ABSTRACT: This paper discusses recent developments in corporate income tax policies in the EU and the US states. It examines the EU’s corporate tax reform proposal and the latest updates to that proposal. The paper looks at changes in tax rates and methods of taxing related groups of companies in the economic blocs; it also discusses the various ways in which the U.S. states tax multistate and multinational corporations. It also examines how the UK’s decision to leave the European Union, known as Brexit, affects UK companies doing business in the EU and identifies specific U.S. state practices that illustrate how to limit the scope of the CCCTB to the EU’s water’s edge. A final section discusses selected U.S. state policies on combined reporting and how Brexit might affect a large UK multinational enterprise and its use of the CCCTB. (Note: This paper reflects developments as of January 2017.)
I. Introduction

By dismantling its internal economic barriers, the European Union has stimulated cross-border activity and created an integrated economy among the EU Member States that parallels the economic integration that exists among the U.S. states. In both economic areas, goods and services cross borders without having to pay any tariffs, meaning that workers can freely move to any location in search of employment, and capital can flow freely to its most productive location.

These freedoms, however, don’t exist for businesses in the two economic blocs. While companies have the “freedom of movement” to invest across state borders in the United States, they lack the ability to invest freely across member state borders in the European Union. Numerous economic barriers, especially the existence of a separate set of corporate tax rules in each of the EU’s 28 member states, continue to hinder cross-border business expansion. Whereas U.S. businesses can use a single set of rules --- essentially the federal income tax rules --- to calculate their corporate tax base in every state where they do business, EU businesses must use a different set of rules in each member state. There is no "common tax base" in the European Union equivalent to the federal tax base in the United States.

For the EU’s business sector, the lack of a common tax base means they must confront a bewildering array of tax rules as they expand across the Single Market. The complications that arise with tax base proliferation aren’t limited to EU multinational enterprises. EU governments also must deal with this array of rules as they seek effective ways to determine where those multinationals earn their profits so that they can fairly apply tax rules. It is difficult to identify the location of those profits when the member states apply unique and often non-transparent rules to cross-border transactions. Many EU governments find that they can’t block the clever tax avoidance schemes that multinational enterprises can exploit under existing rules.

The European Commission listened to these concerns. After a decade of study, the European Commission issued in 2011 the most far-reaching overhaul of company tax rules in the half-century since the founding of what is now the European Union. The proposal to create a common consolidated corporate tax base, or CCCTB, with formulary apportionment far surpasses the scope of EU directives adopted in 1990 that addressed relatively narrow direct tax issues, such as cross-border interest payments.2

Many of the EU’s ideas derive from the U.S. states, which have more than a century of experience in taxing multistate corporations. The U.S. states have created detailed rules that define the tax base, the taxable group, and the apportionment formula. Many analysts view the U.S. state experience as providing useful guidance for the Europeans.3

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This paper discusses the EU’s recent company tax proposals and recent developments in U.S. state policies that may provide additional guidance to the EU.

A recent political development has complicated the EU’s plans. Although it won’t necessarily change the European Commission’s approach to the CCCTB, the UK’s decision to leave the European Union, known as Brexit, will affect UK companies with operations in the EU. This paper identifies U.S. state practices that illustrate how to limit the scope of the CCCTB to the EU’s water’s edge and then discusses how Brexit may affect the way selected UK multinationals are taxed. The paper also provides background on tax practices in both areas.

II. The European Union’s Common Consolidated Corporate Tax Base (CCCTB)

a. March 2011 – The CCCTB proposal

In March 2011, the Commission of the European Communities, hereinafter referred to as the EU Commission, proposed that the Member States adopt a common corporate tax policy that was designed to eliminate over- and under-taxation of EU multinational enterprises and reduce the administrative burdens and high compliance costs that affect companies doing business across the EU’s internal borders. That policy would require each member state to allow EU multinational companies to calculate their tax base using a common set of rules for all of their EU operations and then use a formula to share the total EU tax base among the group members in the various member states. The individual member states would then tax the group’s apportioned share of total income at local rates. The Commission has always insisted that member states will set their own tax rates. The Commission does not intend to set any minimum or maximum level of corporate income tax rate.

