announcing the agreement (July 2021 Statement) included some notable changes.[3] The July 2021 Statement only set out the agreement on the headline points, with many technical details (including on issues discussed in this article) still to be resolved. The second proposal is a new article 12B

1. Users of certain digital platforms, such as social media platforms, search engines and online marketplaces, are thought to create value for the businesses operating these platforms through their engagement and active contribution. *See*, for example, the discussion in UK: Her Majesty's Treasury, *Corporate tax and the digital economy: position paper* (2017); and UK: Her Majesty's Treasury, *Corporate tax and the digital economy: position paper update* (2018) [hereinafter UK Updated Position Paper], both available at https://www.gov.uk/government/consultations/corporate-tax-and-the-digital-economy-position-paper (accessed 26 Aug. 2021).
2. This proposal combines and supersedes three proposals in a broadly similar way put forward by the United States (the "Marketing Intangibles" proposal), the United Kingdom (the "User Participation" proposal) and the G24 (the "Significant Economic Presence" proposal).
3. OECD, *Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint* (OECD 2020) [hereinafter Pillar One Blueprint]; and OECD, *Statement on a Two-Pillar Solution to Address the Tax Challenges Arising From the Digitalisation of the Economy* (OECD 2021).

of the UN Model Double Taxation Convention for Developed and Developing Countries (UN Model), which was approved in April 2021 by the UN Committee of Experts on International Cooperation in Tax Matters, together with an accompanying commentary.[4] The third proposal discussed in detail in this article is the "residual profit allocation by income" proposal (RPAI), as envisaged by Devereux et al.[5]

These proposals are not exclusive: a number of other proposals have also been made, as well as several variants of these, including proposals similar to those considered as part of the Inclusive Framework discussions[6] or the UN proposal,[7] as well as proposals that reform the system more comprehensively.[8] However, focusing on these three proposals allows for the identification of the key issues that arise in respect of moving taxing rights in the direction of the market. The authors refer to other proposals when useful. In addition, digital services tax (DST) will be referred to throughout as a useful point in the discussion, particularly as the various proposals that are currently being considered are partly intended to overcome the perceived downsides of DST.

While the proposals are broadly similar in what they seek to achieve, they differ – quite significantly – in why and how they seek to achieve it. This article addresses primarily the latter question. It largely disregards the different rationales spurring and the principles guiding these proposals.[9] Instead, it focuses on the proposals' design. In this regard, the three proposals have similar features, but they also differ significantly, including in respect of their mechanisms, their interaction with the existing system and their implementation. These differences in design revolve around two issues that are at the heart of the three proposals (and any other proposals that have the objective of reallocating taxing rights to

4. United Nations Committee of Experts on International Cooperation in Tax Matters, Twenty-second Session, *Tax consequences of the digitalized economy – issues of relevance for developing countries: Co-Ordinator's Report*, E/C.18/2021/CRP .1 (19-28 Apr. 2021) [hereinafter Article 12B]. Although Article 12B has been approved, the authors refer to it as a proposal in this article.
5. M. Devereux et al., *Residual Profit Allocation by Income*, Oxford University Centre for Business Taxation Working Paper WP19/01 (2019); and M. Devereux et al., *Taxing Profit in a Global Economy* (Oxford University Press 2021).
6. J. Becker, J. Englisch & D. Schanz, *A SURE way of taxing the digital economy*, 93 Tax Notes International 3, p. 309 (2019); P. Hongler & P. Pistone, *Blueprints for a New PE Nexus to Tax Business Income in the Era of the Digital Economy* (2015), Journal Articles & Opinion Pieces IBFD; M. Graetz, *A Major Simplification of the OECD's Pillar 1 Proposal*, Tax Notes Federal 170, p. 213 (2021); and I. Grinberg, "*Design of scope limitations for OECD Pillar 1 work*, 98 Tax Notes International, pp. 1221-1234 (2020).
7. Y. Brauner & A. Baez, *Withholding Taxes in the Service of BEPS Action 1: Address the Tax Challenges of the Digital Economy* (2015), Journal Articles & Opinion Pieces IBFD.
8. *See*, for example, R.S. Avi-Yonah, K.A. Clausing & M.C. Durst, *Allocating Business Profits for Tax Purposes: A Proposal to Adopt a Formulary Profit Split*, 9 Florida Tax Review 5, pp. 497-553 (2009); H. Luckhaupt, M. Overesch & U. Schreiber, *The OECD Approach to Transfer Pricing: A Critical Assessment and Proposal*, in *Fundamentals of Transfer Pricing in Law and Economics* pp. 91-121 (W. Schön & K. Konrad eds., Springer 2012); and U. Schreiber & L.M. Fell, *International Profit Allocation, Intangibles, and Sales-Based Transactional Profit Split*, 9 World Tax J. 1, pp. 1-18 (2017), Journal Articles & Opinion Pieces IBFD.
9. Stated rationales vary. Some purport to identify the "value" created in the country of the market (or, more specifically, of the user), which is claimed as being inadequately taxed under the existing system, especially in the context of a digitalized economy. Different concepts of fairness have been used to justify a reallocation of taxing rights, although it is possible that such justifications are ad hoc rationales for increasing the taxing rights of certain countries. A different view is that allocating taxing rights to market countries is justified by the more prosaic rationale that there are benefits in allocating taxing rights to locations where relatively immobile factors, such as consumers and users, are located. *See* Devereux et al. (2021), *supra* n. 5.

market countries): (i) the allocation of primary taxing rights to the market country; and (ii) the possible consequent adjustment of taxing rights in other countries.[10]

By examining these three proposals side by side, this article aims to identify their similarities and differences and their consequent strengths and weaknesses. More specifically, this article has two objectives. First, it aims to identify the strengths and weaknesses that are particular to each proposal, distinguishing between features that are inherent to each proposal (that cannot be altered without altering its fundamental nature) and those that are not inherent (that can be altered without altering its fundamental nature). This lays the foundations for the second objective: to show how these proposals can be improved by drawing on the most useful features of each other, or how alternative proposals can be designed by combining these features.

The article proceeds as follows. Section 2. addresses some preliminary issues. It introduces the notion of "market" countries in more detail, briefly describes the three proposals and sets out the evaluative criteria used for assessing their strengths and weaknesses. It also considers the strengths, weaknesses and trade-offs of seeking reform on a unilateral, bilateral or multilateral basis. Finally, it briefly raises the question of the extent to which juridical double taxation (namely, double taxation that occurs when two jurisdictions seek to tax the same income of one person) is problematic. Section 3. analyses the allocation of taxing rights to market countries in more detail, including how much is to be taxed in these countries, the base that is used to calculate the amount and how the tax is collected. Section 4. analyses whether – and, if so, how – the different proposals prevent the double taxation of profit by adjusting some of the current methods of allocation of taxing rights. Sections 3. and 4. also apply the criteria set out in section 2. to these respective features of the proposals. Section 5. considers the ways in which these proposals can be improved or new approaches developed by combining different aspects of the proposals. Section 6. concludes.

2. Preliminary Matters

In this section, the authors very briefly summarize the three proposals discussed in this article.[11] They then set out and briefly discuss two important dimensions on which they differ: (i) how they seek to define the market country; and (ii) whether the proposals could be – or are intended to be – implemented on a unilateral basis, as part of a bilateral tax treaty with a multilateral approach. They briefly set out the criteria by which they propose to evaluate the three proposals and related options and, finally, question the view that juridical double taxation is necessarily problematic.

10. Under public international law, countries have the right to tax profit if they have a sufficient nexus with the person who earns the profit or the activity that generates it. In this sense, market countries already have a right to tax business profit. However, they are not allocated taxing rights over business profit under the existing system. Technically, this is because they have already agreed to cede primary taxing rights under the treaty or forego them under domestic law. In a strict sense, therefore, these proposals do not "create new taxing rights for market countries", but the authors use this and similar phrases in this article to mean that they adjust the allocation of primary taxing rights in favour of market countries.
11. The discussion on the precise form of the Pillar One proposal is ongoing, and the precise form of the Pillar One proposal may change.

2.1. The three proposals

2.1.1. The OECD's Unified Approach (Pillar One)

The Pillar One Blueprint, published in October 2020 (subject to the changes announced in the July 2021 Statement) is, by far, the most detailed of the proposals discussed in this article. The current proposal would apply only to multinational enterprises (MNEs) with global turnover above EUR 20 billion and profitability above 10%.[12] The proposal would modify the existing international tax system by adding a new taxing right to market countries. The taxing right would be based on a portion of the deemed "residual" (or non-routine) profit that is regarded as arising from the "sustained and significant" participation of the MNE concerned in market countries. The amount of the allocable profit is determined based on the consolidated financial statements of the MNE group and based on a profitability metric that deducts a fixed – and rather arbitrary – proportion of gross revenues (10%) to reward the group for its "routine" activities and further divides the remaining residual profit into the portion allocable to market countries (20%-30%) and the portion deemed to be allocable to other factors (such as capital and risk).[13] The amount allocable to market countries is referred to as "Amount A". This is divided among market countries based on the proportion of revenues that are deemed to be sourced in any particular state. Depending on the nature of the good or service being sold, the "market" may be interpreted as either the location of the direct or indirect purchaser of the good or service or the location of the user.

As the new taxing right is designed to operate alongside the existing rules on income allocation based on the arm's length principle (ALP), this proposal also seeks to make an adjustment to the existing allocation methods to ensure that the new Amount A is not taxed twice. This would be based on identifying an entity in which residual profit is deemed to be allocated under the existing system and that has sufficient taxable capacity. Priority would be given to entities that have some connection to the market itself.

The proposal also includes a package of measures that are designed to improve the prevention and resolution of disputes (both in respect of the new taxing right and the existing system).[14] The proposal also includes measures that would introduce a fixed return for certain baseline marketing and distribution activities, although these measures are not discussed further in this article.

12. The July 2021 Statement explains that the turnover threshold is to be reduced to EUR 10 billion, contingent on successful implementation (including of tax certainty regarding Amount A), with the relevant review beginning 7 years after the agreement comes into force and being completed within no more than 1 year. Extractive and regulated financial services are excluded from the scope of Pillar One. An empirical assessment of the consequences of alternative scoping rules for Pillar One is provided by M. Devereux & M. Simmler, *Who will pay Amount A?*, EconPol Policy Brief 36 (2021), available at https://www.econpol.eu/publications/policy_brief_36 (accessed 29 Aug. 2021).
13. The Pillar One Blueprint, *supra* n. 3, at p. 141, footnote 109, states: "At the level of a group or segment, the term 'residual profit' for Amount A purposes refers to profit in excess of an agreed profitability threshold … . This differs from the transfer pricing concept of 'residual profits', which are the profits (or losses) that remain after remunerating activities that can be reliably benchmarked using comparables". In this article, the term "residual" is used broadly.
14. It is intended that the removal of unilateral measures, such as digital service tax DST), is a pre-condition for any agreement to this proposal.

2.1.2. The United Nations' Article 12B proposal

The United Nations' proposal is for a new article 12B to be inserted into tax treaties. The new provision would apply to cross-border payments from automated digital services (ADS) (as defined in the OECD's Unified Approach work). There are three main elements of the UN proposal.

