

# DEBATE ON THE CCCTB

## Destination-with-Credit Formula: A Simple Add-On that Would Make the CCCTB More Resilient in the Face of Tax Competition and Tax Planning

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### 1 INTRODUCTION

The common consolidated corporate tax base (CCCTB) regime proposed by the European Commission has the potential to tackle most of the key issues of international taxation. However, there is an inherent flaw in the design of the CCCTB. The system does not remove the incentive of Member States to engage in tax rate competition. On the other hand, the CCCTB leaves multinational enterprises (MNEs) with the opportunity for tax minimization through shifting of real activities. This article introduces an amendment to the CCCTB that would tackle these structural defects.

The CCCTB is based on a classic three-factor allocation formula that takes into account the location of labour, (tangible) assets and sales. The approach presented in this article is to include in the formulary apportionment system of the CCCTB an additional calculation method, namely the destination-with-credit formula. The starting point of the destination-with-credit formula is to allocate all profits to the Member State(s) of sales, as sales represents the least mobile factor of the current apportionment key. However, unlike from some previous proposals that concern a purely destination-based approach, the destination-with-credit method would be applied side-by-side with the three-factor baseline formula. This is possible because under the destination-with-credit formula, the Member State(s) of sales would be obligated to grant a computational credit for foreign taxes paid based on the other attributes of the baseline formula (labour and assets).

This article first explains the basic structure, merits and flaws of the CCCTB proposal (section 2.), describes and evaluates previously outlined solutions to the shortcomings of the CCCTB (section 3.) and presents the destination-with-credit approach (section 4.).

### 2 THE CCCTB PROPOSAL

#### 2.1 Basic Structure

The current international tax system applied in the European Union is based on the standard separate entity approach (arm's length principle), under which each Member State determines the scope of its tax jurisdiction and applies its own tax base and tax rate. Instead, under the CCCTB system, the profits (and losses) of different units of an MNE are first calculated based on a uniform tax base. Next, those profits (and losses) are consolidated (added up). After that, the consolidated profits are allocated to different Member States in line with a fixed apportionment formula. Finally, each Member State taxes its portion of the profits at its own tax rate.

The formulary apportionment mechanism of the CCCTB is based on three equally weighted factors, namely sales, labour and assets (the so-called Massachusetts formula). Payroll costs count for half of the labour factor and the number of employees for the other half. The assets factor includes all tangible property of the MNE, but does not include intangibles and financial assets.<sup>1</sup> In technical terms and with a little simplification, under the three-factor formula, the corporate income tax of an MNE in a Member State is calculated as follows:

$$\begin{aligned} & \text{Member State's share of MNE's EU-wide labour} \times \\ & \text{MNE's EU-wide profit} \times 1/3 \\ & \quad + \\ & \text{Member State's share of MNE's EU-wide assets} \times \\ & \text{MNE's EU-wide profit} \times 1/3 \\ & \quad + \\ & \text{Member State's share of MNE's EU-wide sales} \times \\ & \text{MNE's EU-wide profit} \times 1/3 \\ & \quad \times \\ & \text{Member State's corporate income tax rate (CIT rate)} \end{aligned}$$

#### Notes

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<sup>1</sup> European Commission, *Proposal for a Council Directive on a Common Consolidated Corporate Tax Base (CCCTB)*, COM(2016) 683 final 10 & 28 et seq. (25 Oct. 2016).

## 2.2 Merits of the CCCTB

The CCCTB is the favoured alternative of the European Commission to tackle the issues of the present international business tax system. The CCCTB approach indeed has various benefits compared to the current state of affairs. First, the fast-paced technological developments in communications, manufacturing and logistics are concentrating more and more taxable profits in the jurisdiction where the intangibles of an MNE are located. The CCCTB, with its three-factor apportionment formula, has the benefit of restoring some of the balance in the *allocation of taxing rights* between different countries where an MNE operates.

