# INTERNATIONAL TAX PLANNING UNDER THE DESTINATION-BASED CASH FLOW TAX

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#### I. INTRODUCTION

The inclusion of a Destination Based Cash Flow Tax (DBCFT) by the Ways and Means Committee of the US House of Representatives in their Blueprint of June 2016 marked the start of a period of intense debate over the tax (Ways and Means Committee 2016). In the space of a few months, the DBFCT went from being a topic discussed occasionally in public finance circles (Auerbach 2010; Auerbach, Devereux and Simpson 2010; and Auerbach and Devereux 2015) to being the primary focus of an intense and high profile policy debate. In this short time, many in the tax community and beyond broadly familiarized themselves with the tax, and the debate unquestionably improved understanding of it. However, the debate was also marked by poor comprehension of the tax in some quarters.

The DBCFT proposal has now been shelved—at least for the time being. But it is sensible to continue studying its properties and effects, and exploring solutions to the implementation issues it faces. Elements of the DBCFT, or even the DBCFT itself, might well be back on the political agenda in the United States and beyond before too long. In fact, this was the second iteration of the tax on the US political agenda following its first appearance in 2005 (President's Advisory Panel on Federal Tax Reform 2005), and there is good reason to believe that the competitive forces that contributed to its consideration will persist and even intensify.

This paper focuses on just one aspect of the DBCFT: its robustness, or otherwise, to tax planning.<sup>1</sup> It argues that the DBCFT, though not without gaming issues, is much more robust against planning activities by multinationals than is the present system.

<sup>&</sup>lt;sup>1</sup> Thus it does not discuss, for example, issues related to exchange rate and price adjustment, or to World Trade Organization rules and tax treaties.

Indeed this is one of its most attractive properties, so that it is both surprising and disappointing that this point did not feature more prominently in the recent debate.

The tax planning practices of companies, including of course US multinational companies, have been a source of considerable political and public concern worldwide. Estimates of the scale of the effect of these practices are notoriously problematic, but recent estimates put the revenue loss from base erosion and profit shifting practices of companies at around one percent of GDP (Crivelli and others, 2016) or, in another exercise, to a global corporate income tax (CIT) revenue loss of between 4 and 10% of global CIT revenues, equivalent to \$100-240 billion annually (OECD 2015 a). Specifically for the U.S., Guvenen et al. (2017) estimate that multinationals shifted \$280 billion in profits out of the United States in 2012. <sup>2</sup> If this profit had instead been taxed at both federal and state level in the US, this would represent foregone corporation tax revenue of around 34% of the total actually collected in 2012.<sup>3</sup> And the overstatement of net US imports it implies would account for more than half of that year's trade deficit. These are significant issues, of considerable public concern, and any tax reform that offers the prospect of substantially addressing them merits close attention.

The G20-OECD 'Base Erosion and Profit Shifting' (BEPS) project has of course set about addressing many of these challenges while retaining the essential features of the current international tax system. It has produced detailed and lengthy reports, extensive new legislation and guidance. However, even on the most favourable view, the minimum standards and proposals stemming from the BEPS project will not eliminate profit

<sup>&</sup>lt;sup>2</sup> Clausing (2016) arrives at estimates of a similar size using a somewhat different, regression-based methodology.

<sup>&</sup>lt;sup>3</sup> Total US corporate tax revenue in 2012 was around \$327 billion, and the combined federal and state tax rate is approximately 40%.

shifting through these channels. The DBCFT, on the other hand, would – if well-designed and implemented – effectively eliminate profit shifting through these and other channels targeted by the BEPS project,<sup>4</sup> as well as some that were not. As one of the DBCFT's fiercest critics noted, the DBCFT "solves many of the most vexing problems of international taxation of corporate income, problems that have occupied the OECD in its BEPS project for several years without any satisfactory conclusion." (Graetz 2017).