First, article 12B would permit the source state from withholding tax on payments from ADS (except for when those payments already qualify as royalties or fees for technical services under article 12 or 12A of the UN Model). Note that, in this case, the source state is the state of the (direct) purchaser from which the payment is made, which may not be the state where an indirect purchaser or user resides. The rate of any withholding tax would be negotiated bilaterally with treaty partners, although the draft recommends what it regards as a modest rate of 3%-4% of the gross amount.[15]

Second, an alternative net basis of taxation may apply in the source state at the request of the owner of the relevant ADS income. This works on the basis of the profitability ratio (relevant annual profits divided by annual revenue) of that owner's ADS segment (or group accounts, if there is no segment data) being applied to the gross revenue arising in the source state, with 30% of the resulting net profits being treated as the profits that are taxable in that state. Third, there is an exclusion from the new allocation of taxing rights under article 12B when the relevant ADS income is attributable to a permanent establishment (PE) in the source state.

The UN proposal does not address whether and how credit would be given by the country of residence of the recipient of the payment in any detail. Existing rules concerning credit given for withholding taxes would, presumably, apply.

2.1.3. Devereux et al.'s residual profit allocation by income

The RPAI, proposed by Devereux et al., is part of a family of residual profit allocation (RPA) schemes that are based on dividing profit into "routine" and "residual" components and allocating different taxing rights for those two components. Unlike Pillar One, the RPAI aims to allocate all residual profit to the market countries. It also aims to do so for all MNEs above a *de minimis* (rather than very high) threshold. An important RPA scheme proposed by Avi-Yonah, Clausing and Durst follows the same approach as Pillar One by defining the residual profit in an arbitrary way with a fixed mark-up and apportions it to market countries based on sales.[16] Unlike these schemes, the RPAI would use existing transfer pricing techniques, such as the cost-plus method, to identify routine[17] (and, therefore, also resid-

15. Article 12B, *supra* n. 4, at Commentary, para 15. Para. 16 of the Commentary considers various factors that should be taken into account when setting the rate.
16. An important option, first proposed by Avi-Yonah, Clausing & Durst, *supra* n. 8, calculates routine profit through a fixed mark-up over costs and apportions residual profit to the market country entirely based on sales.
17. Under residual profit allocation by income (RPAI), "routine" profit is defined as the profit a third party would expect to earn for performing a particular set of functions or activities essentially on an outsourcing basis (*see* Devereux et al. (2021), *supra* n. 5, at p. 201). While the RPAI departs from the arm's length principle in many ways, the routine profit is measured following existing transfer pricing techniques, such as cost-plus, that rely on public, third-party comparable outsourcing data.

ual) profit.[18] Residual profit would then be allocated based on the “residual gross income”, defined below.

As a consequence, the RPAI also differs in how it would be administered. Unlike Pillar One and other RPA schemes, it would not start by apportioning the total residual profit (or gross revenue). Instead, it would take a “bottom-up” approach. In a first step, all business functions and activities within a multinational business (research and development (R&D) activities, manufacturing activities, general and administrative activities, sales and marketing activities, etc.) would be allocated a routine profit and taxed in the countries where these functions and activities are performed. In a second step, the residual profit would be calculated in each market country as the sales minus the costs of sales, including any routine profit associated with these costs. Any costs that cannot be attributed directly to the sales in a particular country would be apportioned to market countries on the basis of the residual gross income (the income in each country before such non-attributable costs are deducted). Because the first step aims to allocate only routine profit to countries where functions and activities take place, there is no need for the residual profit allocated to market countries to be subsequently deducted from profit elsewhere.

2.1.4. Digital services tax

DSTs will be used as a reference point in this discussion. DSTs have been proposed and enacted on a unilateral basis and vary (sometimes significantly) from jurisdiction to jurisdiction. A DST typically seeks to tax in the market (often the country of the user and not that of the consumer) the gross revenues arising from certain digital business (such as those selling digital advertising space or data provided by users or providing digital intermediation activities). Concerns have been expressed that a proliferation of unilateral DSTs would lead to a decrease in tax certainty, excessive compliance burdens, double taxation and high tax burdens on loss-making businesses. There is also a real danger that the United States – and perhaps other countries opposed to DST – could respond with retaliatory trade measures. The OECD has sought support for Pillar One by emphasizing that failure to reach agreement on this proposal could lead to uncoordinated and unilateral measures, including DST, which it estimates, in the “worst-case scenario”, could lead to a reduction of global gross domestic product by more than 1%.[19]

2.2. Market countries

The market country is generally understood as the location in which a good or service is sold to a third party.[20] However, for the purposes of this article, how the market country is

18. Residual profit is defined as the “profit earned by the business in excess of routine profit”. *See* Devereux et al. (2021), *supra* n. 5, at p. 210 and Box 6.2 at p. 202.

19. OECD, *Tax Challenges Arising from Digitalisation – Economic Impact Assessment: Inclusive Framework on BEPS* (OECD 2020). This possibility made headlines in news media around the world. *See*, for example, S. Amaro, *Digital tax conflicts could wipe more than 1% off global GDP every year, OECD warns*, CNBC (12 Oct. 2020); and L. Thomas, *A collapse of global tax talks could cost $100 billion, OECD says*, Reuters (12 Oct. 2020).

20. A distinction should be made between the allocation of taxing rights under two guiding principles. If company A resident in country A sets up a permanent establishment (PE) in country B and sells goods and services to consumers there, under the existing system, (at least some) taxing rights over the profit of company A will be allocated to country B. However, this is not an allocation of taxing rights to a “market country”: taxing rights are allocated to country B as a result of the presence of the PE – not the purchasers – in country B. Under an allocation of taxing rights to market countries, country B would be allocated

defined should more generally depend on the rationale behind the reform – for example, whether the intention is to identify where "value" is created or whether the intention is to base the approach on a relatively immobile factor (the final customer or user) that can be used for the purposes of allocating taxing rights. In the latter case, the market country could be taken to be (normally) the country of residence of the final customer or the user.

As noted in section 1., in this article, the term "market" is defined broadly to include countries where either a direct or indirect purchaser (which could be a business or an individual) of a good or service or a user of certain digital platforms is found.[21] The distinction between purchasers and users is important in the case of certain highly digitalized businesses, such as social media services, Internet search engines and online marketplaces. To illustrate this, consider a social media business (S), resident in country A, that remotely sells advertising space to a wine producer (P), resident in country B. The advertisement appears in the phone of a user resident in country C. Country B may be referred to as the market country on the grounds that the purchaser of the service is located there. Alternatively, the market country could be country C, where the user is located. (Of course, in many cases, these may be the same country, but that it not necessarily the case.) The authors aim to avoid any ambiguity by clarifying, where appropriate, as to whether they are referring to the location of the purchaser or that of the user in such cases.

A second example of a related distinction between the direct and indirect purchaser of a good or service is the case of a "centralized purchasing" strategy of a multinational company. Consider the situation in which W Co, resident in country W, is the parent company of a construction group with operations and subsidiaries in countries X, Y and Z. Even ignoring tax reasons, W Co may choose just one of these subsidiaries to offer a centralized purchasing strategy for the group as a whole. For example, X Co may purchase heavy machinery from an independent company, G Co, for use throughout the group. In this case, X Co is the direct purchaser of the machinery, but Y Co and Z Co are the entities making use of the machinery and, hence, are the indirect purchasers according to the authors' terminology. If G Co's profit is partly taxed in the "market", it makes a difference as to whether the market is defined as the location of (i) the direct purchaser (X Co); or (ii) the indirect purchasers (Y Co and Z Co). If the former approach is chosen, W Co and G Co would benefit from locating the purchasing subsidiary in a low-tax country.

A third – and again, related – example involves a company that sells consumer goods via an "independent distributor", which, again, may be a profitable strategy even in the absence of taxation. Suppose, for example, that A Co, resident in country A, manufactures smart phones to sell to consumers in country B. If A Co sells its phones directly to the consumers, under the proposals discussed in this article, part of its profit will be taxed at country B's

taxing rights over the profit of company A as a result of the mere presence of purchasers in country B and irrespective of whether company A operates a PE in country B. In a sense, country B is a "market" country in both cases because purchasers are found there, but for the purposes of the allocation of taxing rights, there is an important conceptual difference between the two. *See* Devereux et al. (2021), *supra* n. 5, at pp. 13 and 168-173.

21. In setting out revenue-sourcing rules for online intermediation platform services, Pillar One proposes that there should be a 50/50 split between the purchaser and the seller of a good or service. However, in this case, the focus is on the service being provided to the purchaser or seller via the platform. In this sense, even the seller is a "purchaser" of those services. Pillar One also makes finer distinctions, for example, between the real-time location and the ordinary residence of the user (i.e. the viewer of the advertisement).

tax rate. However, it is possible that A Co sells its phones to C Co, an independent company located in country C, which sells the phones on to consumers in country B. In that case, if the market is defined as the location of the direct purchaser, under these proposals, part of A Co's profit will be allocated to country C, so there would be an incentive for C Co to locate itself in a low-tax country. The effect of this could, in principle, be mitigated by again defining the market as the country of the indirect purchasers (in this example, country B). This requires looking through the set of transactions to identify where the indirect purchasers are located. This may be difficult, especially if the intermediate company, C Co, adds some value to the phones before selling them on.

Under the existing system, the countries of the direct or indirect purchasers and those of the users are not allocated taxing rights simply by virtue of the fact that they may be thought to constitute the location of the market. In that sense, the proposals discussed in this article are radical departures from the existing system. In any case, it is already clear from the discussion that a precise definition of the "market" may have important consequences. In section 3., these issues are discussed in more detail.

2.3. Unilateral, bilateral and multilateral approaches

The existing allocation of taxing rights can be altered unilaterally, bilaterally or multilaterally. Achieving multilateral reform is the most difficult because countries have different interests and preferences, and achieving consensus may, thus, be problematic. Unilateral reform is, in principle, the least difficult, although the prospect of retaliatory measures and international political pressure may complicate it in practice. Multilateralism is necessary in order to achieve an ambitious reform of the current system (as in Pillar One and the RPAI), because doing so requires amending the existing treaty network. If multilateralism cannot be achieved, the options that remain available are (i) bilateral reform broadly within the system of existing treaties (such as in the case of Article 12B); or (ii) unilateral reform outside of the system through the introduction of stand-alone taxes (e.g. DST).

Pillar One involves significant change within the existing system, and the RPAI involves even more comprehensive change. From a technical perspective, it might be possible – albeit challenging – to implement either proposal unilaterally. However, it would not be possible from a legal perspective because the implementation of these proposals requires the amendment of a number of provisions in existing treaties based on the OECD/UN Models. These include articles 5 (PE threshold rules), 7 (PE attribution rules) and 9 (transfer pricing rules) for both Pillar One and the RPAI. Such amendments would most likely be achieved within a reasonable timeframe through a multilateral treaty, following the model of the OECD Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS, adopted to implement the BEPS Actions.

Pairs of countries that have treaties in place could agree on a reform through a less extensive bilateral amendment of those treaties. The United Nations' proposed article 12 B does this by permitting source states to withhold tax on payments for services from ADS; this is naturally limited to the country of the purchaser rather than the user. However, while this change can be undertaken on a bilateral basis, its widespread adoption would be more likely in practice to require a multilateral treaty along the lines discussed immediately above.