The Commission’s proposal is the Common Consolidated Corporate Tax Base (CCCTB) with formulary apportionment.

The CCCTB would include only EU operations and the formula would allocate EU income based on the shares of a corporation’s labor, assets, and sales assigned to each company within the group. The entire scheme would be limited to the European Union’s borders. This system closely parallels the system of water’s edge combined taxation with formulary apportionment that the U.S. states have used since the turn of the 20th century.

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The Commission proposed that companies use a formula to share their EU profits across group members. As shown in Box I, the formula includes the usual sales, labor and capital factors.

**BOX I: Apportionment Formula in the EU**

\[
\text{Share } A = \left( \frac{1}{3} \frac{\text{Sales}^A}{\text{Sales}^\text{Group}} \right) \\
+ \frac{1}{3} \left( \frac{\text{Payroll}^A}{\text{Payroll}^\text{Group}} + \frac{1}{2} \frac{\text{employees}^A}{\text{employees}^\text{Group}} \right) \\
+ \left( \frac{1}{3} \frac{\text{Assets}^A}{\text{Assets}^\text{Group}} \right)
\]

Where A represents the branch of the corporate group and the numerator of each factor represents company A's sales, payroll, employees, and assets as a share of the company total. The calculation only includes operations located in the European Union. This apportionment method differs slightly from the approach in the U.S. states as it assigns income to the particular company in a location rather than to the geographic location.¹

However, in recognition of the wide variation in employee compensation across the EU, the formula splits the payroll factor into two parts – one part based on employee compensation and the other part on the number of employees. The tax base is shared only when it is positive.

For many reasons, the member states didn’t act on the Proposal. In terms of the specific elements of the CCCTB, much business opposition centered on the provision that companies must calculate the tax base on a consolidated basis, believing that the consolidation rules weren’t well defined. Governments objected to the provision that the new rules would be optional for EU multinational enterprises, believing that optionality would leave the door open for gaming the tax system.

To address these issues, the Commission issued a public request for comments on two features of the CCCTB. First, should the Commission offer a non-consolidated tax base instead of a consolidated tax base and, second, should the proposal be mandatory for businesses.


In June 2015, the Commission launched an action plan for a Fair and Efficient Corporate Tax system.⁵ The re-launch of the proposal focuses on linking taxes with the location of business activity, specifically closing off artificial profit-shifting opportunities.⁶ As the Commission noted:

The fight against corporate tax avoidance is a top priority of this Commission. The consultation is part of the broader [Action Plan for Fair and Efficient Corporate Taxation](https://ec.europa.eu/commission/2014-2019/en/priorities/economic-growth-and-sustainability/anti-tax-avoidance-and-beyond) that is also being presented today. The Commission's work follows through on the commitments made by G20

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⁶ The Commission notes that its plan is consistent with the OECD’s Base Erosion and Profit Shifting (BEPS) reforms, but is tailored to issues specific to the unique features of the EU.
leaders, who have pledged to ensure that tax authorities freely exchange information about large multinationals, including their country-by-country reporting (CBCR).

Some companies currently generate large profits in the Single Market, but pay little or no tax in the EU. Some multinationals are able to use aggressive tax planning, national mismatches and legal loopholes due to their presence in multiple jurisdictions. Their use of complex corporate structures often puts small and medium enterprises (SMEs) at a disadvantage. It may also distort competition, put smaller rivals at a disadvantage and pit EU and non-EU companies within the Single Market against each other.7

The Commission indicated that requiring companies to disclose additional tax information gives them an incentive to pay their “fair share of tax” in the country where they earn their profits.

c. October 2016 – Re-launch the CCCTB

The European Commission issued a revised proposal on October 25, 2016 that reflects two key changes. The first major change is that the CCCTB would be mandatory for large multinational groups, instead of being optional as in the 2011 proposal. Groups with global consolidated revenues above €750 million would be required to use the new system. The Commission introduced this step to help curb tax avoidance.