Throughout this debate, some doubt has been cast on the effectiveness of the DBCFT in eliminating profit shifting through these channels. A distinction must be made here, however, with respect to the form of DBCFT being addressed. In this paper we focus on what Miller (2017) calls the "pure" DBCFT – essentially the version discussed in the academic literature and set out most fully in our earlier paper (Auerbach et al, 2017). Miller and others (e.g. Hariton 2017, Avi Yonah and Clausing 2017; Shizer 2017; and Graetz 2017) have addressed the possibility of profit shifting primarily under the House Blueprint proposals. As Miller (2017) argues, the Blueprint is "a hybrid that incorporates aspects of the pure DBCFT, but also elements of our current income tax. Many of the planning opportunities under the DBCFT [i.e. the Blueprint] arise because of its hybrid nature." This paper does not discuss in any detail the implication of divergences between the "pure" DBCFT and the Blueprint proposal.

This paper is structured as follows. Section II briefly describes the DBCFT. Section III explores the robustness of the DBCFT to three of the major profit shifting channels under the existing system; first in a setting where the tax is adopted universally

<sup>&</sup>lt;sup>4</sup> For example, treaty abuse and manipulation of the permanent establishment rules.

and then where it is adopted unilaterally.<sup>5</sup> Section IV raises some other considerations, and section V concludes.

#### II. ELEMENTS OF THE DBCFT

The "cash flow" component of the DBCFT means giving immediate relief to all expenditure, including capital expenditure, and taxes revenues as they accrue. In the terminology of the Meade Committee (1978), a cash-flow tax could be levied on a company on an R (real) base or an R+F (real plus financial) base. Under the R base, transactions involving financial assets and liabilities are ignored – so, for example, interest receipts would not be taxed and interest expenses would not be deductible. The R base is thus limited to the difference between real inflows (from the sale of products, services and real assets) and real outflows (from the purchase of materials, products, services – including labour – and real assets). By contrast, under the R+F base, all cash inflows (excluding injections of equity), including borrowing and the receipt of interest, would be taxable; all cash outflows, including lending, repaying borrowing and interest payments (but excluding equity repurchases and dividends) would be subtracted in calculating the tax base. That is, the tax would apply to all net financial inflows.

The "destination" component means that a DBCFT would be based on sales of goods and services in the country less expenses incurred in the country: so receipts from exports are not included in taxable revenues and imports are taxed.<sup>6</sup> This 'border

<sup>&</sup>lt;sup>5</sup> Sections II and III of this article are based on Auerbach et al (2017).

<sup>&</sup>lt;sup>6</sup> More precisely (and as discussed later): imports by businesses liable to a DBCFT could either be taxed, with a deduction then available, or untaxed but not deductible; imports by final consumers would simply be taxed.

adjustment' is essentially the same treatment as is standard under value added taxes (VAT).

The relevant "destination" for the calculation of tax, it should be emphasized, is the location of the immediate purchaser, not (necessarily) that of the final consumer. For example, if a US manufacturer sells steel to a French automobile producer which uses the steel to produce automobiles sold back to the United States, US application of the destination-based tax would not tax the sale of steel but would tax the automobile imports.

It is, however, the location of the final consumer upon which the impact of the DBCFT ultimately turns. Sales to other businesses effectively attract no tax under the DBCFT, either (if the sale is domestic) because they generate a deduction for the purchaser or (if exported) because they are untaxed. The DBCFT is built on the intuition that taxing companies on the basis of something that is relatively immobile – which we take consumers, by and large, to be - limits the scope for the gaming that has caused such difficulties within the current international tax framework.

A simple example makes the workings of the DBCFT clear (Table 1). Suppose a company produces goods in country A, employing labour at a cost of 60 and with costs of 40 on other domestic purchases. It sells goods to domestic consumers in A for 150, and also exports goods to country B for 150. It therefore has a total profit, in cash flow terms, of 200.

#### Table 1. Illustration of application of the DBCFT

The DBCFT tax base in country A is calculated as domestic sales of 150 less domestic cost of 100: a total of 50. The DBCFT tax base in B is simply the value of the

imports into B: 150. If the tax rate in A is 20% and that in B is 30%, then the firm's tax liabilities are 10 in A and 45 in B.

As will become clear, it is the destination-basing component of the DBCFT, not the cash flow part, that is at the heart of the distinct robustness of the DBCFT against much international tax planning. Indeed the analysis that follows would be much the same for other forms of taxation that depart from cash flow treatment but retain destination-basing.