To the extent that it is not bound by treaties, a country could also unilaterally exercise increased taxing rights as a market country. This could be done through the imposition of a withholding tax or even a direct tax. However, many countries do have extensive treaty networks to consider, and if market countries were to unilaterally impose tax on the *profit* of a non-resident company, they would be in breach of their treaty obligations. Countries have sought to side-step this constraint by imposing a separate tax, namely DST, on the *gross revenue* of non-resident companies.[22] Whether this is successful from a legal perspective is questionable.[23] It depends on whether the DST falls within the ambit of existing treaties, which, in turn, depends on the interpretation of treaty provisions modelled after article 2 of the OECD Model, setting out the taxes covered by each treaty.[24] It may be argued that DST is "identical or substantially similar" to a corporate income tax, thus falling within the ambit of article 2(4). Conversely, it may be argued that DST falls within the ambit of article 2(2) as a tax on "elements of income". If either of these arguments is correct and clauses corresponding to these provisions in the OECD Model are included in a relevant tax treaty, DST would breach existing treaties, as they would apply beyond the limitations on adopting countries' taxing rights provided for in tax treaties.

The potential ambition of each proposed reform is, therefore, linked to its legal framework. At one extreme, a government could potentially unilaterally introduce a tax on gross revenue that falls outside the taxation of corporate profit and, thus, leave the remaining system unchanged. The introduction of a reform that requires only bilateral agreement – as the UN proposal intends – might be argued to be more feasible than one that requires multilateral agreement. However, that naturally limits the scale of the reform. Pillar One and the RPAI approaches both represent more sweeping reforms than the UN proposal does and would require multilateral agreement. The RPAI also clearly goes beyond Pillar One.

2.4. Evaluative criteria

In assessing the strengths and weaknesses of these proposals and elements of the proposals, the authors use criteria for determining what a good tax system would be. In particular, they use the five criteria set out and developed by Devereux et al. to evaluate the existing system and various alternatives. These criteria are (i) economic efficiency; (ii) fairness; (iii) ease of administration; (iv) robustness against avoidance; and (v) incentive compatibility. In addition, the authors take account of the transition costs of reforming the system.

22. Note, however, that the UK DST includes a safe harbour that allows businesses in loss positions or with very low profit margins on their UK digital services activity to elect an alternative basis of charge. As a result, qualifying businesses in a loss position will not have to pay the DST, and those with low margins will have to pay the DST at a somewhat reduced rate of tax. *See* UK: Finance Act 2020 sec. 48; and UK: Her Majesty's Revenue and Customs, *Digital Services Tax Manual*, DST43400.

23. Questions have also been voiced about their compatibility with EU and World Trade Organization (WTO) law; *see* references in *infra* n. 24.

24. The United Kingdom insists that its DST is compatible with its treaty obligations. *See* UK: Her Majesty's Treasury and Her Majesty's Revenue and Customs, *Digital Services Tax* ch. 10 (2018). For commentary on this issue, *see*, for example, G. Kofler & J. Sinnig, *Equalization Taxes and the EU's 'Digital Services Tax'*, in *Tax and the Digital Economy: Challenges and Proposals for Reform* (W. Haslehner et al. eds., Wolters Kluwer 2019); R. Goulder, *The futility of challenging DSTs under international law*, Tax Notes International (22 June 2020); R. Ismer & C. Jescheck, *Taxes on Digital Services and the Substantive Scope of Application of Tax Treaties: Pushing the Boundaries of Article 2 of the OECD Model?*, 46 Intertax 6/7, p. 573 (2018); C. Forsgren, S. Song & D. Horvath, *Digital Services Taxes: Do They Comply with International Tax, Trade, and EU Law?*, The Tax Foundation (29 May 2020), available at https://taxfoundation.org/france-digital-tax-international-tax-law-trade-law-eu-law/ (accessed 29 Aug. 2021); and R. Shiers & J. Stoel, *Is the DST compatible with the UK's international obligations?*, Tax Journal 12, p. 1463 (2019).

These five criteria are relatively uncontroversial, although there may be disagreement as to their relative importance. Three of them (economic efficiency, ease of administration and robustness against avoidance) are, in principle, straightforward. Economic efficiency refers to the costs that may be imposed on society by taxation that affects the behaviour of economic agents. If, for example, a more costly approach is taken to implement a business plan because of its tax advantages, the higher costs incurred represent a cost to society as a whole, which will be reflected in higher prices or lower income, or both. Inefficiencies can result from distortions to, for example, the choice of the locations of functions and activities, the scale of investment and competition between firms within specific markets. The costs of administration, including costs borne by both tax authorities and taxpayers, are also a clear cost to society. Robustness against avoidance is included as a separate criterion, although it overlaps considerably with other criteria.

Identifying a "fair" tax is more controversial. It includes at least two dimensions: (i) fairness among taxpayers who are ultimately made worse off by the tax; and (ii) and fairness among the governments that receive the tax revenue. Both are difficult to evaluate, as discussed at length by Devereux et al. Briefly, with regard to fairness among taxpayers, even if it could be agreed as to how progressive the tax should be and how it should be allocated among individuals resident in different countries, there is still the almost impossible task (in most cases) of identifying who actually bears the tax burden – something that is likely to differ according to the conditions in the various markets in which an MNE operates. Much has also been written on how revenues should be allocated among countries based on fairness. The notion of allocating tax rights to where value is created represents one attempt to define a guiding principle in this respect. For many reasons, the authors do not find that convincing,[25] but they do not offer an alternative principle; rather, they take the position that there are many factors that could be taken into account for determining a fair (or unfair) position. As a result, they focus primarily on the other four criteria (economic efficiency, ease of administration, robustness against avoidance and incentive compatibility).

The final criterion, i.e. incentive compatibility, is perhaps more unusual.[26] It is intended to test whether individual states have an incentive to undermine the system, imposing costs on other states. The existing system does not exhibit incentive compatibility; as states compete for inward investment or for taxable profit, there is pressure to reduce their effective tax rates to make themselves more attractive. That imposes costs on all states, both in respect of the possible loss of investment and revenues and constraining tax rates. This is not true for all taxes, however; for example, there is little competition in respect of VAT rates (*see* section 3.1.5.).

25. The authors have previously outlined a number of reasons to doubt the coherence and usefulness of the notion of "value creation". *See* M.P. Devereux & J. Vella, *Value Creation As the Fundamental Principle of the International Corporate Tax System*, European Tax Policy Forum Policy Paper (2018); and R. Collier, *The Value Creation Mythology*, in *Taxation and Value Creation* (W. Haslehner & M. Lamensch eds., IBFD 2021), Books IBFD. For a, more positive view, *see*, for example, S. Langbein & M. Fuss, *The OECD/G20-BEPS-Project and the Value Creation Paradigm: Economic Reality Disemboguing into the Interpretation of the "Arm's Length" Standard*, 51 The International Lawyer 2, pp. 259-409 (2018); and R. Petruzzi et al., *Transfer Pricing and Value Creation*, (Linde Verlag 2019).
26. For more on this criterion, *see* Devereux et al. (2021), *supra* n. 5, at pp 55-57 and 123-127.

2.5. Double taxation

It is widely accepted that one of the purposes of treaties is to avoid juridical double taxation. The RPAI naturally avoids double taxation in that it first determines routine profit, leaving the remaining profit as "residual". However, the Pillar One and Article 12B proposals both seek to add a layer of tax on top of the existing system. To avoid double taxation, they therefore both aim to make an offsetting adjustment to taxable income elsewhere. How they do so is discussed at length in section 4.

However, the notion that double taxation is a significant problem is one that should be addressed. Taxpayers may think it unfair, but this appears to be a concern simply regarding the number of times a tax is levied on income. Instead, both fairness and economic efficiency considerations would point to a consideration of the overall tax paid.

The case for concern about double taxation is weakened much further in comparison to taxes on revenue rather than profit or income. Take DST, for example. This tax is typically designed to be a tax on revenue, not income, and hence, it is argued that it is likely to fall outside the treaty network, as discussed in section 2.3. DST has been introduced on this technical basis, even if it gives rise to double taxation in a very real sense, and it is not credited against other taxes. Ironically, if DST were altered to be more generous by providing relief for costs, it would become a tax on profit and, therefore, likely be subject to treaty provisions and concerns about double taxation. Even so, there is no economic rationale for a tax on revenue to be treated differently from a tax on profit.

One alternative approach to both the Pillar One and Article 12B proposals is that neither of the new elements of tax introduced should be creditable against other taxes. That would, of course, greatly simplify their implementation. However, it would seemingly introduce juridical double taxation. One possible justification for this approach could be to regard the new taxes as being akin to "excess profit taxes", which have been proposed as a contribution to paying for the costs of the COVID-19 pandemic. This approach would offer a major simplification and effectively make section 4. of this article redundant.

However, it should also be noted that a lack of creditability may not imply double taxation. That depends on how an MNE is structured and the transfer prices it uses. Consider the marketing-and-distribution safe harbour element of Pillar One, for example. This caps or removes the Amount A allocation when the existing transfer pricing system properly books adequate residual profits in the market.

This could be taken further. Consider the case in which transfer prices are adjusted from their present level to achieve the same result as Amount A. That would probably imply lower prices at which the distribution arm of the MNE purchases final or near-final goods from other parts of the business. That, in turn, would automatically reduce the taxable profit in other parts of the business, thereby avoiding double taxation.

A question then arises as to which elements of the business are likely to see a reduction in their taxable profit to offset the additional profit allocated to the market country. If at least a routine rate of return is allocated to each separate entity within the MNE, transfer prices must ultimately be adjusted in such a way that the reduction in taxable profit must occur in entities to which the residual profit is currently allocated. That is precisely what the Pillar One proposal aims to do; in this case, however, it would be achieved by manipulating transfer prices.

3. Taxation in the Market Country

The three proposals analysed in this article vary considerably in respect of the allocation of taxing rights to the market country. This section sets out the different approaches in this respect, with all issues relating to the consequent impact on other countries being discussed in section 4.

Section 3.1. starts by focusing on five aspects of the differences between the proposals: (i) their scope; (ii) how they define the market country; (iii) how the tax base is determined; (iv) the overall size of the allocation to the market country; and (v) the procedures for collecting the tax. An important issue here is that many of the key features of each proposal are not necessarily inherent to each proposal. To take just one example, the definition of the market employed by the Pillar One and RPAI proposals could be narrowed to apply only to the direct purchaser. This raises the question –which is discussed in section 5. – of whether it is possible to mix and match the proposals, identifying and using the better features of each proposal without necessarily supporting one proposal over the others. In preparation for such a discussion, in section 3.2, each of the choices made against the criteria set out in section 2. is evaluated.

3.1. Comparing the proposals

3.1.1. Scope of allocation to the market country

The UN Article 12B proposal is intended to apply to businesses in the ADS sector only. This is broadly similar to most DSTs. The October 2020 version of Pillar One proposed applying the tax in the market country also to consumer-facing businesses (CFB), but it would only apply to businesses with an annual consolidated group revenue above a certain threshold (which is not specified in the Blueprint document but was thought to be around EUR 750 million at the time). However, the July 2021 Statement announced a change to the scope of Pillar One so that it applies to all MNEs with global turnover above EUR 20 billion and profitability above 10%.[27] Only the extractive and regulated financial services industries are excluded from the scope of Pillar One. By contrast, the RPAI proposal is intended to apply to all businesses above a *de minimis* threshold.