Also, under the CCCTB system, tremendously complicated transfer pricing issues of today would be largely avoided and MNEs would no longer have to deal with twenty-eight different corporate tax bases. As a result, *compliance and administrative costs* would be reduced. In addition, *double taxation*, in particular economic double taxation related to transfer pricing, as well as *over-taxation* caused by lack of cross-border loss consolidation, would be eliminated. Furthermore, the CCCTB would end *tax base competition* between the Member States and remove from the internal market opportunities for *shifting of accounting profits* through intra-group transactions, as well as various types of *tax planning strategies that exploit differences in national tax bases* (e.g. hybrid instruments).<sup>2</sup>

## 2.3 Remaining Issues: Tax Rate Competition and Shifting of Real Activities

Despite the broad coverage of the CCCTB regarding the main problem areas of international business taxation, some issues remain unaddressed. These are not minor shortcomings, but indeed structural flaws that ultimately could threaten the legitimacy of the entire system. Most significantly, the CCCTB does not eliminate *tax rate competition* between the Member States.<sup>3</sup> The CCCTB maintains the inbuilt incentive of the current system for countries to apply a lower corporate income tax rate compared to other countries in order to attract foreign investment and to give domestic companies a competitive advantage. Furthermore, one could argue that by removing the opportunities for Member States to engage in tax

base competition, the CCCTB could actually exacerbate the so-called race to the bottom as regards statutory corporate income tax rates.

The other side of tax rate competition is that the CCCTB maintains the opportunity for MNEs to apply *tax planning strategies that exploit the differences in national tax rates*. Under the CCCTB, an MNE can achieve a lower overall tax burden by manipulating the different factors in the apportionment formula. This can be done by shifting real activities (labour and tangible assets) to a low-taxing Member State.<sup>4</sup>

Section 4 will demonstrate how the destination-with-credit amendment would effectively reduce the incentive of Member States to engage in tax rate competition and the opportunities for MNEs to engage in factor shifting. First, however, some previously presented solutions will be considered, and their merits and shortcomings evaluated.

## 3 PREVIOUSLY PROPOSED SOLUTIONS

### 3.1 Minimum Corporate Tax Rate

One proposal to tackle tax rate competition and factor shifting within the CCCTB is a minimum corporate income tax rate.<sup>5</sup> As such, a minimum tax rate would be a somewhat efficient tool in this respect, as it would moderate tax rate differences between the Member States. However, the proposal comes with issues.

The effectiveness of a minimum tax rate is limited in the sense that it does not entirely remove the incentive of Member States to engage in tax competition and the incentive of MNEs to engage in shifting of real activities. As long as there is even one Member State with a corporate tax rate higher compared to the minimum tax rate, MNEs have the incentive to optimize their tax position by locating real activities in the lower-taxing Member States. Conversely, any Member State that applies a higher corporate tax rate has a competitive disadvantage in relation to any Member State that applies a lower rate. Accordingly, a system built on a minimum tax rate structurally facilitates the harmonization of tax rates at the level of the minimum rate. The race to the bottom continues until the minimum tax rate becomes the only tax rate.

## Notes

<sup>2</sup> European Commission, *Commission Staff Working Document, Impact Assessment, Accompanying the document Proposals for a Council Directive on a Common Corporate Tax Base and a Common Consolidated Corporate Tax Base (CCCTB)*, SWD(2016) 341 final 8 et seq. (25 Oct. 2016) and European Commission, *Commission Staff Working Document, Impact Assessment, Accompanying Document to the Proposal for a Council Directive on a Common Consolidated Corporate Tax Base (CCCTB)*, SEC(2011) 315 final 9 et seq. (16 Mar. 2011).

<sup>3</sup> The conclusion of OECD's 2018 tax policy study is that after a moderate period that followed the 2009 financial crisis corporate income tax rate reductions have again accelerated over the last few years. OECD, *Tax Policy Reforms 2018: OECD and Selected Partner Economies* 68 (OECD Publishing 2018).