#### III. THE DBCFT AND INTERNATIONAL TAX PLANNING

This section assesses the DBCFT's robustness to three of the most significant profit shifting channels found under existing tax system: debt shifting through the use of related party finance, the manipulation of transfer prices, and the location of intangible assets that earn a royalty or license payment in a low tax country. In each case, two settings are considered: first, that in which the DBCFT is adopted universally; second, that in which it is adopted by only one country. In doing so, we focus on the adoption of a "pure" DBCFT. That is not what was proposed by the House Republicans in their Blueprint or other versions of the tax: for example, the simple carry forward of losses without payment of interest, as proposed there, creates obvious planning opportunities. It may seem unfair to compare an idealized proposal with the current system as actually implemented. To the extent that the implementation of a DBCFT departs from its ideal design, it may be less robust to these and other planning strategies. But the DBCFT is not unique in this regard. The flawed implementation of any tax can create weaknesses for tax planners to exploit. More to the point is that the underlying incentives for tax

planning at the heart of the two systems are fundamentally different, and this would shine through in any implementation of the DBCFT that incorporates the key features set out above.

#### A. Universal Adoption

We consider in turn the three profit shifting devices highlighted above.

#### 1. Profit shifting through the use of debt

Multinationals' use of third party and related party interest payments to shift profits from high to low tax countries has been established in a series of studies (De Mooij 2011 and Riedel 2014). These avoidance techniques primarily rely on the deductibility of interest payments under most existing corporate tax systems. Suppose for instance<sup>7</sup> that a multinational has two affiliates, one in a high tax country (country A), the other in a low tax country (country B). The affiliate in B requires financing for its business, but instead of borrowing directly from a third party bank, it is equity funded by the affiliate in A using funds borrowed from a bank in A. The interest paid to the bank is thus deducted from the profit of the affiliate in A rather than that of the affiliate in B. This structure benefits the multinational as a whole as the former is subject to a higher tax rate than the latter. In practice, of course, profit shifting through this channel can be achieved through even more sophisticated structures.

Countries have sought to combat profit shifting through this channel with different types of rules - including thin capitalisation rules, transfer pricing rules and withholding taxes – with varied degrees of success. An interest limitation rule is

<sup>&</sup>lt;sup>7</sup> This example is taken from OECD 2015 b. Further examples are set out in this report.

proposed under BEPS Action 4, which, if adopted by participating states, may address the worst excesses of planning through this channel but would not eliminate avoidance through debt-shifting since a significant proportion of interest payments would remain deductible (e.g. Collier, Devereux and Lepoev 2017).

In contrast, the DBCFT would eliminate profit shifting through this channel. Under an R-based cash flow tax, there is no tax relief for interest payments and there is no tax on interest received. So the debt-shifting channel simply would not exist. Incentives for debt-shifting would also not exist under the R+F base, which (as set out for instance in the Meade Report) is the appropriate cash flow form for financial institutions. This is because border adjustments would result in the same cross-border treatment of financial flows as under the R base: that is, receipts of interest (and principal) would be treated as exports, and so not taxed, while payment of interest (and principal) would be treated as an import and so would not be deductible (or would be deductible but also taxed). Auerbach et al (2017), elaborate on this issue (including the possible simplification of ignoring cross-border flows between entities subject to the DBCFT).

#### 2. Transfer Pricing

Transfer pricing is widely considered an important profit-shifting channel for multinationals.<sup>8</sup> This importance is unsurprising. A large percentage of international trade takes place within multinationals, and since pricing intragroup transactions is not an exact science, there is ample scope for price manipulation. Furthermore, the primary

<sup>&</sup>lt;sup>8</sup> See, for example, Kleinbard (2011) who explains the importance of transfer pricing strategies for US firms creating 'stateless income'.

counter-measure to these practices, the Arm's Length Principle, has significant weaknesses both conceptually and in its application.