The rationale behind these differences is not entirely clear. The UN proposal, like DSTs, is targeted specifically at certain highly digitalized businesses. That proposal is, therefore, presumably not intended as a general reform of the allocation of taxing rights. The scope of the Pillar One proposal has been informally described as "the mother of all issues", and the back-and-forth on this point and the change announced in July 2021 reflects the differing views held by members of the IF and the changing views of some members, in particular, the United States. The RPAI proposal is firmly based on the view that moving taxing rights to the market country would be beneficial for all sectors.

Note, however, as indicated in section 2.1., that the proposed scope of these proposals is not inherent to them. It would be possible to narrow the scope of the Pillar One and RPAI proposals and to extend the scope of the Article 12B proposal. These changes would have an impact on the proposals' feasibility, as well as their economic efficiency and robustness against avoidance. These issues are discussed in sections 3.2.1.-3.2.2.

27. There is a planned review that could result in the lowering of the threshold to EUR 10 billion.

3.1.2. Definition of the "market" country

The notion of the "market" was already discussed in section 2.2., distinguishing between the locations of a direct purchaser, an indirect purchaser and a user. The three proposals discussed in this article each interpret the notion of the "market" differently.

The UN Article 12B proposal states that "income from automated digital services arising in a Contracting State may also be taxed in the Contracting State in which it arises",[28] and it defines such income as "any payment in consideration for any service provided on the internet or an electronic network requiring minimal human involvement from the service provider".[29] The proposal is, therefore, for a withholding tax on any payment made by the direct purchaser of a digital service, although the corresponding Commentary also leaves open the possibility of the tax being levied through the direct assessment of the vendor.

The tax would, therefore, presumably be collected by the country where the purchaser is located.[30] This would seem to preclude looking through a set of transactions to identify where the indirect purchaser or the user of the digital services may be located. The Commentary goes into some detail in defining ADS. However – and in great contrast to the Pillar One proposal – there is no detailed discussion as to the "source" of the revenue. The discussion does, however, appear to confirm the principle that the contracting state in which income arises is determined by the location of the direct purchaser.[31]

At the other extreme, the October 2020 Blueprint for Pillar One set out, in some detail, an almost bewildering range of different revenue-sourcing rules for determining the location in which the tax on Amount A should be levied, depending on the nature of the good or service being provided.[32] Pillar One sets out a "principle" for each type of income that it identifies.[33] There is no explanation of the overriding principle that can explain the more specific principles, but the approach seems to be based on the leading principle that revenue is to be treated as being derived from the jurisdiction where a good or service is used or consumed rather than from the location of the paying customer. For digital advertising services, the market is (broadly) declared to be the location of the user (as is the case of most DSTs). For sales of data, it is the country of the user that is the subject of the data being sold. For online sales platforms, there is a 50/50 split between the two sides of a transaction (purchaser and seller), both of whom are, in effect, purchasing services from the platform. For the sale of digital content, the market is the country of the immediate purchaser. For a business purchaser of cloud computing, it is the country of the user of those services. For CFB, Pillar One broadly identifies the market as the place of final delivery of a good to the

28. Article 12B, *supra* n. 4, at para. 2.
29. Id., at para. 4.
30. Leaving aside what "located" means in this context, for example, whether it depends on the ordinary residence of the purchaser.
31. One different approach to Pillar One, for example, is that the "source" of the data is not relevant; *see* Article 12B, *supra* n. 4, at para. 4.
32. *See* Pillar One Blueprint, *supra* n. 3, at sec. 4.2. More specifically, the rules determine whether any nexus revenue threshold test is met in a particular state, as well as which revenues/profits are allocated to each market jurisdiction. Revenue-sourcing rules are not new; various international and domestic rules already exist. Examples include the OECD's 2017 International VAT/GST Guidelines and the UK DST. There are also corporate income tax rules that determine the state in which revenue arises, e.g. the US and Canadian state corporate income tax rules and the EU Commission's proposed Common Consolidated Corporate Tax Base.
33. These are linked to a range of possible indicators to identify the appropriate jurisdiction.

consumer, or the place of enjoyment or use of a service. Of course, as the scope of Pillar One was broadened to go beyond ADS and CFB with the July 2021 Statement, a wider set of revenue-sourcing rules are required, which comes with considerable design, implementation and administration challenges.

The RPAI proposal is different in how it sets out the nature of the market. Unlike the Pillar One proposal, it does not discuss revenue-sourcing rules in any detail. However, it does set out an overriding principle for determining revenue-sourcing rules: the market should be determined by a factor that is as immobile as possible. This principle would yield a set of revenue-sourcing rules rather similar to that proposed in Pillar One. For example, income from digital advertising would be allocated to the country of the user, and sales of goods through an intermediate distributor would, as far as possible, be allocated to the indirect (or final) purchaser. As the scope of the RPAI is not limited to particular sectors, a comprehensive set of revenue-sourcing rules will be required, as will also be required for Pillar One following the change in scope.

As discussed in section 3.2., the definition of market has a considerable impact on the performance of the proposals under the evaluative criteria. Pillar One and the RPAI could adopt a narrower definition of the "market" to include only direct purchasers, although that would be less in line with their stated or presumed guiding principles. The Article 12B proposal appears much less amenable to a broad definition of the market to also include indirect purchasers and users. The definition of the market adopted in the context of DSTs depends on their guiding principle. For example, DSTs that seek to tax the value created by users for highly digitalized businesses will necessarily define the market as the location of users.

3.1.3. Determination of the tax base

The proposals differ significantly in how they determine the tax base. The Article 12B proposal begins with a tax on gross revenue or on a specific payment made by a purchaser in the country. As noted in section 2.1.2., however, an alternative net basis may be requested by the recipient of the income. This works on the basis that the profitability ratio (relevant annual profits divided by annual revenue) of the recipient is applied to the gross revenue arising in the source state, and 30% of the resulting net profit is then treated as the profit that is taxable in that state. This is equivalent to a form of formulary apportionment, in which 30% of the global profit is allocated in proportion to the sales in market countries. A third possibility arises if the business of the MNE in the market country can be allocated to a local PE, in which case there is no additional tax other than that normally due on the profits attributed to the PE.

The tax base of Pillar One is very different from the Article 12B approach, as it is based on a formulary apportionment allocation of part of the consolidated financial profit of the MNE group. The approach determines "residual" profit as the remaining profit after having deducted a fixed proportion of gross revenues (10%) to account for the "routine" activities within the group. It then allocates a fixed portion of this residual amount (20%-30%) to market countries. This is allocated on the basis of the proportion of revenues in each market country.

The approach of the RPAI is much broader. It allocates all "residual" profit to the market country, although this is based on a very different calculation from that of Pillar One, and, as a result, the measurement of residual profit may differ between the Pillar One and RPAI proposals. First, the RPAI identifies the routine profit in each part of the MNE, largely based on existing transfer pricing techniques. The residual profit is the remaining profit, which naturally accrues to the market country, as measured by the total revenue arising in that country minus all costs and routine profits associated with the goods and services sold in that market.

3.1.4. Overall size of allocation to the market country

A separate, albeit related issue is the resulting size of allocation to the market country in each proposal for the businesses that lie within their scope. In this respect, the key element of comparison is that the Article 12B proposal suggests a rate of 3%-4% to be applied to the gross revenue. Even though this is a low rate, it is a particularly broad base, which is not related to any measure of profit. This clearly matters in comparison to the proposals that are based on net profits.

Given the difference in determining the residual profit, the RPAI would assign a greater share of profit to the market state than Pillar One would. The relative allocation of the UN Article 12B proposal is more uncertain. To compare these approaches with a simple example, suppose that an MNE has global sales of 1,000 and global profit of 150 and, thus, an overall profit rate of 15% of sales. Suppose that the threshold for determining the routine profit under Pillar One is 10% and that Pillar One allocates 20% of the residual profit to market countries in proportion to sales. Pillar One would then allocate a total profit of 10 to market countries. If the 10% rate of return for routine profits were also the result of the RPAI approach, the RPAI would allocate a profit of 50 to market countries.

If the primary UN approach is taken, with a withholding tax rate of 3%-4% of gross revenues in the market country, article 12B would allocate 30-40 of profit to market countries, also on the basis of sales. If the second (profit-based) approach were taken, article 12B would allocate 45 to market countries on the basis of sales. In this example, the UN proposal would allocate a smaller share of profits to market countries than the RPAI would.

However, it is clearly possible for the opposite to be true. Suppose, for example, that the total profit was only 100, but sales were still 1,000, implying that there is no residual profit at all. In that case, neither Pillar One nor the RPAI would allocate any profit to the market countries. Article 12B would, again, allocate 30-40 as its primary approach, and, in this case, 30 as its second (profit-based) approach. The allocation under the UN proposal is, therefore, less sensitive to the overall rate of profit (and, hence, the degree of residual profit).

Once again, however, the issue of the size of the allocation to the market country is not inherent in each proposal. For example, the proportion of profit allocated to the market country by Pillar One could vary, and it would not even need to be limited to residual profit. The tax rate on revenues under Article 12B could also vary.

3.1.5. Collection of tax

A final point of comparison concerns the nature of the collection of tax. The Article 12B proposal is primarily envisaged as a withholding tax. In the case of a business purchaser, this would presumably be levied as a withholding tax on the purchaser. However, this approach is unlikely to be feasible when, for example, a company seeks to sell a digital product – for example, streaming music or television – to individual consumers, which would imply that there could be millions of individuals with the responsibility of remitting the tax. One alternative could be that the tax is collected at the level of the credit card company that operates as an intermediary between the purchaser and seller, but that raises issues of its own. This difficulty may be one reason why the Commentary also leaves open the possibility of the tax being levied through the direct assessment of the vendor.

The Pillar One and RPAI proposals would, in general, be levied on the entity that receives the income, even if those entities are non-resident. This gives rise to clear challenges, but countries do have experience in collecting tax from non-resident entities with no physical presence within their borders, albeit in more narrowly defined circumstances. Dependent-agent PEs have long given rise to similar collection challenges, and there have been more instances in recent years. The United Kingdom, for example, extended withholding tax on royalties to certain payments made in connection with profits derived from UK sales, regardless of where the payer is based, meaning that payments made by a non-UK entity may be covered.[34] The UK DST casts an even broader net and taxes businesses providing social media, search engine and online platform services on revenues attributable to UK users, wherever they arise. Her Majesty's Treasury dismissed concerns regarding the collection of DST by noting that the United Kingdom has "significant experience of collecting tax from businesses with no physical presence in the UK in areas such as VAT", concluding that it "does not therefore see collection as a significant issue".[35]

3.2. Evaluation

The next issue is evaluating the proposals. This article does not delve too far into details; this is intended to be a comparative exercise, identifying the strengths and weaknesses of the key features of each proposal. The analysis is not intended to generate a ranking of the three proposals; rather, it is an analysis of their features. For example, what are the strengths and weaknesses of extending the scope of the tax to smaller companies or to additional sectors, or extending their reach beyond direct purchasers to indirect purchasers and/or users, or raising the overall allocation to the market country? The authors focus primarily on four of the criteria set out in section 2.: economic efficiency, incentive compatibility, robustness against avoidance and ease of administration. They make only brief comments on fairness in passing.