<sup>4</sup> M.F. de Wilde, *Sharing the Pie: Taxing Multinationals in a Global Market* 655 et seq. (IBFD 2017). Also, the location of 'sales' might be subject to manipulation in some cases. However, this question can be addressed by careful designing of the applicable location rules. M.F. de Wilde, *Tax Competition Within the European Union Revisited: Is the Relaunching CCCTB a Solution?*, in *The EU Common Consolidated Corporate Tax Base: Critical Analysis* 226 et seq. (D. Weber & J. van de Streek eds, Kluwer 2018).

<sup>5</sup> E.g. European Parliament, Committee on Economic and Monetary Affairs (Rapporteur A. Lamassoure), *Report on the Proposal for a Council Directive on a Common Consolidated Corporate Tax Base (CCCTB)*, A8-0051/2018 44 (1 Mar. 2018).

All this is extremely problematic from the perspective of the sovereignty of the Member States. As stated in the Impact Assessment of the 2011 CCCTB proposal:

The comprehensive proposals examined in this document do not imply a harmonisation of corporate tax rates in the EU and, therefore, they do not restrict Member States' capability to influence their desired amount of corporate tax revenues. They do not interfere with national choices in terms of the size of public sector's intervention and composition of tax revenues.<sup>6</sup>

A regime with a uniform tax base and a minimum corporate tax rate would factually leave the Member States with very little decision-making power concerning corporate income taxation. Getting all Member States to agree on such system does not seem very likely in the near future. Accordingly, other options should be explored.

### 3.2 Destination-Based Formulary Apportionment

One of the fundamental flaws of the present international tax system is that states' taxing rights are determined to a large extent by the location of easily movable factors, in particular the location of intangibles and financing. This facilitates tax competition and aggressive tax planning. Under the proposed CCCTB regime, this unsustainable feature of the present system is moderated, but not entirely removed. Under the apportionment key of the CCCTB, two out of three apportionment factors, namely labour and tangible assets, are still somewhat mobile, although not equally agile compared to intangibles and financial assets. What adds to the problem of tax competition under the CCCTB is that for the Member States, the location of real activities (labour in particular) is not just about corporate income tax revenue, but concerns a whole range of other important considerations within and outside taxation. Accordingly, tax rate competition in the internal market can be expected to gain momentum, as stakes are higher compared to the mere shifting of accounting profits, which is the main concern today.

In order to cut the connection between corporate tax revenues and mobile attributes altogether, it has been proposed that the apportionment formula be entirely based on the location of third-party sales.<sup>7</sup> The underlying idea is that the location of customers is something that MNEs cannot manipulate.<sup>8</sup>

A purely destination-based formulary apportionment has undeniable merits, in that it would successfully remove the incentive of Member States to engage in tax rate competition and the incentive of MNEs to look for tax savings by shifting real activities. Any such measures would be ineffective because the applicable tax rate would always be determined by the location of sales. What is more, the desired effect could be achieved without any harmonizing of corporate tax rates within the internal market. There is, however, at least one major concern regarding a purely destination-based apportionment formula.

Allocating the taxing rights as regards an MNE entirely to the Member State(s) where third-party sales take place would fundamentally change the whole approach to the attribution of MNE profits for income tax purposes. Although the very basic idea of the CCCTB to apply a formulary apportionment instead of the separate entity approach already represents a structural shift in profit allocation, it still maintains the state of affairs in that taxing powers are distributed between the state(s) of supply and the state(s) of demand. In a purely destination-based approach, the supply side of the value chain would be altogether disregarded. For many, this may be a step too far.

## 4 ALTERNATIVE APPROACH: DESTINATION-WITH-CREDIT FORMULARY APPORTIONMENT

### 4.1 Basic Logic

This section introduces an alternative type of formulary allocation that takes the positive from the purely destination-based apportionment discussed above (section 3.2.), namely the connection between tax jurisdiction and the relatively immovable location of third-party sales. At the same time, the alternative approach avoids the negative effect of the purely destination-based allocation method, namely ignoring the taxing claim of the state(s) of supply. This is achieved by applying a combination of the classic three-factor (labour, assets, sales) Massachusetts formula and a new destination-with-credit formula. The idea is that the three-factor formula ensures the balanced allocation of taxing powers between the state(s) of supply and state(s) of demand, while the destination-with-credit add-on tackles the issues of tax competition and tax-motivated shifting of real activities.