While direct empirical evidence on transfer pricing abuse has been "scarce" (IMF 2014), some recent papers find significant profit-shifting through this route by multinational firms (e.g. Cristea and Nyugen 2017 and Flaaen 2017). Indeed the BEPS project has been very much focused on transfer pricing issues, which are the subject of three out of the fifteen BEPS Actions (Actions 8, 9 and 10). A number of commentators, however, have criticized this aspect of the BEPS outcomes as making least progress on some significant issues (see for instance Brauner, 2016). More generally, it seems clear that the changes flowing from the BEPS Actions will not eliminate all problems with transfer pricing (e.g. Collier and Andrus 2017).

In contrast, profit shifting through the manipulation of intra-group prices is precluded by the DBCFT. To see this, consider the effect of a sale of a good by company A to another member of the same multinational group, company B, with the two companies located in different countries. Under current arrangements, A pays tax on the sale of the good to B, but B receives tax relief on the purchase of the good as an input into its own activity. If A's country has a higher tax rate, then the multinational has an incentive to understate the true price of the good, since B's tax relief on the purchase of the good will then exceed the tax levied on A's sale. If, on the other hand, the country in which A is located has a lower tax rate, then the incentive is reversed: overall tax is lowered if the price is overstated.

Things are very different under a DBCFT. Company A then faces no domestic tax on its export. B does face a tax on its import,<sup>9</sup> but as an input into whatever activity B is undertaking the cost of the good will also be deducted from B's tax base. These two effects exactly cancel out, making the value of the import irrelevant for tax purposes.

An alternative approach to implementing this treatment of imports, as discussed in Auerbach (2010) and further below, would be simply to exclude imports by taxable businesses from the tax base altogether – so that for them there is neither a tax on imports, nor a deduction for the cost of the imported good. (Imports by final consumers would of course be taxable). In this case, the transaction between A and B is entirely free of tax, so it is particularly easy to see how the destination basis eliminates avoidance techniques that rely on manipulating the prices of transactions within the multinational.

An example illustrates this key point. Suppose one affiliate in the multinational group imports the good from another affiliate and then sells it to a domestic third party – for example, a final consumer or an unrelated party – for a price of 120. Both countries operate a DBCFT, and so there is no tax on the export in the exporting country. The tax in the importing country – assumed to be at a rate of 25 percent – can be thought of in two ways, as described above. Table 1 illustrates. In column (a) the import is taxed, and the cost of the import set against the tax charge on the sale to the final consumer. In column (b), the import is ignored for both purposes.

Suppose first that the price at which the good is imported is 100. Then under method (a), there is a tax charge on the import of 25. In addition, there is a tax charge on the profit of the importing company at 25 percent of sales (of 120) less imports (of 100):

<sup>&</sup>lt;sup>9</sup> To be clear(er), what we mean when speaking loosely of an export (and conversely for an import) is a good or service the destination of whose sale is taken to be abroad. Note too that domestic sales by domestic firms are taxed in the same ways imports.

a tax liability of 5. Adding this to the tax on imports, total tax payable in the importing country is 30. Because the tax on imports washes out, this is the same liability as implied by simply taxing sales of 120 at 25 percent.

Under method (b), the import is simply ignored, and there is a tax charge on the total value of the sale to the domestic consumer, which also generates a total tax liability of 30. The import price has no impact on the total tax charge faced by the multinational. The lower two panels of the table illustrate this by showing that liability remains at zero if the import price were not 100 but, say, zero, or 120.

## Table 2. Tax liabilities of an importing business under a DBCFT

#### 3. Locating IP in low tax jurisdictions

Intellectual property (IP) has become increasingly important for multinationals and the economy as a whole<sup>10</sup> – and for tax planning it has the merit that it can be located and relocated strategically more easily than physical factors, thus making it a prominent element of current tax planning strategies. As the OECD noted at the start of the BEPS project, "many corporate tax structures focus on allocating significant risks or hard-to-value intangibles to low-tax jurisdictions, where their returns may benefit from a favourable tax regime." (OECD 2013, p. 42). Empirical studies confirm that the location of valuable IP is systematically distorted towards low-tax locations (Riedel 2014).