The second key change is that consolidation would no longer be longer required, meaning that the CCCTB (Common Consolidated Corporate Tax Base) technically becomes the CCTB (Common Corporate Tax Base). The latest version proposes implementing the CCCTB in two steps. Member states would first implement a common tax base, the CCTB, and later move to consolidation, the CCCTB.8

Other new elements include provisions for a “super-deduction” for research and development and the introduction of an “Allowance for growth and investment (AGI)” that gives companies the same benefits for equity finance that they now receive for debt finance. The revised proposal also includes efforts to combat tax avoidance and new anti-abuse measures designed to limit harmful tax competition. These measures are consistent with those in the anti-Tax Avoidance Directive (ATAD) that member states agreed to in July 2016.

The Commission’s revised proposal keeps the apportionment formula based on assets, labor (both payroll and number of employees) and destination-based sales, from the 2011 proposal.

However, since the tax base is not consolidated across borders, the latest version postpones apportionment until the system moves to a consolidated tax base.

The Commission notes that the full benefits of the CCCTB will arise only once consolidation is in effect. Until then, companies won’t be able to benefit from cross-border loss offset nor from being able to file a single tax return through the One-Stop Shop tax administrative system. The revised proposal will allow EU parent companies to receive temporary tax relief for subsidiary losses in another member

8 Because the proposal itself envisions consolidation, the Commission still refers to the proposal as CCCTB.
states. The member state that allowed the tax relief for losses will recapture those tax benefits once the subsidiary becomes profitable. In a first in social media, the Commission put together a series of videos on YouTube highlighting the benefits of the CCCTB.9

II. The U.S. states

   a. Formulary apportionment

   With few exceptions, notably Stanford professor Joseph Stiglitz,10 most analysts of international corporate taxation view, rather disdainfully, the adoption of formulary apportionment as a means of estimating where a multinational enterprise earns income. For example, James Hines, in his 2009 National Bureau of Economic Research Working Paper states:

   “...which is that the factors that enter the formulas do not accurately correspond to the determinants of business incomes. As a result, the formulas misattribute income, so their use in an international setting would misallocate tax revenue among countries and create incentives for new forms of tax avoidance through mergers and divestitures” 11

   Despite its shortcomings, the U.S. states have used formulary apportionment to estimate where a multistate enterprise earns income since 1911 when Wisconsin became the first state to adopt the corporate income tax with formulary apportionment.12 Since then, with a handful of exceptions, all of the states that have adopted the corporate income tax use formulary apportionment.

   Briefly, the majority of states employ three factors to apportion income to their state – sales or gross receipts, payroll, and real and tangible personal property. Many states determine the corporate group using a method known as “combination” as an alternative to consolidation. Although the rules for including a company within the taxable group differ across the two approaches, combination is similar to consolidation in how it deals with transactions within the group. That is, the net combined income of a multistate or multinational enterprise apportioned to a particular state equals the total profits of the enterprise multiplied by the proportion of sales in this state multiplied by the weight of the sales factor plus the proportion of payroll in this state multiplied by the weight of the payroll factor plus the proportion of property in this state multiplied by the weight of the property factor. See Box 2.

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9 https://www.youtube.com/playlist?list=PL-ScJb_EepJeCwmqZatN3xolWlx9QlcCrU
10 Joseph Stiglitz, “Reforming Taxation to Promote Growth and Equity,” Roosevelt Institute, May 2014.
12 Hawaii adopted a corporate income tax in 1901, but it was not yet a state. See U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism Volume 1, Budget Processes and Tax Systems, February 1993, M-185, page 34.
BOX 2. General State Apportionment Formula under Worldwide Combination

\[ \Pi_{ij} = \Pi_i \cdot \{\alpha_j (S_{ij}/S_i) + \beta_j (L_{ij}/L_i) + \gamma_j (P_{ij}/P_i)\} \]