The formulary apportionment mechanism of the CCCTB would be modified so that both the Massachusetts formula

## Notes

<sup>6</sup> European Commission, Commission Staff Working Document, Impact Assessment, *Accompanying Document to the Proposal for a Council Directive on a Common Consolidated Corporate Tax Base (CCCTB)*, *supra* n. 2, at 16.

<sup>7</sup> R. S. Avi-Yonah & K. A. Clausing, *Reforming Corporate Taxation in a Global Economy: A Proposal to Adopt Formulary Apportionment*, Discussion Paper, Hamilton Project / Brookings Institution (June 2007).

<sup>8</sup> The proposal for Destination Based Cash Flow Tax is founded on the same basic logic. E.g. A. J. Auerbach, M. P. Devereux, M. Keen & J. Vella, *Destination-Based Cash Flow Taxation*, Oxford University Centre for Business Taxation WP 17/01 (Jan. 2017).

and the destination-with-credit formula would be applied in parallel. The amount of tax in each Member State would be the greater of the results under the two competing formulas. The outcome provided by such a combined approach is that in a ‘normal’ situation, in which corporate income tax rates are somewhat consistent and the allocation of labour and assets is not concentrated in low-taxing Member State(s), the destination-with-credit add-on has little or no effect on the allocation of the tax base between the Member States. Only when there is a distortion in the form of significantly different corporate income rates and a concentration of labour and assets in low-taxing Member State(s), does the effect of the destination-with-credit add-on become substantial.

In technical terms, the destination-with-credit formula determines the amount of corporate income tax in a Member State as follows:

$$\begin{aligned} & \text{Member State's share of MNE's EU-wide sales} \times \\ & \text{MNE's EU-wide profit} \\ & \qquad \qquad \qquad \times \\ & \text{Member State's corporate income tax rate} \\ & \qquad \qquad \qquad - \\ & \text{credit for foreign taxes} \end{aligned}$$

The starting point under the destination-with-credit approach is the same as in a purely destination-based formula. In principle, all the profits of an MNE are allocated to the Member State(s) of third-party sales. However – and this is the main point of the destination-with-credit approach – the Member State(s) of sales must allow a computational credit for taxes paid in other Member State(s) based on the other factors of the three-factor baseline formula, namely labour and assets.<sup>9</sup> The outcome of such approach, in general terms, is that it increases the amount of taxes in the State(s) of sales if there is a major decrease in the tax rate in the State(s) of labour and/or assets. The reason for this is that the decrease of taxes in the State(s) of labour and/or assets decreases the computational credit for foreign taxes in the State(s) of sales. As a result, the destination-with-credit approach significantly reduces the incentive for Member States to engage in tax rate competition and the incentive for MNEs to minimize their taxes by shifting real activities. Any tax savings acquired by locating

labour and/or assets in low-taxing Member State(s) will be offset by the increase in taxes in the Member State(s) of sales.

The amount of credit for foreign taxes under the destination-with-credit approach is the lesser of the *formulary credit* or the *maximum credit*. The *formulary credit* is the Member State's share of the MNE's EU-wide sales times the MNE's taxes payable under labour and assets factors in other Member States. The formulary credit is the essential and reflective element of the destination-with-credit approach, as it increases taxes in the State(s) of sales when taxes go down in the State(s) of labour and/or assets. The *maximum credit* is the MNE's taxes payable in the Member State under the sales factor times two thirds. The purpose of the maximum credit is to safeguard the taxing rights of the State of sales when it applies a lower corporate income tax rate compared to the State(s) of labour and/or assets.<sup>10</sup>

## 4.2 Example of the Effects of the Destination-with-Credit Approach

The following example illustrates the functioning of the destination-with-credit add-on in a simple two-state scenario (all figures are euro). Z Group operates in a higher-taxing Member State (Germany) and in a lower-taxing Member State (Poland). The overall EU-wide profit of Z Group is 1 million. In the basic scenario, Z Group pays the same total amount of taxes under the plain three-factor Massachusetts approach and the proposed Massachusetts + destination-with-credit approach.