Under the existing system, once highly valuable intangibles are located in low tax countries, related companies within the multinational group that are located in high tax countries may pay royalties or license fees to the company that owns the intangible asset

<sup>&</sup>lt;sup>10</sup> See Auerbach (2017).

in return for their use. These payments receive tax relief at the high rate of tax and are liable to tax on the receipt at the low rate of tax.

Transfer pricing rules are a primary response to profit shifting through this channel. But the difficulties arising in their application to intangibles are notorious. While BEPS Action 8 sought to improve transfer pricing rules as they relate to hard-to-value intangibles, this is one area where commentators have been particularly critical on the lack of progress made by BEPS (e.g. Brauner 2016). Countries can take other countermeasures, individually or collaboratively. BEPS Action 5, for example, resulted in collaborative action to address patent box regimes. However, this action is of narrow scope. More broadly, there is little doubt that this profit shifting channel will continue to trouble existing tax systems post-BEPS.

Again, this profit-shifting channel would not exist under a DBCFT. The reason is the same as that given above. The purchase or sale of the right to make use of the intangible asset would naturally be treated in the same way as the purchase or sale of a good or service. Thus a purchase, in the form of a royalty or licence payment say, would be treated as an import into a destination country, and as such, would be liable to tax there. So if A (located in a high tax jurisdiction) acquires a license from B (located in a tax haven) to use its IP, this would give rise to a tax liability in A. But the tax paid on that import would also be deductible as a cost for A. Just as above, these two elements would exactly balance out. An alternative arrangement, as with other imports by taxed businesses, would be simply to disregard the import and the payment for it. In any case, since there are no real tax consequences of the transaction, the incentive to locate intangible assets in a low tax country would disappear under the DBCFT.

The numerical example in Table 2 again illustrates this analysis. We can interpret the import as being the purchase by A of the right to make use of an intangible asset owned abroad. That enables the importer to produce a good which it sells to a consumer for 120. A incurs no other costs. Then the analysis in Table 1 holds for the import of the right to make use of an intangible asset. If A pays 100 or 120 for the use of IP it incurs the same overall tax liability as it would if it paid zero. As a result, locating IP in B's low tax country and paying a royalty or licence fee from A's high tax country does not alter the tax due by either in their respective countries.

#### **B. Unilateral Adoption**

The unilateral adoption of a DBCFT would leave existing planning opportunities in place; however, they would operate to the detriment of the rest of the world, not that of the adopting country. Intuitively, tax arbitrage plays off differences in statutory rates of source based taxation, and adoption of a source based tax effectively sets that rate in the adopting country to zero. So if both countries adopt a DBCFT, the difference, and hence the opportunities for tax arbitrage go to zero. But if only one does so, then, if the rate in the other country is unchanged, the incentive for such arbitrage unambiguously increases.

#### 1. Profit shifting through the use of debt

The previous section showed that if two countries adopt the DBCFT, multinationals cannot shift profits from one to the other through intra-group debt. But what would happen if country A adopted a DBCFT, while country B maintained the existing source-tax based tax?

Consider first the adoption of an R-Base DBCFT by A. Then companies located in A cannot shift profits to affiliates located in B through intra-group debt: if a company in B lends to an affiliate in A, when the latter pays interest back the payment is not deductible in A (as interest is not included in the R Base) – but the interest received in B would generally be taxable under the source based system in country B.

On the other hand, the adoption of the DBCFT by A increases the incentive for companies in B to shift profits to affiliates in A through intra-group debt. Interest paid by companies in B is likely to be deductible in B, subject to anti-avoidance rules, but will not be taxed in the DBCFT-adopting country A (again, because interest is not included in the R Base). Countries adopting a DBCFT thus aggravate debt-shifting problems for non-adopting countries. They also create incentives for multinationals to locate their debt in countries maintaining the existing system. The same result is achieved under an R+F base (Auerbach et al 2017).

#### 2. Transfer Pricing

If country A adopted a DBCFT and country B maintained the existing sourcebased tax, transfer mispricing could be used to the detriment of B but not A. As we have seen above, cross-border intra-group transactions would not appear in the tax base in country A. But the declared prices used for intra-group cross-border transactions would still affect the tax base in the non-DBCFT country B. If the company was exporting from B, there would be an incentive to under-price the export. If the company was importing

to B, there would be an incentive to overprice the import. This incentive arises whatever the tax rates in A and B, so long as the latter is strictly positive – and is larger the greater is the difference in rates.