3.2.1. Economic efficiency

A starting point for evaluating these alternatives from the perspective of economic efficiency is the point emphasized by Devereux et al., namely that the less mobile the factors that determine the location of the tax base are, the less distortion there will be with regard to the location choices of MNEs. If the "market" is defined to include an indirect purchaser or user who will not relocate in response to the tax liability of the MNE, the location of the market is fixed, and the location of other elements of the MNE would be irrelevant to the allocation to the market country. To the extent that the location of the market is indeed immobile,

34. UK: Finance Act 2019, sec. 15 and Schedule 3 (Offshore Receipts for Intangible Property).
35. UK Updated Position Paper, *supra* n. 1, at paras 4.49 and 4.50.

there is a clear benefit from the perspective of economic efficiency to allocate as much profit as possible to the market country.[36]

Relative to the existing system, in which there is no systematic allocation to the market country per se, all of the proposals considered in this article might be seen to improve economic efficiency. However, they clearly do so to different extents.

First, the benefits depend on the scope of the tax, which would need to be as wide as possible to generate the greatest improvements in terms of economic efficiency. In this respect, restricting the scope to ADS or only very large MNEs limits the benefits in terms of economic efficiency. Second, limiting the allocation to the market, for example, to only a part of the residual profit also weakens these benefits.

Second, the benefits also depend on the definition of the "market", as well as the tax base. The Article 12B proposal is based on the location of the direct purchaser. The incentives thereby created depend on whether the withholding tax is based on gross revenue or a measure of net profit. If based on gross revenue, there is a clear disincentive to use an intermediate purchaser, since there would be a cascading of the tax. Suppose, for example, that company A sells its product to consumers in country B via an independent distributor in country C. In this case, a withholding tax on gross revenue applied in both country B and country C would have a cascading effect. Country C may levy a tax on the sale to the intermediary, and B may also levy a tax on the sale to the final consumers.

This effect is likely to be mitigated by the option of net-basis taxation. However, the net basis creates problems as well: if company A is highly profitable and the intermediary is not, if the tax is levied in the country of the direct purchaser, there is a clear incentive for the intermediary to locate in a low-tax country.[37] This effect is mitigated under the Pillar One and RPAI proposals, to the extent that they look through the direct purchaser to the indirect purchaser or user, who might be thought to be less mobile.[38] Of course, that raises issues of administration, which are discussed in section 3.2.4.

A final issue relating to economic efficiency is that if the tax in the market country is based on revenue, it is likely to affect decisions with respect to the scale of the investment, at least if it is not fully credited against a tax on net income. In this regard, revenue will be taxed, but there will be no relief for costs. However, if it is not restricted to a base of economic rent, a tax on net income is also likely to affect investment.

3.2.2. Robustness against avoidance

Issues of avoidance are closely linked to those of efficiency. For example, if an existing independent distributor changes its location because of the tax, that would generate social costs, which would result in economic inefficiency. However, if the independent distributor only came into existence as a device to shift the location of the market for tax purposes, this

36. Note that these considerations do not depend on the notion or measurement of residual and routine profit. Here, the concern is simply that of maximizing the application to market countries. Incorrectly measuring, say, residual profit only matters to the extent that it may imply a smaller share of profit being allocated to the market country.
37. This problem does not arise under a destination-based cash flow tax. *See* Devereux et al. (2021), *supra* n. 5.
38. *See* id., at pp. 203, 240-241 and 243-244.

would be a case of avoidance. The same is true for the "centralized purchasing" strategy, described in section 2.2.

The implications for the design are then very similar. Defining the "market" for tax purposes based on an immobile factor is beneficial both in terms of economic efficiency and robustness against avoidance. To the extent that the market is defined as including the location of the indirect purchaser or user, the incentive to use an independent distributor is negated, and the location of any existing distributors should not be affected. Again, there is a trade-off with the costs of administration, since the "market" in this case is more difficult to define. As noted above, the incentive to use an independent distributor or a centralized purchasing strategy does not arise if the tax base is the gross revenue, as under the Article 12B proposal.

Drawing somewhat arbitrary lines between activities that are within or out of scope not only increases administrative costs, but can also stimulate avoidance if there is an incentive to declare an activity as being on one side or the other of the boundary between activities.

3.2.3. Incentive compatibility

Reducing the tax-induced incentive for an MNE to change the location of its functions and activities is beneficial for economic efficiency and also makes the system more robust against avoidance. It also indirectly affects tax competition and the incentive compatibility of the tax system.

To illustrate this, assume that governments aim to set their tax rates by balancing the marginal benefits of attracting more tax revenue (by raising the tax rate) and attracting inward investment (by lowering the tax rate). Then consider the case in which at least some taxing rights are moved partially away from the state where functions and activities take place to market countries.[39] The tax base in the former state is now lower. This has two effects. First, it implies that a reduction in the tax rate by one percentage point has a smaller impact on government revenues. Second, it implies that the MNE is less likely to change its location decision in response to the tax rate cut. In principle, that could leave tax rates higher or lower than before the tax reform. Overall, however, it seems likely that the diminished role of taxation in the state where functions and activities take place will reduce the competitive pressure that the state is currently under to lower its tax rate.

By contrast, the tax base in the market country has increased. Generally, however, the trade-off described above does not occur in market countries – at least to the extent that third-party customers are immobile – because a higher tax rate in the market country would not affect the locations of different parts of the business. There should, therefore, be only very weak tax competition in market countries. This gives much greater freedom to countries to levy higher tax rates where they host markets compared to the profits allocated there because an MNE's functions and activities take place there.

39. Post-BEPS, it is less likely that profit would be moved away only from countries that have no functions and activities, given the significant emphasis in the BEPS output on aligning the location of profits with the location of value-adding functions and activities (as, for example, in the new transfer pricing approach relating to the risk framework; *see OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations* para. 1.60 (10 July 2017), Primary Sources IBFD.

In summary, at least to the extent to which the market is defined, as far as possible, as the place where an immobile purchaser or user is located, one could expect limited competition over tax rates in market countries. In general, one could also expect less competition in other countries simply because there is less at stake in those countries, since the tax base there would be diminished.

3.2.4. Ease of administration

Considerations of economic efficiency and incentive compatibility point to advantages from levying the tax on net income and defining the market country as that of the location of the direct or indirect purchaser or user. Unfortunately, considerations of the cost of administration tend to point in the opposite direction. Overall, administration considerations also point to a limited scope. Considerations of robustness against tax avoidance point to levying the tax on revenue or defining the market as including direct or indirect purchasers or users. To examine this, the authors consider each of the issues raised in section 3.1. separately. However, the overall amount of the allocation to the market country seems to raise no specific issues other than those discussed below.

3.2.4.1. Scope of allocation to the market country

Restricting the scope of the tax in terms of the sectors to which it applies can both help and hinder with respect to administrative costs. On the one hand, restricting the scope to ADS and/or CFB means that it is not necessary to apply the tax to businesses in other sectors. To some extent, these two sectors appear to have been chosen in the October 2020 Blueprint version of Pillar One in order to minimize administrative costs, in particular, those relating to revenue-sourcing rules. For CFBs, it is likely easier to know and have access to data on their underlying markets. ADS presents a tougher challenge, which the October 2020 Blueprint partly addressed by the increased flexibility in the rules relating to these businesses.[40] As the scope of Pillar One was extended in July 2021, further complex revenue-sourcing rules will need to be designed and administered to cover additional sectors brought into scope. On the other hand, restricting the scope of a proposal means that it becomes necessary to police the boundary between activities that are in scope and out of scope for the purposes of the tax. One can certainly expect there to be tax planning around this boundary. This trade-off arises in the context of the Article 12B proposal. Applying the tax only to ADS reduces the administrative burden in some ways (e.g. applying a withholding tax to B2C transactions or collecting tax from non-resident businesses through direct assessment) but requires policing of the boundary.

The scope of Pillar One is limited by a very high threshold that offers unambiguous administrative advantages. Indeed, a high threshold might even be critical for the feasibility of this proposal. It is unlikely that the certainty process (discussed in section 4.2.4.) can be operated with the increased number of businesses that would come within the scope of the proposal if the threshold were to be reduced dramatically.

40. It is notable that the discussion on revenue-sourcing issues in the Pillar One Blueprint relating to specific consumer-facing-business issues takes up five pages, whereas the corresponding discussion on automated digital services (ADS) requires 17 pages.

The RPAI proposal suggests that its scope should not be limited by business type or size (save for a *de minimis* threshold). That necessitates a comprehensive set of revenue-sourcing rules that, again, are likely to be complex and costly to administer. On the other hand, these revenue-sourcing rules would not be layered on top of the existing morass of complex rules, as the RPAI would obviate the need for many existing rules. Of course, one could also restrict the scope of the RPAI, but that has the downsides described in section 3.1.2., and the existing complex rules would have to be maintained for out-of-scope businesses.

3.2.4.2. Definition of the market country

In terms of administrative costs, there is a clear advantage to drawing the definition of the market narrowly to include only the location of a direct purchase by a resident individual or business. In that scenario, there is no need to look through a set of transactions for an indirect purchaser or user. That is the approach of the Article 12B proposal, which permits the use of a withholding tax on payments made. Even then, however, and as noted in section 3.1.5., complications would arise when a very large number of purchases are made by individual customers, especially when these are digital services rather than goods that have to be shipped across borders. It is perhaps for this reason that the Commentary also leaves open the possibility of levying the tax through direct assessment.

However, costs would be even higher if the market is defined broadly. Consider again the case in which company A sells its product to consumers in country B via an independent distributor in country C. Country B may want to tax the profit of company A rather than the profit of the distributor in country C, but company A may have no presence in country B, and information on the relevant profit may, thus, be hard for the tax authority to obtain. Chains of intermediaries would make collection even harder, and this would be exacerbated to the extent that the intermediary also makes some contribution to the value of the final good sold. The more substantial the intervention is, the weaker the case for looking through the intermediary becomes.

The inclusion of users in the broad definition of the market can be challenging, as there may not even be a payment in the country collecting the tax. This would arise, for example, if L Co, a social media company, sells advertising services to M Co, resident in country M, for advertisements to appear on the electronic devices of users in country N. In such a case, in which the users constitute the relevant market, country N would be seeking to tax part of L Co's profit arising from sales in country M.

3.2.4.3. Determination of the tax base

Aside from these issues, in general, the costs of collection are likely to be lower when the tax base is gross revenue rather than a measure of net income or (part of) residual profit. That is simply because gross revenue is more easily observable, i.e. there is no need to take account of costs. This represents an advantage of the Article 12B proposal over the RPAI proposal.

However, the Pillar One proposal is based on a completely different approach, using consolidated financial accounting data. If the allocation of Amount A to different market countries for a specific MNE is identified by a single tax authority, all market countries should, in principle, be able to rely on the assessments made by that tax authority. That element of the Pillar One proposal seems to minimize the costs of collection.