Where

- \(\Pi_{ij}\) denotes the profits of firm (i) in jurisdiction (j)
- \(\Pi_i\) denotes the global profits of firm (i)
- \(\alpha_j\) is the weight of apportionment factor for sales in jurisdiction (j)
- \((S_{ij}/S_i)\) is the ratio of the sales of firm (i) in jurisdiction (j) to total sales of firm (i)
- \(\beta_j\) is the weight of the apportionment factor for payroll in jurisdiction (j)
- \((L_{ij}/L_i)\) is the ratio of the payroll of firm (i) in jurisdiction (j) to total payroll of firm (i)
- \(\gamma_j\) is the weight of the apportionment factor for property in jurisdiction (j)
- \((P_{ij}/P_i)\) is the ratio of the property of firm (i) in jurisdiction (j) to the total property of firm (i)
- \(\alpha_j + \beta_j + \gamma_j = 1\)

b. Water’s edge reporting

The states set the geographical scope of the group either to all worldwide operations or limit the scope to operations within the “Water’s Edge” of the United States. In the early years of state corporate income taxation, many states applied the system on a worldwide basis, but most states moved to the water’s edge election, which allows companies to choose to limit the geographical scope to the United States, in the 1980s and 1990s.

State use of worldwide combined reporting rather than water’s edge reporting has been controversial. As noted by Roberts and Walters:

“By 1983, 12 states had adopted some or all elements of a mandatory worldwide combined reporting regime. That year, the U.S. Supreme Court ruled in Container Corp. v. Franchise Tax Board, 463 U.S. 159 (1983), that California’s mandatory worldwide combined reporting system did not violate the commerce clause of the U.S. Constitution as applied to a U.S.-based corporate “taxpayer.” As a result of the Container decision, members of the business
community and major U.S. foreign trading partners called for federal legislation that would restrict the authority of states’ to impose worldwide unitary taxation methods.\textsuperscript{13}

In September 1983 President Reagan established the Worldwide Unitary Taxation Working Group,\textsuperscript{14} chaired by U.S. Treasury Secretary Donald Regan, to produce recommendations concerning worldwide taxation “conducive to harmonious international economic relations, while also respecting the fiscal rights and privileges of the individual states.’” In July 1984, the Working Group issued its recommendations, describing numerous problems with worldwide combined reporting and options for ameliorating those problems.

After 10 months of meetings, the parties involved agreed on three principles: (1) water’s edge unitary combination for both U.S. and foreign-based corporations; (2) increased Federal administrative assistance and cooperation with the states to promote compliance; and (3) competitive balance for U.S. multinationals foreign multinationals. With few exceptions, the states abandoned worldwide combined reporting as a result of the pressure applied by foreign companies that threatened the states with disinvestment if the states persisted in using mandatory worldwide combined reporting and from the pressure applied by the Treasury on the states. To some extent, the states were mollified by the Treasury Department’s promise to help the states enforce compliance by multinational companies.

Four states, Alaska (petroleum companies only), Idaho, Montana, and North Dakota impose their corporate income tax on a worldwide basis. However, companies, can petition the revenue agency to permit them to file a water’s edge return. Twenty-eight states --- Alaska, Arizona, California, Colorado, Florida, Hawaii, Idaho, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Oregon, Utah, Vermont, Virginia, West Virginia, and Wisconsin --- require water’s edge filing. These states allow the multinational enterprise to elect to file a worldwide combined report; but the default is water’s edge reporting.\textsuperscript{15} Water’s edge is the default on filing returns.

Companies can petition the state Secretary of Revenue to file worldwide returns. That is, to include affiliates with more than 80% of their property and payroll in foreign countries. This sometimes occurs when on or more of the foreign affiliates incurs large losses. However, the company is then required to file worldwide returns for a number of years. Similarly, in those states where worldwide filing is the default, companies can petition the Secretary of Revenue to file a water’s return. Again, the company would be required to file a water’s edge return for the requisite number of years. Thus, states with a water’s edge default can allow worldwide returns to be filed and the converse is true in states that require worldwide combined filing. States usually grant the petitions.