The simple numerical example in Table 3 illustrates this analysis. First consider the case where a company in A (which employs a DBCFT) exports goods to an affiliate in B (which employs a source based tax) for resale to consumers in B at 120. Assume a tax rate of 25 percent in both countries – so in this case there would actually be no transfer pricing issue if both countries adopted a source-based tax. Not so with a unilateral DBCFT. Then exports are not taxed by A, and therefore the company in A is indifferent to the price charged on the export. But the intra-group price is important for the tax liability of the affiliate in B. If the import price is set at 100 the affiliate in B makes a profit of 20 and pays tax of 5; if the price is set at zero it makes a profit of 120 and pays tax of 30; and if it is 120 it makes no profit and pays no tax. Whenever the source based tax in B is strictly positive, the group thus has an incentive to over-price sales from affiliates in A to affiliates in B; and this incentive is larger the higher is the rate in B.

# Table 3 Tax liabilities on exporter and importer when only one country hasa DBCFT

If instead a company B exports to an affiliate in A under the same conditions, then the transfer price is irrelevant for tax in A. Either the affiliate in A will pay tax on the import and receive a deduction for costs equal to the value of the import, or the import will be ignored altogether for calculating the tax in A. In either case, the affiliate in A will pay tax of 30 on the sale of 120, whatever the transfer price. But now there is a

clear incentive for the exporter from B – the non-DBCFT country – to underprice the value of the export, to reduce the tax due in the non-DBCFT country.

#### 3. Locating IP in low tax jurisdictions

A similar analysis applies to the strategic location of intangible assets. Under the existing system, there is an incentive for companies to locate intangible assets in low-tax countries and pay royalties and license fees from high–tax countries to where the assets are owned. But, as shown above, this incentive would not be present in a country with a DBCFT, however high the rate. That is because the use in the DBCFT country of the benefits of the intangible asset would be treated as an import. The tax on the import would again net out with tax relief on the purchase of that import; or the import could be ignored entirely. In either case, there is no net deduction for the cost of using the imported service from the intangible asset.

If other countries maintained existing source-based systems, however, then there would be an incentive to locate intangible assets in the DBCFT country, since there would be no tax on the receipt of royalty or license fees but royalty or licence payments to the DBCFT country would generally be deductible in other countries; this would reduce taxable income in those countries.

The numerical example in Table 3 again illustrates the position for trade in the use of IP, when the countries of both the exporter and importer have tax rates of 25%, but only one of them has a DBCFT. The key issue arises in the first panel of the table, where the IP is owned in the DBCFT country (A) and a company in the non-DBCFT country (B) pays a royalty or licence fee for the right to use the IP. That represents an

import from the DBCFT country which is not taxed. But the payment does receive relief in the non-DBCFT country, which creates an incentive to make such payments.

#### **IV. OTHER CONSIDERATIONS**

Several other issues arise in assessing avoidance possibilities under the DBCFT.

#### A. Other avoidance strategies

The DBCFT puts considerably less pressure on the notion of corporate residence than does the existing system, though at the cost of introducing a different notion of nexus than exists in current tax treaties. The tax base is essentially domestic sales less domestic expenses. There is no requirement for corporate residence to identify either sales or expenses. Sales are taxed in the country of the consumer, irrespective of corporate residence. And expenses are allowed in the country in which they are incurred, also irrespective of corporate residence. Under the DBCFT, companies would not gain any tax advantage by moving their corporate tax residence. Inversions and similar tax strategies would thus become obsolete.

The DBCFT also removes avoidance strategies revolving around the taxation of capital accruing to non-residents, with the realization of gains ultimately deriving from assets located in one country being realized, through a series of intermediary companies, in low tax jurisdictions rather than that in which the underlying asset is located (IMF, 2014; Cui, 2015). This planning device is of particular importance to low income countries and not covered by the BEPS project (see for instance IMF (2014)). Under the

consumption tax approach of the DBCFT, there would simply be no clear rationale for taxing such corporate-level capital gains.