<b>Z GER</b> <ul style="list-style-type: none"> <li>• 3 million labour</li> <li>• 150 million assets</li> <li>• 135 million sales</li> <li>• CIT 30%</li> </ul>	<b>Z POL</b> <ul style="list-style-type: none"> <li>• 5 million labour</li> <li>• 50 million assets</li> <li>• 65 million sales</li> <li>• CIT 19%</li> </ul>
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### 4.2.1 Taxes in Germany

– Massachusetts formula:  $600,000 \times 30\% = \underline{180,000}$ <sup>11</sup>  
 – labour  $\frac{3}{8} \times 1 \text{ million} \times \frac{1}{3} = 125,000 \times 30\% = 37,500$

## Notes

<sup>9</sup> Schreiber has previously discussed an approach in which MNEs profits, either on transactional level or on group level, are allocated on sales-basis and the sales jurisdictions credit taxes levied on the share of MNEs profits attributed to non-sales jurisdictions. U. Schreiber, *Sales-Based Apportionment of Profits*, 72(4/5) Bull. Int'l Tax'n. 259–72 (2018). See also U. Schreiber & L. M. Fell, *International Profit Allocation, Intangibles and Sales-Based Transactional Profit Split*, 9(1) World Tax J. (2017). The main difference between the destination-with-credit approach compared to the one discussed by Schreiber is that only the former approach is designed to operate particularly in the formulary apportionment context. Therefore, only in the destination-with-credit approach the mechanism where profits are allocated on a sales-basis (with credit for foreign taxes) is applied together with the three-factor apportionment formula (labour, assets and sales). In the context of the CCCTB, the Scientific Advisory Council of the German Federal Ministry of Finance has suggested as a possible alternative to the formulary apportionment an approach that maintains the separate entity accounting principle and includes a credit for taxes paid at subsidiary level. DE: Scientific Advisory Council, Federal Ministry of Finance, *Einheitliche Bemessungsgrundlage der Körperschaftsteuer in der Europäischen Union – Gutachten des Wissenschaftlichen Beirats beim Bundesministerium der Finanzen* 27 (Mar. 2007), [www.bundesfinanzministerium.de/Content/DE/Standardartikel/Ministerium/Geschaeftsbereich/Wissenschaftlicher\\_Beirat/Gutachten\\_und\\_Stellungnahmen/Ausgewaehlte\\_Texte/0703231a3003.pdf?\\_\\_blob=publicationFile&v=5](http://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Ministerium/Geschaeftsbereich/Wissenschaftlicher_Beirat/Gutachten_und_Stellungnahmen/Ausgewaehlte_Texte/0703231a3003.pdf?__blob=publicationFile&v=5) (accessed 21 Jan. 2019). Schreiber has also discussed a similar alternative. U. Schreiber, *Consolidation, Allocation and International Aspects*, in *A Common Consolidated Tax Base for Europe – Eine einheitliche Körperschaftsteuerbemessungsgrundlage für Europa* 113–27 (W. Schön, U. Schreiber & C. Spengel eds, Springer 2008).

<sup>10</sup> Without the maximum credit, the application of the destination-with-credit formula could leave the state of sales entirely without tax revenue. This may happen in cases where the state of sales applies a lower corporate income tax rate compared to the state(s) of labour and/or assets and there is little or none labour and/or assets located in the state of sales. In most cases, however, the applicable credit will be the formulary credit.

<sup>11</sup> 180,000 is the amount of taxes payable in Germany under the Massachusetts formula. That number is applied to Z Group as it is bigger than the amount of taxes payable in Germany under the destination-with-credit formula (165,090).