\textsuperscript{15} Suellen Wolfe, “State Taxation of Multinationals: Combined Reporting.”

The term water’s edge report means that some affiliates of a multinational enterprise are deliberately excluded from the combined report of a U.S. company. Members of a unitary affiliated group that are generally excluded from the combined report include entities organized in foreign countries or have 80 percent or more of the weighted average of their property or payroll outside of the United States; i.e., “80/20” companies. In recent years, several states have enacted legislation to provide exceptions to their water’s edge tax returns to include the income of U.S. companies doing business in “tax havens.” In 2014, the Montana Senate introduced legislation to repeal their water’s edge election and require mandatory worldwide combined reporting.  

In contrast, to the general rules of state corporate income taxes, which impose the tax on the water’s edge income of a multinational enterprise, the Federal government imposes the tax on the worldwide income of multinational corporations. However, the income of some foreign affiliates of U.S. based multinationals – 80/20 companies – may be excluded from the worldwide combined report. Specifically, 80-percent of the corporation’s gross income from all sources for the testing period must be active foreign business income (“80/20” test). The testing period is the three-year period (or shorter period, if applicable) ending with the close of the tax year preceding the payment if there is no gross income for this period, the testing period is the tax year of the payment (Code Sec. 861(c)(1)(C), prior to repeal by P.L. 111-226). Under the active foreign business requirement of Code Sec. 861(c)(1), in effect before repeal, active foreign business income is income that:

(1) is derived outside of the United States either by the resident alien or the domestic corporation, and

(2) is attributable to the active conduct of a trade or business in a foreign country or U.S. possession by the individual, corporation or subsidiary (Code Sec. 861(c)(1)(B), prior to repeal by P.L. 111-226).

c. Unitary business and combined reporting

Before proceeding further, two terms should be defined: unitary business and combined reporting. To a certain extent, the definition of a unitary business is tautological – if separate accounting cannot provide a reasonable division of income among the affiliated entities then the affiliated entities are assumed to be engaged in a unitary business. If there is a finding of unity among the affiliated entities, then combined reporting should be used to apportion the income to those jurisdictions in which it conducts business. Determining whether a group of affiliated companies is unitary is difficult and requires judgement on the parts of both business taxpayers and state revenue agencies. Box 3 shows Charles McLure’s four-step method of determining whether a group of affiliated companies is deemed to be unitary.

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16 Todd Roberts and Joel Walters, “In Defense of Water’s Edge Reporting,” op. cit., page 885
17 For Federal purposes, an existing 80/20 company is any corporation that meets the foreign business requirement of Code Sec. 861(c)(1), as in effect before its repeal by the Education Jobs and Medicaid Assistance Act (P.L. 111-226), for the corporation’s last tax year beginning before January 1, 2011.
18 Commerce Clearing House, December 19, 2016.
### Box 3. Four Stage Test for the Existence of a Unitary Business

<table>
<thead>
<tr>
<th>Test 1: Is there common ownership?</th>
<th>No: non-unitary</th>
<th>Yes: Apply Test 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 2: Is there centralized management (common control)</td>
<td>No: non-unitary</td>
<td>Yes: Apply Test 3</td>
</tr>
<tr>
<td>Test 3: Are there horizontal or vertical integration, shared expenses, economies of scale or scope, intragroup transactions that cannot be easily valued, or other uncompensated or unaccountable flows of value resulting from economic interdependence that depend on common ownership and control?</td>
<td>No: non-unitary</td>
<td>Yes: Apply Test 4</td>
</tr>
<tr>
<td>Test 4: Are these unitary links substantial?</td>
<td>No: non-unitary</td>
<td>Yes: Unitary</td>
</tr>
</tbody>
</table>


If the state determines that the affiliated group is unitary, then there are four steps to apportioning income to a particular state with combined reporting.