#### B. Lessons from the Value-Added Tax?

Expositions of the DBCFT make much of its equivalence to a broad-based VAT combined with a subsidy to labor at the same rate. So while there is no practical experience with the DBCFT to draw on, one might look for some lessons from experience with the VAT.

Some international problems under the VAT might also arise under a DBCFT. In each case (as under sales taxation and excises in the U.S.), there is an incentive – not present under a source based corporate tax – to disguise domestic sales to final consumers as exports. Other forms of VAT fraud,<sup>11</sup> however, seem less likely to arise under the DBCFT, since they have an element of speed that reflect the relatively high frequency of VAT returns that would not be replicated under a DBCFT administered on the same annual basis as is normal for income taxation. (Missing trader fraud under the VAT, for instance, revolves around claiming and receiving refunds then quickly disappearing.) This is not to say that fraud issues analogous to those under the VAT would not arise: there could for example be an incentive to acquire a reputation as a good taxpayer who happens to be perpetually in a refund situation, before making a large bogus claim and vanishing. Issues of outright fraud and evasion, however, are matters of enforcement rather than – our concern here – planning opportunities associated with core design features of the tax.

<sup>&</sup>lt;sup>11</sup> \_See Keen and Smith (2007).

The VAT experience would, however, have direct applicability to key aspects of the design and implementation of a DBCFT. Defining the destination of sales is straightforward for goods and tangible services, but not for intangible services. Here the OECD's VAT/GST Guidelines (OECD, 2017) provide the natural starting point for addressing the issue under a DBCFT. In terms of implementation, the problems that a DBCFT would face in bringing into tax sales of such services to final consumers (and low value consignments) are also familiar under the VAT. Whilst an entirely satisfactory solution has yet to be found, there is extensive experience in Europe to drawn on; and experience with state sales taxes in the U.S. too, where considerable progress has been made in bringing inter-state sales into tax.<sup>12</sup> Well-developed proposals have been made to facilitate enforcement, such as introducing simple registration requirements for foreign companies. Innovative and interesting solutions are also being explored, such as using financial institutions as collection agents or electronic identification devices (e.g. Lamensch 2015).

#### C. Comparison with sales-based formula apportionment

The analysis in the previous section compared the DBCFT with source-based taxation of the kind that is now the norm. Among the radical alternatives to the present system, however, is movement to some form of formula apportionment – as with the recently-revived Common Consolidated Corporate Tax Base (CCCTB) proposal of the European Commission (European Commission, 2016). Such a scheme would likely weight in part – perhaps U.S. experience suggests, to a large degree – by sales defined on a destination basis. That, however, creates avoidance possibilities: a highly profitable

<sup>&</sup>lt;sup>12</sup> See Bruce and others (2015).

company could, instead of making final sales into a high tax jurisdiction itself, sell its products in a fully arms-length transaction to an independent, much less profitable retailer in a low-tax jurisdiction. As a result, only the low rate of tax would be applied to the company's high profits. The retail company could sell on the goods into the high tax jurisdiction and face tax at that high rate, but that would only apply to its relatively low profit. The company's tax liability, and the sum of its and the retailers', may then be considerably lower than if the original company had sold directly into the high tax jurisdiction. This would not happen under a DBCFT. In that case, the full value of imports into the final country of destination – rather than a corresponding proportion of the profits of the final seller – would be subject to tax in that country.

#### V. CONCLUSION

Even a well-designed DCBFT would involve opportunities for evasion and tax planning. Some of these are the same as under a traditional income tax (or sales tax): the incentives, for instance, to conceal domestic sales or present purchases for personal consumption as being for business use. Others are novel in detail, but qualitatively familiar: lines would need to be drawn – between those entities subject to the DBCFT and those not, for instance, and between financial institutions and others – and that always invites tax planning. And of course an imperfectly designed DBCFT would likely open up even more opportunities: if full loss relief were not allowed under a DBCFT,<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> This is a particular issue under the DBCT because successful companies can find themselves with negative tax bases as a result of both the cash-flow and the destination elements of the tax, perhaps permanently so in the case of exporters. Auerbach and others (2017) discuss ways in which effective full loss offset could be achieved under a DBCFT.

for example, taxable losses could be used in the context of mergers with profitable businesses.