3.2.4.4. Collection of the tax

Beyond the issues already discussed, many details of the nature of the collection of tax are important. For example, the indicators used to source revenue could permit an online advertising provider to determine the location of where its advertising is viewed based on:
– the IP address;
– the location of a device;
– the information that a user provides when they register for a service;
– a user's phone number;
– a user's credit card details; or
– a combination of the above.

Taxpayers could be given some discretion to determine which source of information was most appropriate for them, subject to appropriate checks and balances. This hints at another challenge in applying revenue-sourcing rules: they will likely require information that is not currently available to taxpayers, meaning that new reporting requirements will need to be devised and operated. This may be especially problematic when the entity responsible for remitting the tax is non-resident in the market jurisdiction. In many cases, it would be necessary to ascertain whether the information required could even be obtained or is valid[41] and to confirm that no problems arise under data protection rules, such as the EU General Data Protection Regulation. Finally, there is a clear possibility of disputes arising between states on the application of revenue-sourcing issues, and therefore, mechanisms to manage such disputes will be required.

4. Adjustments to Avoid Double Taxation

There is significant variation in the degree to which the proposals include (or need to include) specific measures to deal with the double taxation of income as a consequence of the taxing rights they each allocate to the market state. Assuming that the aim is to avoid double taxation, such measures are needed under the UN Article 12B and the OECD Pillar One proposals because these proposals use the current allocation of taxing rights as a starting point, although they differ significantly in how they would be implemented.

This is not required under the RPAI because it does not use the current allocation of taxing rights as its starting point. Instead, the RPAI reallocates taxing rights over the total profit of an MNE in a consistent and comprehensive manner. It starts with the allocation of routine profit to countries where functions and activities take place, and the remainder, i.e. the residual profit, is then allocated to market countries. The design principle of the RPAI that the routine and residual profits will always amount to 100% of the MNE group's profits removes any concerns related to double taxation and obviates the need for any explicit double tax adjustment mechanism.

The three proposals may also be contrasted with the position of DST. Under DST, there is generally no mechanism to adjust for the double taxation that may be deemed to arise when revenues subject to DST are also taxed as business income in the state of the recipient.[42] This

41. Note that there are problems with IP addresses from Virtual Private Networks, meaning that other mechanisms might be needed; *see* Pillar One Blueprint, *supra* n. 3, at pp. 84-87.
42. This is because the primary adjustment mechanism is found in art. 23 of the OECD and UN Models and DSTs are generally designed to operate outside the treaty framework. A DST may, however, qualify as a deductible expense in the computation of profits subject to corporate income tax.

perhaps reflects the position discussed above that a conventional view of "double taxation" does not see DST as generating double taxation (or at least not double taxation that requires addressing). However, from an economic perspective, such a view seems inconsistent with the treatment of the Article 12B proposal (in its form as a tax on gross revenue) as requiring relief for double taxation.

Notwithstanding these points, there are two central issues in comparing the different approaches of the Article 12B and Pillar One proposals. The first is the location where the measure of relieving double taxation actually operates – that is, which country gives up taxing rights in favour of the new taxation in the market? The second is the condition for giving credit against the market country taxation. Specifically, would credit be limited to the tax liability on only residual profit, or would the credit be extended to the tax liability on any profit? The authors address these two questions separately. In each case, they take the issues of taxing in the market country (discussed in section 3.) as a given and focus only on the extent to which there is also relief for that taxation.

4.1. Two central issues

4.1.1. Which country gives credit?

The integration of the article 12B taxing right into the treaty framework implies that mechanisms are, in principle, already available to alleviate double tax relief. Specifically, there are two main methods to eliminate international juridical double taxation: (i) the exemption method (a version of which is found in article 23A of the OECD and UN Models); and (ii) the credit method (article 23B of the OECD and UN Models).[43] Under the exemption method, the residence jurisdiction (that is, the country of the recipient of the income) does not retain secondary taxing rights over the income or profits derived from the market state, as the income or profits are simply exempt from tax.In this case, there is no further relief for the market country tax. However, as a practical matter, in situations involving article 12B, it seems likely that the credit method would be the more commonly applied of the two methods.[44] Under the credit method, the residence jurisdiction (that is, the state to which income or profits are paid from the market state) retains secondary taxing rights over the income received but credits any taxation in the market country on that income against any tax chargeable on that income in the residence state.

In the case of the tax levied as a withholding tax on the gross revenue in the market country, the revenue subject to that tax would be subject to tax as income, net of costs, in the residence country. If the tax in the market state is lower than that in the residence state, there will be further "top-up" taxation in the residence state. If the tax in the market state is higher, any market state tax charged in excess of the residence-state tax will have no relief, and the residence country will receive no tax at all as a result of the application of article 12B.[45]

43. Adjustments made to address double taxation are obviously not needed when the tax charge under art. 12B is disapplied by reason of the relevant ADS income being attributable to a PE in the state of the payer (*see* Article 12B, *supra* n. 4, at para. 5).
44. This is because the income under Article 12B will generally be business income deriving from activity (relating to the provision of ADS) in the residence state.
45. This could be the case when, for example, a limited-risk distributor makes a relatively small profit from the production and distribution of a product or service giving rise to income from ADS after paying a royalty to an affiliate in a third country relating to intangibles used or exploited in its ADS business.

By contrast, the Pillar One approach seeks to deliver a comprehensive solution to the elimination of double taxation in two steps. First, it would identify the relevant "paying entity or entities", which are the entities regarded as owning the income that is taxed in the market states. Second, methods to eliminate double taxation would be applied in respect of the identified paying entities. Given that the primary taxing rights over the Amount A income are granted to the market states, the double tax relief mechanism would be administered in the states of the paying entities. These states would exempt the Amount A income from tax or, alternatively, tax it, but allow a credit for the market-state tax, therefore using the same exemption and credit methods under article 23 of the OECD and UN Models as described above in relation to article 12B.[46]

The most critical part of the Pillar One approach is the process by which the identity of the paying entities is determined. This is an area in which the OECD is considering alternative, simplified approaches following the recent consultation process. The position of the 2020 Pillar One Blueprint is a relatively complex four-step approach, the core elements of which are the following:

(1) identifying the entities generating the residual profits by means of a qualitative activities test (relating to, for example, the bearing of economically significant risks or the ownership of key intangibles);
(2) the application of a profitability test to ensure that those entities have enough income to absorb the Amount A tax liability;
(3) the allocation of the tax liability, in order of priority, to entities that have a connection with the markets where Amount A is allocated; and
(4) the allocation of any shortfall in capacity, on a pro-rata basis, to the remaining entities in the group.[47]

4.1.2. Whether credit is given against all profit or only residual profit

The second key difference between the Article 12B and Pillar One proposals with respect to the credit against the market country tax is whether the tax is credited against all profit or only residual profit.

The operation of the tax credit mechanism under article 23B of the OECD and UN Models would not be constrained by any distinction based on whether the income is characterized as routine or residual. In theory, this means that the tax charged on that income in the market state should be fully creditable against the tax charged on that income in the residence state. As a practical matter, however, states may seek to resist that result, as ceding primary taxing rights to the market state may mean that they lose the ability to tax businesses operating within their jurisdictions, as explained in section 4.1.1.

46. For a detailed description of the approach adopted, *see* OECD (2020), *Tax Challenges Arising from Digitalisation – Report on Pillar One Blueprint: Inclusive Framework on BEPS* ch. 7 (Elimination of double taxation) (OECD 2020), available at https://doi.org/10.1787/beba0634-en (accessed 26 Aug. 2021). This also notes that the credit method could be applied either jurisdiction by jurisdiction (which means applying the credit limit separately by reference to each market) or using a blended approach (which would allow tax in low-tax markets to be blended with tax in high-tax markets, allowing for a higher measure of credit relief).
47. This is a highly summarized account of the approach; the discussion on the approach in the Blueprint is several pages long.

By contrast, Pillar One is intended to work on the principle that credit should be given against identified residual profit. The rationale behind this approach seems to be that, since the tax base in the market country is measured as a fraction of the residual profit, the country giving credit should be the country where that residual profit is currently taxed. This rationale for the Pillar One approach can be questioned. It seems to depend on the notion that the income that is reallocated to the market country actually reflects the residual profit, as opposed to the more practical notion that taking a fraction of residual profit as reflected in the consolidated group accounts is simply a convenient mechanism for implementing the reallocation of some taxing rights to the market country. In any case, the methods proposed in Pillar One to estimate the residual profit for taxation in the market country are not the same as the methods used to determine where the residual profit is currently taxed.

4.2. Evaluation

The authors will now again evaluate these approaches against their criteria (economic efficiency, robustness against avoidance, incentive compatibility, ease of administration and fairness). As in section 3., they do not focus specifically on fairness. Although there are several issues discussed in this section that might be thought to affect fairness (for example, whether there may be an element of double taxation under the UN Article 12B proposal), they address such issues in the context of the other criteria – in this case, economic efficiency.

One important issue that does not arise under the other criteria, however, is sovereignty. Pillar One proposes a novel, panel-based, mandatory, binding dispute-prevention process to provide tax certainty, which is a process that includes identifying which countries are to make the necessary adjustments. Some countries may view this as a threat to their sovereignty and, therefore, as unfair, and the matter may make reaching consensus on Pillar One problematic.[48]

4.2.1. Economic efficiency

A starting point in considering efficiency is whether moving some taxing rights to the market country reduces distortions in location choices. In principle, taxing profit in the market is beneficial because individuals are relatively immobile, although, as discussed above, that depends, to some extent, on how the “market” country is defined. Here, though, the authors focus on where existing taxing rights are moved away from. If the profit is currently taxed in countries where functions and activities take place (as is likely to be the case under the Article 12B proposal, for example), moving it to the market country would result in some efficiency gains because the move reduces the incentive to locate real economic activities in low-tax countries. However, if the profit is currently taxed in a tax haven where little real economic activity takes place, allocating taxing rights over this profit to market countries will not result in efficiency gains.

Consider the example in which an MNE has a parent company in country A and R&D and manufacturing activities in country B and holds its IP in tax haven C. If the residual profit currently arises in country C (where there are only modest functions and activities), real-

48. J. Li, *The Legal Challenges of Creating a Global Tax Regime with the OECD Pillar One Blueprint*, 75 Bull. Intl. Taxn. 2 (2021), Journal Articles & Opinion Pieces IBFD.

locating the taxing rights over the residual profit from country C to an immobile market country will address profit-shifting concerns, but its impact on reducing distortions in the location choices for real economic activity may be quite limited.

A second issue is the extent to which the reform results in double taxation, or, more accurately, an increase in overall tax liability. To the extent that distortions in investment decisions increase with the proportion of profit paid in tax, the double taxation of profit is likely to increase distortions and, hence, economic inefficiency. Although the Article 12B proposal is more likely to result in double taxation, the implementation of Pillar One could also raise the overall level of taxation. This will occur due to the additional market state tax in cases in which the "paying entity" is subject to a low rate of tax in the state in which it is resident. Double taxation does not arise under the RPAI; however, again, the overall level of tax could rise relative to the existing system.