1. The members of the combined group prepare a combined report that calculates the worldwide, or water’s edge, taxable income of the group under State law. In the tax parlance of the States, this amount would represent the combined group’s pre-apportionment income.

2. The combined group calculates its apportionment percentage by applying the appropriate apportionment formula, using the aggregate factors of the combined group and the aggregate taxable income of the combined group. Only factors that helped generate the pre-apportionment income enter into the formula.

3. The combined group multiplies its pre-apportionment income, calculated in the first step, by the apportionment percentage calculated in the second step. The resulting amount is the combined group’s taxable income apportioned to the State.

4. The members of the combined group make the calculations necessary for intra-state apportionment. Under that process, the income taxable by the State is apportioned *pro rata* among the members of the combined group having specific nexus with the state in proportion to their respective shares of the apportionment factors. Only those members of the combined group having independent nexus with the State are taxable by the State. Members of the group that do not have factors located in the State or otherwise lack nexus with the State typically are not required to file a tax return with the State.

### IV. Current issues in the European Union

#### a. Brexit

Two recent events have affected the Commission’s comprehensive tax reform plans.
First, in June, the United Kingdom voted to leave the European Union, a decision known as Brexit. UK Prime Minister Theresa May announced that the process of leaving the 28-member economic bloc would start no later than the end of March 2017. This means that the UK might no longer be a member of the European Union by mid-2019. The exact form of the UK’s exit has not yet been determined. The UK Parliament is debating the UK’s “The European Union (Notification of Withdrawal) Bill. Details about the process are available at the UK’s website for the Department for Exiting the European Union.

The UK’s exit from the European Union means that UK multinational enterprises will no longer be considered “EU enterprises” and thus, won’t be covered by the EU’s tax proposals. However, their EU-based operations will be covered by those rules.

b. EU Commission action against Apple

The second major event occurred in August 2016 when the EU’s competition Commissioner, Margrethe Vestager, called on Apple to pay Ireland more than $14 billion in taxes that the Commissioner accused Apple computer of inappropriately shifting out of Ireland into operations with “no employees, premises, no real activities.” The competition commissioner said, “The ultimate goal should of course be that all companies, big or small, pay tax where they generate their profits.” The Commissioner concluded that Ireland violated the EU’s state aid rules when it gave Apple up to 13 billion euros in tax breaks. In so doing, Apple reduced its effective tax rate from 1 percent in 2003 to just 0.005 percent in 2013.

According to the Commission, “In fact, the tax treatment in Ireland enabled Apple to avoid taxation on almost all profits generated by sales of Apple products in the entire EU Single Market. This is due to Apple’s decision to record all sales in Ireland rather than in the countries where the products...
were sold." The Commission said that Apple failed to allocate its profits in a way that reflects "economic reality" and that, since it had no employees, the head office to which Apple allocated its sales, couldn’t have been responsible for so many of the company’s sales. See the excellent analysis by Ruth Mason for a detailed analysis of the case, including a discussion of its potential impact on the CCCTB.

Supporters of a formulary-based tax system argue that it prevents this type of profit shifting. Thus, to the extent that this view prevails, support for the CCCTB may grow.

The figure below shows how the Commission illustrated Apple’s arrangement.


The Apple tax strategy illustrates the type of corporate tax avoidance that the CCCTB is designed to prevent. With profits allocated according to the location of real activities, it would be impossible for a company to assign profits to an operation in a location without any employees, premises or sales.

As the Commission stated, “consolidation would remove the need for complex transfer pricing within the group, which is one of the main vehicles for profit shifting at the moment.”