A well-designed DBCFT, however, would – if adopted by all countries – be fundamentally immune from the opportunities for international tax planning to which the current system, given the inherent difficulties associated with the arm's length principle (conceptual as well as practical)<sup>14</sup> is so clearly prone. Those opportunities generally hinge on differences in the rates at which payments made by one affiliate of a multinational to another located elsewhere – 'imports,' broadly interpreted to include not only purchases of goods and services but payments of interest or of royalties and license fees – are taxed by the jurisdiction in which they are received and deductible in that from which they are paid. With universal adoption of destination based taxation, however, these payments are neither taxable where received nor deductible where paid. Such opportunities for avoidance thus disappear.

If only some subset of countries applies a DBCFT, they insulate themselves against avoidance that tends to reduce their tax bases, for exactly the same reason as above: the application of the destination basis eliminates scope for game playing on the prices paid or charged on the international transactions of firms located there. For those countries not adopting the DBCFT, in sharp contrast, opportunities and incentives for outward profit shifting, as we have seen, unambiguously increase. Conversely, countries adopting the DBCFT become clear beneficiaries of profit shifting activities. The likely extent of such effects from partial adoption is hard to gauge: multinationals already have many opportunities to shift profits to low rate countries. And the impact will depend on the particular circumstances, being greater, for instance, if the adopter is a large and

<sup>&</sup>lt;sup>14</sup> See, for example, Collier and Andrus (2017).

initially high-tax country. The likelihood is, in any case, of increased pressure on the devices that non-adopters have at their disposal to limit profit-shifting: thin capitalization rules, withholding taxes and the like. While the most direct responses are in the hands of the non-adopters, the adopter may also wish to protect foreign tax bases from undermining through artificial transactions and pricing. Participation in the country by country reporting that is a minimum standard under the G20-OECD BEPS project, for instance, may yield little direct benefit to the adopter, but can be helpful for others in addressing transfer pricing issues. Even if adequate responses can be shaped, however, this – or, following suit by adopting a DBCFT – is likely to take some time, during which the adverse impact on non-adopters might be significant. This is, or should be, a significant concern with unilateral adoption.

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# Tables

	Country A	Country B	Total
Tax rate	20%	30%	
Labour costs	60	0	60
Other costs	40	0	40
Sales	150	150	300
DBCFT tax base	50	150	200
DBCFT charge	10	45	55

	Price	Tax liability:	Tax liability:
		Method (a)	method (b)
Import price = 100			
Import	100	25	0
Sale to domestic consumer	120	5	30
Total tax liability	-	30	30
Import price = 0			
Import	0	0	0
Sale to domestic consumer	120	30	30
Total tax liability	-	30	30
Import price = 120			
Import	120	30	0
Sale to domestic consumer	120	0	30
Total tax liability	-	30	30

Table 2. Tax liabilities of an importing business under a DBCFT

Note. This table illustrates the tax liabilities of an exporting business at three alternative imports prices (100, 0, 12) and under two alternative treatments: in column (a) the import is taxed, and the cost of the import set against the tax charge on the sale to the final consumer; in column (b) the import is ignored for both purposes. In each case, we consider three alternative prices for the import.

# Table 3 Tax liabilities on exporter and importer when only one country has

Transfer	Price of	Exporter tax liability	Importer tax liability
price	final good	(DBCFT country)	(non-DBCFT country)
100	120	0	5
0	120	0	30
120	120	0	0
		Exporter tax liability	Importer tax liability
		(non-DBCFT country)	(DBCFT country)
100	120	25	30
0	120	0	30
120	120	30	30

Note. This table illustrates the tax liabilities of an exporting business and importing business when only one of the two is in a country with a DBCFT. In the first panel, the exporter is in the DBCFT country; in the second, the importer is in the DBCFT country. In each case, the importer purchases the import and sells it on without further cost for a price of 120.