These considerations raise two further issues. The first is the extent to which the possibility of double taxation under the Article 12B proposal could be mitigated. Options include allowing credits to be carried forward and to be transferred to other countries. These are discussed in section 5. MNEs may also address this problem themselves by moving profits to the relevant residence country. Consider the simple example given above in which an MNE has a parent company in country A and R&D and manufacturing activities in country B and holds its IP address in tax haven C. Sales are made from the parent company in country A to consumers in country D. If the residual profit of the MNE is currently declared in country C, there may be insufficient taxable income in country A to provide a full credit for the tax levied in country D. This may incentivize the MNE not to shift profits to country C. If so, such a reaction does not appear abusive; on the contrary, it could be argued that it unwinds planning that may have been abusive.

The second issue is the extent to which a rise in taxation would actually result in additional distortions if the base that is subject to a higher rate of tax is residual profit, as in the Pillar One and RPAI proposals. In principle, it is well understood that a tax that falls only on economic rent should be non-distortionary. While residual profit cannot be equated to economic rent,[49] there is clearly a similarity between the two concepts. It could plausibly be argued that a higher tax applying to residual profit (or, in the case of Pillar One, part of the residual profit) would generate few, if any, economic distortions. However, this point can be taken further: if that is true, it is not clear that Pillar One needs to have any credit mechanism to reduce double taxation. Clearly, such a mechanism will have significant administrative costs, and the benefits – at least for the purposes of economic efficiency – are unclear.

4.2.2. Robustness against avoidance

There seem to be no obvious problems in the mechanism for the avoidance of double taxation with respect to robustness against avoidance, either for the Article 12B or Pillar One proposal.

Indeed, the Pillar One mechanism is likely to strengthen the system's robustness against avoidance if it allocates taxable profit away from entities with little or no economic sub-

49. The concepts of residual profit and economic rent are not identical, and in any case, the measurement of residual profit in the Pillar One and RPAI proposals is somewhat arbitrary. *See* Devereux et al. (2021), *supra* n. 5, at p. 202.

stance, typically located in tax havens. Consider the case above in which an MNE has a parent company in country A and R&D and manufacturing activities in country B and holds its IP in tax haven C. Residual profits are located in countries A and C, but not B. Suppose that the profit located in tax haven C represents the result of profit shifting from the other countries. In that case, if Pillar One results in taxable profits being taxed in market countries other than tax haven C, it may be argued that the system is less prone to profit shifting.

The same would be true under the UN Article 12B proposal to the extent that the MNE moved profit from tax haven C to, say, country B in order to take advantage of the tax credit in country B, as discussed above.

4.2.3. Incentive compatibility

The main benefits of these proposals accrue to market countries and are considered in section 3. The main costs accrue to countries of which the taxing rights are displaced by these proposals. In a bilateral setting, such as that contemplated in the Article 12B proposal, a country is more likely to identify as either primarily a market or a residence country (i.e. the country in which the recipient of the income subject to withholding is resident). If the latter, it is less likely to agree to amend its treaties to align with article 12B. A previous draft of the UN proposal alluded to this when stating that it was possibly unpalatable for some residence countries.

On a multilateral basis, countries are more likely to be both market and residence countries, making the classification as one or the other less obvious and increasing the likelihood of agreement. Of course, if the portion of the residual profit is systematically shifted away from tax havens, it is more likely that non-tax-haven countries will agree.

4.2.4. Ease of administration

In principle, the credit or exemption mechanism inherent in the Article 12B proposal is relatively simple to administer and is based on tried and tested rules and mechanisms. That is a clear advantage of the approach of using a withholding tax mechanism that fits within existing treaty provisions.

By contrast, Pillar One proposes a materially greater complexity, including a complex process for determining the relevant “paying entities” and a significant and novel multilateral administrative infrastructure (including the review panels required for the “certainty” process).[50] That approach is dependent upon a radical transformation of existing arrangements and practices relating to both tax administration and the prevention and resolution of disputes.

In particular, this includes the centralized “tax certainty” process, which necessitates two different levels of tax panels (comprising tax officials from selected states) as the primary mechanism to prevent disputes relating to the new rules, which would therefore require an agreement among participating states to delegate tax administrative powers under the panel mechanism. There is also the proposed standardized and centralized administration infrastructure through which it is proposed that tax returns and tax payments relating to

50. *See* Pillar One Blueprint, *supra* n. 3, at chs. 9-10.

the new rules be processed.[51] These measures are important for the Pillar One design in order to avoid the possibility of its operation being derailed by disputes involving any one or more of 150 or so individual tax administrations.

However, the radical shift that is required from existing administrative and dispute practices operated by states to deliver these arrangements presents difficult challenges, given the scale of the tax sovereignty that must be ceded.[52] The nature of these requirements and their novelty may make it difficult to implement the new approach in the first place or, alternatively, unduly constrain the application of the new tax.

All of these factors have an impact on the potential scope of the Pillar One proposal. Due to its complexity and administrative cost, Pillar One can reasonably only be extended to a relatively small number of businesses, implying the need to restrict its scope by sector and/or business size.

A clear trade-off therefore arises here. Pillar One, unlike article 12 B, in principle provides a comprehensive approach to dealing with double taxation, but this comes with considerable added complexity and administrative costs. Article 12B can, in principle, be applied more widely.

By its nature, the RPAI does not give rise to double taxation. However, the RPAI involves a much more ambitious programme of reform.

5. Combining Approaches

The discussion in the previous sections considers certain key features of the proposals on a comparative basis. This makes it easier to identify the effects and implications of the individual design choices made for each of those proposals. In turn, this facilitates the possibility of considering how different features of the proposals might be combined to offer a greater range of possible options or improve the features of a particular proposal.

This point is illustrated sections 5.2.-5.2.2. by reference to the Pillar One proposal, with possible impacts from both the UN proposal and the RPAI. In particular, a possible revision of the Pillar One delivery mechanism is considered, which also has implications for how double taxation is relieved. First, however, the authors summarize the conclusions of the previous discussion for ease of reference.

5.1. Summary of conclusions

Table 1 summarizes the key features of each proposal. It also identifies which features are inherent in these proposals and, thus, cannot be changed without changing the very nature of the proposal.[53] Table 2 sets out the strengths and weaknesses of the different options available for each key feature. It also highlights the difficult trade-offs that arise in choosing among these options. For example, narrowing the scope of the tax to only include businesses in certain sectors and/or businesses of a certain size and the definition of the market to

51. *See* generally id.
52. *See*, for example, the discussion of the various legal challenges of the Pillar One proposal in Li, *supra* n. 48. Li argues that the legal obstacles (including the required ceding of sovereignty) to constructing the regime outlined in the Blueprint are significant and may be insurmountable.
53. Of course, there can be different views on when the nature of a proposal is changed.

only include immediate purchasers has a negative effect on economic efficiency, robustness against avoidance and incentive compatibility. Nevertheless, overall, such a change would reduce administrative costs significantly. Another option to reduce administrative costs under Pillar One is to reallocate the profit taxed in the market country to the recipient country (being the country to which the relevant sales revenue is paid) rather than to the countries where the residual profit is found. The authors discuss this option and the trade-offs it gives rise to in section 5.2.

Table 1 – Extent to which features are inherent in each proposal

	Scope	Definition of market	Base taxed in market	Collection mechanism	Adjusting country	Credit against
Pillar One	ADS & CFB*	Direct or indirect purchasers or users*	Part of residual profit*	Direct assessment**	Broadly, where residual profit currently located*	Tax on the residual profit*
	High revenue threshold*					
Aritcle 12B	ADS*	Direct purchasers**	Revenue or profit*,1	Withholding or direct assessment*,2	Residence country**	Tax on the profit*
RPAI	All businesses beyond *de minimis* threshold*	Direct or indirect purchasers or users*	Residual profit*	Direct assessment**	No adjustment required**,3	No credit required**,4
UK DST	ADS**	Users**	Revenue attributable to users**	Direct assessment**	No adjustment offered*	No credit offered*
	High revenue threshold*					

1. Article 12B includes an alternative profit-based approach.
2. The alternative profit-based approach involves the tax being collected through direct assessment.
3. No adjustment is made, but relative to the existing system, the base allocated to the market is shifted from all countries that are currently allocated more than routine profit.
4. No credit, but the system produces a result that is akin to credit being given against residual profit.

*Key: * Feature not inherent in proposal and, therefore, can be changed; ** Feature inherent in proposal and, therefore, cannot be changed.*

5.2. Possible revision of the Pillar One delivery mechanism

This section considers whether the Pillar One approach could be implemented through a bilateral mechanism. The intention would be to minimize or remove the need for the ongoing multilateral infrastructure required under the Pillar One proposal, given that this infrastructure is complex and costly to administer, and may prove to be an obstacle to Pillar One's implementation. However, the intention would also be to retain other elements of the Pillar One proposal, including the scope, nexus, revenue-sourcing and profit allocation.

The starting point is to identify the tax in the market country following the Pillar One approach, but to transform this into a tax on revenue to make it possible to apply the tax using existing bilateral mechanisms. For example, suppose that, under the formulary apportionment approach of Pillar One, country A is allocated 1,000 of the profit of company Y. Suppose also that the tax rate in country A is 20%, so A would seek to collect 200 in tax.

Table 2 – Evaluation of key features

<table>
<tr><th></th><th>Efficiency</th><th>Ease of administration</th><th>Robustness against avoidance</th><th>Incentive compatibility</th></tr>
<tr><td rowspan="2">Narrower scope (limited number of sectors and/or only very large firms)</td><td>Limits benefits from allocating tax to the market**</td><td>Reduces administrative costs (including those relating to revenue-sourcing rules, collection and, for Pillar One, the certainty process)*</td><td rowspan="2">Creates opportunities to avoid tax by reclassifying**</td><td rowspan="2">Leaves more profit being taxed in location of functions and activities, resulting in greater incentive to compete for business**</td></tr>
<tr><td>Creates distortions between businesses of different sizes and in different sectors**</td><td>Classification borders need policing**</td></tr>
<tr><td>Narrower definition of market (direct purchaser), including implications for collection mechanism</td><td>Location more mobile, resulting in greater incentive to change location of direct purchaser**</td><td>No need for look-through rules for indirect purchaser or user; no need to identify non-resident in order to tax*</td><td>Easier to create structure to relocate profit to a low-tax country (e.g. independent distributor and centralized purchasing strategies)**</td><td>Greater incentive to compete for purchasers**</td></tr>
<tr><td>Narrower base (profit rather than revenue)</td><td>Less potential distortion of investment overall, depending on extent of credit elsewhere*</td><td>Harder to identify profit**</td><td>More opportunities for manipulating revenue-sourcing rules**</td><td>Incentive to shift purchasing operations creates incentive to compete**</td></tr>
<tr><td rowspan="2">Adjusting country where residual profit is rather than recipient country</td><td>Less potential distortion of investment through double taxation*</td><td rowspan="2">Complexity of certainty process**</td><td rowspan="2">If residual currently shifted to low-tax country*</td><td rowspan="2">Less reduction in tax in country of functions and activities, resulting in more incentive to compete**</td></tr>
<tr><td>Less impact if residual profit not already taxed**</td></tr>
<tr><td rowspan="2">Credit against residual profit only</td><td rowspan="2">Less impact if residual profit not already taxed**</td><td rowspan="2">Requires identification of residual profit**</td><td>Limits extent to which residual profit can be shifted to low-tax countries*</td><td rowspan="2">Less reduction in tax in country of functions and activities, resulting in more incentive to compete**</td></tr>
<tr><td>May offer greater opportunities for manipulation of where residual profit is located**</td></tr>
</table>

*Key: * Weakness; ** Strength.*

If the revenue of company Y in country A is 10,000, this could be viewed as a tax on revenue at a rate of 2%. The tax rate applied to revenue is obtained with the following formula:

Tax rate applied to revenue = Local rate of tax × Profit allocated to country ÷ Revenue in country

This tax rate would, of course, be company and year-specific, since the ratio of allocated profit to revenue will differ from company to company and from year to year, just as in the basic operation of Pillar One as currently proposed.