- assets  $150/200 \times 1 \text{ million} \times 1/3 = 250,000 \times 30\% = 75,000$
- sales  $135/200 \times 1 \text{ million} \times 1/3 = 225,000 \times 30\% = 67,500$
- destination-with-credit formula:  $135/200 \times 1 \text{ million} = 675,000 \times 30\% = 202,500^{12} - 37,400^{13} = 165,090$
- formulary credit:  $135/200 \times 55,410^{14} = 37,400$
- maximum credit:  $202,500 \times 2/3 = 135,000$

#### 4.2.2 Taxes in Poland

- Massachusetts formula:  $400,000 \times 19\% = 76,000$
- labour  $5/8 \times 1 \text{ million} \times 1/3 = 208,330 \times 19\% = 39,580$
- assets  $50/200 \times 1 \text{ million} \times 1/3 = 83,330 \times 19\% = 15,830$
- sales  $65/200 \times 1 \text{ million} \times 1/3 = 108,330 \times 19\% = 20,580$
- destination-with-credit formula:  $65/200 \times 1 \text{ million} = 325,000 \times 19\% = 61,750 - 36,560 = 25,190$
- formulary credit:  $65/200 \times 112,500 = 36,560$
- maximum credit:  $61,750 \times 2/3 = 41,170$

*Total Taxes – Massachusetts only: 256,000 (25.60%)*

*Total Taxes – Massachusetts + destination-with-credit formula: 256,000 (25.60%)<sup>15</sup>*

Now Z Group attempts to obtain tax savings by placing more assets in the lower-taxing Member State (Poland). Under the plain Massachusetts approach, Z Group would obtain substantial tax savings. However, under the combined Massachusetts + destination-with-credit approach the savings in total taxes is significantly reduced.

Z GER	Z POL
<ul style="list-style-type: none"> <li>• 3 million labour</li> <li>• 50 million assets</li> <li>• 135 million sales</li> <li>• CIT 30%</li> </ul>	<ul style="list-style-type: none"> <li>• 5 million labour</li> <li>• 150 million assets</li> <li>• 65 million sales</li> <li>• CIT 19%</li> </ul>

#### 4.2.3 Taxes in Germany

- Massachusetts formula:  $433,330 \times 30\% = 130,000$
- labour  $3/8 \times 1 \text{ million} \times 1/3 = 125,000 \times 30\% = 37,500$
- assets  $50/200 \times 1 \text{ million} \times 1/3 = 83,330 \times 30\% = 25,000$

- sales  $135/200 \times 1 \text{ million} \times 1/3 = 225,000 \times 30\% = 67,500$
- destination-with-credit formula:  $135/200 \times 1 \text{ million} = 675,000 \times 30\% = 202,500 - 58,780 = 143,720^{16}$
- formulary credit:  $135/200 \times 87,080 = 58,780$
- maximum credit:  $202,500 \times 2/3 = 135,000$

#### 4.2.4 Taxes in Poland

- Massachusetts formula:  $566,670 \times 19\% = 107,670$
- labour  $5/8 \times 1 \text{ million} \times 1/3 = 208,330 \times 19\% = 39,580$
- assets  $150/200 \times 1 \text{ million} \times 1/3 = 250,000 \times 19\% = 47,500$
- sales  $65/200 \times 1 \text{ million} \times 1/3 = 108,330 \times 19\% = 20,580$
- destination-with-credit formula:  $65/200 \times 1 \text{ million} = 325,000 \times 19\% = 61,750 - 20,310 = 41,440$
- formulary credit:  $65/200 \times 62,500 = 20,310$
- maximum credit:  $61,750 \times 2/3 = 41,170$

*Total Taxes – Massachusetts only: 237,670 (23.77%)*

*Total Taxes – Massachusetts + destination-with-credit formula: 251,390 (25.14%)<sup>17</sup>*

#### 4.3 Further Observations on the Effects of the Destination-with-Credit Formula

As mentioned in section 4.1., in a normal situation where corporate income tax rates are somewhat consistent and the allocation of labour and assets is not concentrated in low-taxing Member State(s), adding the destination-with-credit approach to the CCCTB has little or no effect on the allocation of the tax base between Member States and, thus, on MNE's total taxes. The reason for this is that when corporate income tax rates are similar, the credit for foreign taxes provided in the State(s) of sales always remains relatively high. Only when there is a distortion in the form of significantly different corporate income rates and concentration of labour and assets in low-taxing Member State(s), the effect of the destination-with-credit add-on becomes substantial. The reason for this is that when corporate income tax rates are dissimilar, the credit for foreign taxes provided in the State(s) of sales may

#### Notes

<sup>12</sup> 202,500 is the amount of taxes that would be payable in Germany under a purely sales-based apportionment, i.e. without a credit mechanism.

<sup>13</sup> 37,400 is the formulary credit. In this example, the formulary credit is applied instead of the maximum credit, because the formulary credit is lesser of the two amounts.

<sup>14</sup> 55,410 is the amount of taxes payable in Poland under the labour and assets factors.

<sup>15</sup> In this scenario, the amount of taxes payable under the destination-with-credit formula is lower than the amount of taxes payable under the Massachusetts formula in both Germany and Poland. Therefore, the destination-with-credit add-on has no effect on Z Group's total taxes.

<sup>16</sup> 143,720 is the amount of taxes payable in Germany under the destination-with-credit formula. That number is applied to Z Group as it is bigger than the amount of taxes payable in Germany under the Massachusetts formula (130,000).

<sup>17</sup> In this scenario, the amount of taxes payable under the destination-with-credit formula is greater than the amount of taxes payable under the Massachusetts formula in Germany. Therefore, the destination-with-credit add-on increases Z Group's total taxes.

become relative low (or even zero if the applicable tax rate in some of the other States is zero).

An example where Member States apply relatively *similar* corporate income tax rates is a three-state model where the applicable tax rates are 18, 20 and 22%. In this scenario, the destination-with-credit add-on has an effect only in extreme cases where all or almost all labour and assets are allocated to the lowest-taxing state(s). Even then, the biggest difference between the plain Massachusetts approach and the combined Massachusetts + destination-with-credit approach with respect to an MNE's lowest possible overall tax rate is only approximately 2 *percentage points*.

An example where Member States apply relatively *dissimilar* corporate income tax rates is a three-state model where the applicable tax rates are 10, 20 and 30%. In this scenario, the effect of the destination-with-credit add-on is no longer limited to only the extreme cases where all or almost all labour and assets are allocated to the lowest taxing state(s). Yet, even in this scenario the destination-with-credit add-on remains with little or no effect if labour and assets are allocated somewhat evenly or more to the higher-taxing state(s). In this setting, the biggest difference between the plain Massachusetts approach and the combined Massachusetts + destination-with-credit approach with respect to an MNE's lowest possible overall tax rate is increased to approximately 12 *percentage points*.

The destination-with-credit add-on would not prevent the Member States from setting their own corporate tax rates. For example there is nothing preventing a Member State from applying a zero corporate income tax rate if it wishes to do so in order to stimulate the economy or for any other reason. What the destination-with-credit approach simply does is that it moderates tax rate competition in the internal market by reducing the relative edge of lower-taxing Member States. By doing so, one could argue, the destination-with-credit approach actually enhances the tax sovereignty of the Member States in that it enables also the application of higher corporate tax rates without the fear of losing investment to competitor States simply because of tax rate differences.

## 5 CONCLUSION

Introducing the destination-with-credit add-on under the CCCTB has the potential to significantly restrain tax competition and tax-motivated shifting of real activities, while maintaining full capacity of the Member States to determine their own corporate income tax rates. Implementing the destination-with-credit amendment to the CCCTB would be effortless, as it is simply a mathematical formula. No additional information would need to be collected from taxpayers compared to under the current three-factor formulary approach.