Mechanically, the notional tax on revenue could be applied either in the style of a DST (where the MNE remits the tax at the end of the year) or in the form of a withholding tax, or possibly a combination of both.[54] Note that the idea here is to maintain the Pillar One revenue-sourcing rules in terms of defining the market country, so a withholding tax will not always be possible.

This revised approach would simplify the process for the identification of the relevant "paying entity" for the purposes of making adjustments to avoid double taxation. Specifically, the method currently proposed under Pillar One for identifying the relevant paying entity would be replaced with a "bright line test", based on the identity of the legal entity receiving the relevant sales revenue. Relief for double taxation would be provided by the recipient jurisdiction in the same way as under the UN Article 12B proposal, subject to that jurisdiction's own double tax relief system, replicating the existing treatment for other income subject to double taxation, such as dividends, interest and royalties. The revised approach would also follow Pillar One in operating irrespective of the existence of an applicable bilateral tax treaty in any particular case.

These changes would enable the tax to be administered largely – if not exclusively – on a familiar bilateral basis by using the separate-entity approach.[55] The revised approach would still require an up-front multilateral agreement covering the details of the approach to be adopted in line with the Pillar One proposal (including the scope, calculation mechanics, revenue-sourcing, thresholds, etc.). The intention would be that, thereafter, the system would run on a fundamentally bilateral basis. The up-front multilateral agreement would also – consistent with the current Pillar One proposal – enable the new approach to be operated irrespective of the existence of tax treaties (the up-front multilateral process would remove existing treaty obstacles, just as contemplated under the current Pillar One proposal). Under this revised approach to implementing the Pillar One proposal through bilateral mechanisms, the "tax certainty" process would be removed altogether, or possibly operated on a materially scaled-back basis. For example, the panel process could be used simply to advise on or possibly determine the appropriate methodology to be used in matters such as revenue sourcing and the approach to segmentation.

This revised methodology would, therefore, adopt a different stance in the inherent trade-off between the strengths and weaknesses of the Pillar One proposal relative to the Article 12B proposal. It would lack the "tax certainty" feature of the Pillar One proposal, according to which any and all disputes relating to the new Amount A rules will be identified, addressed and resolved through the tax panel process. However, as a result, it would have

54. The use of a withholding tax as a back-up collection mechanism to support a separate tax addressing the digitalization of business is suggested in OECD, *Addressing the Tax Challenges of the Digital Economy – Action 1: 2015 Final Report* para. 301 (OECD 2015), Primary Sources IBFD.
55. For example, while answers to questions relating to the scope and the calculation methodology would be determined through the up-front multilateral process and agreement, answers to questions such as whether the relevant nexus requirements were met in any particular case would be determined by the market state, which would also calculate and charge the tax. Returns would be filed in each market jurisdiction by the relevant recipient entity.

considerably lower administrative costs, and concerns about sovereignty would be removed, which may make it difficult to achieve consensus on the existing Pillar One proposal.

One particular feature of this revised proposal warrants further consideration. This concerns the status of the tax credit (reflecting the tax charged in the market state) in the hands of the entity currently receiving in-scope revenues. As noted in section 3.1.2., the UN proposal has relatively little to contribute to this matter, although it does note some of the barriers to the crediting mechanism that might arise in practice. It seems necessary to address the tax credit position in more definite terms.

Assuming that a tax credit is made available, there are two choices that might be considered with respect to the issues raised in section 4. These choices are discussed in sections 5.2.1.-5.2.2.

5.2.1. Giving credit against all profit or only residual profit

Leaving aside the possibility of doing away with the credit mechanism completely, the first choice is whether the tax credit should be fully available in the residence state (that is, the state in which the relevant payments are received) with no limitation, or whether it should be limited by reference to a threshold based on a required level of profitability – specifically, residual profits.

Having no limitation would be the simplest option and would be applied alongside a straightforward application of the tax credit mechanism in article 23 of the OECD Model. Priority taxing rights would be given to the market state, potentially constraining the ability of the residence state to levy and collect further tax on the income collected by an entity that is resident there. As noted in section 4.1.1., this approach is likely to have the effect of displacing residence-state taxing rights completely when the income is collected in that state by a limited-risk distributor or an entity with a slim profit margin relative to the remainder of the MNE group. Note that any particular country may not lose overall by virtue of it being a residence state, at least to the extent that it is also a market country.

Restricting the tax credit to the residual profit would prevent the residence state's taxing rights on routine profits from being automatically displaced by the tax levied on the relevant payments by the market state. This was discussed in section 4. as a matter of principle. Apart from these issues of principle, two important issues arise.

First, this approach would put the onus on the taxpayer group to either (i) ensure that the residual profits are booked in the residence state; or (ii) suffer the consequences of potential double taxation if they are not. However, there are likely to be situations in which it is simply not possible to book the residual profits in the residence state, for example, in situations in which there is a long supply chain with profit spread across the entities in the chain, consistent with the demands of the ALP.

Second, measuring the residual profit at the level of an individual entity is far from straightforward. For example, it would not be possible to simply consider the ratio of profit to revenue, as would be done at the aggregate level in determining Amount A. This is because the scale of the revenue increases through the supply chain. For example, suppose that three entities in the supply chain all have the same costs and all make a profit of 100. Entity A sells an intermediate good to entity B for 500, and entity B develops this into a more complete good and sells the resulting product to entity C for 1,000. Entity C develops the product further and sells the final good for 2,000. Then, the rates of profit are 20% for entity A, 10% for entity B and only 5% for entity C.

This is the issue addressed by the RPAI proposal, which instead uses established transfer pricing techniques, such as cost mark-up, to identify the routine profit in each entity. Note that in this case, costs arising from the purchase of intermediate products from other entities in the supply chain would need to be excluded from the base. A possibly simpler version of the RPAI proposal would be to use a common rate of return – say, 10% – on all other costs to generate a measure of the routine profit of the entity in the residence country and deduct this from the total profit in order to identify the residual profit. In this way, the Pillar One proposal would also draw on the RPAI proposal. However, such a standardized approach across industry sectors may not be appropriate, given the wide variations in the cost base and the profitability across industries. Nonetheless, a more tailored approach by industry sector or based on the circumstances of the entity or group concerned is likely to prove complex.

5.2.2. Which country is to give credit

The second choice to be made is whether the tax credit is limited only to the residence country in which the payment is received or whether it might be possible to recognize a "transfer" of the tax credit in limited circumstances. The idea would be that, in designated circumstances (which might include there being insufficient profits to provide the capacity to absorb the tax credit in the residence state – a possibility that is, of course, more likely if the credit is limited to the residual profit), a related entity in a third country could choose to fund the payment of some or all of the tax charged by the market state and, thereby, assume the tax credit for the purposes of the tax credit laws in its own state.

Permitting such an approach would clearly go beyond the current operation of tax credits and would require the adoption of an up-front multilateral agreement. Not permitting such a transfer would allow for the bilateral implementation of the new allocation rules in market states and avoid further complexity.

On the other hand, permitting a transfer would mitigate the incentive for some MNE groups to shift profits into residence countries to maximize the use of the tax credit. That is because the profit currently declared in other countries would also be available for credit. Such an entitlement might be allowed when the company in the third country meets specified criteria that are similar to those expressed under the current Pillar One proposal to identify the "paying entities" for the purpose of the elimination of double taxation.[56] In that case, the obvious targets would be states in which there are entities with residual profit. It would be necessary to avoid the need for maintaining, on an ongoing basis, a multilateral infrastructure to deal with the operation of such a system, as otherwise, potentially difficult sovereignty and infrastructure issues may arise (similar to those difficulties discussed above in connection with the tax certainty infrastructure of Pillar One). It would, therefore, be necessary to restrict any multilateral agreement to the up-front agreement of the principles of the system of "transfers" of tax credits, leaving any disputes about the operation of the

56. Detailed rules governing the operation of such a rule and any limitations in its application would need to be developed.

system to be resolved by the courts in the relevant jurisdictions rather than through the panel system proposed under the full certainty process.

6. Conclusions

This article set out to compare and evaluate three current proposals for reform of the international tax system for multinational profits: the Unified Approach (Pillar One) of the OECD, Article 12B of the United Nations and the RPAI proposed by Devereux et al. Each of these proposals shifts an element of the taxation of such profit to the "market" country. They differ in a number of ways, not least in the definition of what is considered a "market country" and whether the reform is intended to address the digitalization of the economy or to be applied more widely.

A key contribution of the article is to show that these proposals can be characterized as representing something more than just standalone alternatives. Rather, they may also be thought of as alternative attempts to address a number of issues that must be considered in any such proposal. Specifically, these factors include:
- the scoping of any proposed tax (that is, which businesses (or which part of businesses) would be liable to the tax);
- the mechanism by which the tax base is identified and allocated to a market state;
- the nature of the tax base (for example, whether it is based on gross revenue or net profit);
- the method by which tax is collected;
- the country, if any, in which adjustments are made to alleviate perceived double taxation; and
- whether that country offers credit against all taxes on profit or only taxes on residual profit.

This perspective is helpful in clarifying the comparative merits of the each of the proposals. It also illustrates that the differences between the proposals lies in the different ways in which they address these issues. It also helps identify which aspects of each proposal are inherent in their design and which aspects could be amended without fundamentally changing the design. This insight promotes the possibility that elements from the different proposals could also be combined in a new way, as illustrated in section 5, in which it was discussed how possible problems in the design of one proposal might be addressed by drawing on the design features of another.

The discussion in this article is largely limited to the three proposals under consideration herein. However, the perspective suggested is equally relevant to other approaches proposing reform to international taxation.

The detailed discussion of the three proposals on a comparative basis also highlights two specific issues. The first is a comparison of unilateral, bilateral and multilateral approaches, which, to some extent, reflects a trade-off between ease of implementation and the extent of the ambition of the implementing countries with regard to each proposal. The authors conclude that any material change to the existing system is likely to require a multilateral approach if the obstacles to change (chiefly, from the network of existing double tax treaties) are to be sufficiently overcome.

A second issue is a comparison between proposals in which the allocation of taxing rights to market countries is part of a new system that is simply layered on top of the existing ALP-based income allocation system (as in the Pillar One and Article 12B proposals), as compared to one that sets out a more coherent package (the RPAI proposal). In order to alleviate double taxation, the former approach requires an allocation of taxing rights under the existing system and a subsequent adjustment to those taxing rights. The inherent difficulties arising from the layering approach (including, in particular, the difficulties relating to the operation of the tax credit mechanism) underscore the desirability of a more coherent and integrated system, such as the RPAI, rather than the piecemeal or "dual" approach that is necessarily adopted in the Pillar One and Article 12B proposals.