V. Descriptive information – Two decades of changes in the US and the EU

a. Developments in the U.S. states

The table below shows the highest marginal corporate income tax rates in the US states for selected years 1992 through January 1, 2016. With few exceptions (CT, IN, NC, ND, and WV), states did not change their tax rates significantly. The medians of the highest marginal tax rates for the selected years were 7.86 percent, 7.71 percent, 7.43 percent, and 6.60 percent for 1992, 2000, 2008, and 2016, respectively. What has changed is the adoption of combined reporting and the increasing adoption of sales factor only apportionment. Although still an important element of state finance, the corporate income tax as a source of revenue has declined in importance over this period. In 1992, according to the U.S. Bureau of the census, corporate income taxes accounted for 6.6 percent of state tax revenues; in 2015, that proportion had fallen to 4.5 percent.

As of 2016, 25 states and the District of Columbia enforce mandatory combined reporting. Eight states (MA, MI, NY, TX, VT, WI, and WV) have adopted mandatory combined reporting since 2004. The map below shows the status combined reporting in the states over time.

Although the majority of states adopted the equally weighted three-factor apportionment formula in the 1990’s, only a small minority of states use that formula today. In 1991, 31 states, including the District of Columbia, used the traditional equally weighted three-factor apportionment formula; in 14 states, the weight of the sales factor ranged from more than one-third to less than one; and Iowa and Texas used a sales factor only apportionment formula. In 2016, the most common apportionment formula is the single sales factor -- 11 states used the traditional equally weighted three factor apportionment formula, in 15 states, the weight of the sales factor ranged from greater than one-third to less than one; and 20 states and the District of Columbia used the sales factor only apportionment formula. The figure below presents the changing distribution of the apportionment weights on the sales factor.

31 Commerce Clearing House.
32 Texas used a franchise; or corporate license tax, which included value of capital stock and net income in the base. We assumed a sales factor only apportionment formula for convenience.
<table>
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<td>6.40</td>
<td>6.40</td>
<td>Oklahoma</td>
<td>6.00</td>
<td>6.00</td>
<td>6.00</td>
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</tr>
<tr>
<td>Idaho</td>
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<td>8.00</td>
<td>7.60</td>
<td>7.40</td>
<td>Oregon</td>
<td>6.60</td>
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<td>7.60</td>
</tr>
<tr>
<td>Indiana</td>
<td>3.40</td>
<td>3.40</td>
<td>8.50</td>
<td>6.50</td>
<td>Rhode Island</td>
<td>9.00</td>
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<td>9.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Iowa</td>
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<td>12.00</td>
<td>12.00</td>
<td>12.00</td>
<td>South Carolina</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Kansas</td>
<td>4.00</td>
<td>4.00</td>
<td>7.35</td>
<td>4.00</td>
<td>Tennessee</td>
<td>6.00</td>
<td>7.00</td>
<td>6.50</td>
<td>6.50</td>
</tr>
<tr>
<td>Kentucky</td>
<td>8.25</td>
<td>8.25</td>
<td>6.00</td>
<td>6.00</td>
<td>Texas</td>
<td>None</td>
<td>None</td>
<td>(4)</td>
<td>(4)</td>
</tr>
<tr>
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<td>8.00</td>
<td>8.00</td>
<td>8.00</td>
<td>Utah</td>
<td>5.00</td>
<td>6.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Maine</td>
<td>8.93</td>
<td>8.93</td>
<td>8.93</td>
<td>8.93</td>
<td>Vermont</td>
<td>8.25</td>
<td>9.75</td>
<td>8.50</td>
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</tr>
<tr>
<td>Maryland</td>
<td>7.00</td>
<td>7.00</td>
<td>8.25</td>
<td>8.25</td>
<td>Virginia</td>
<td>6.00</td>
<td>7.00</td>
<td>6.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>(1)</td>
<td>9.50</td>
<td>9.50</td>
<td>8.00</td>
<td>Washington</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
</tr>
<tr>
<td>Michigan</td>
<td>(2)</td>
<td>2.20</td>
<td>4.95</td>
<td>6.00</td>
<td>West Virginia</td>
<td>9.08</td>
<td>9.00</td>
<td>8.75</td>
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</tr>
<tr>
<td>Minnesota</td>
<td>9.80</td>
<td>9.80</td>
<td>9.80</td>
<td>9.80</td>
<td>Wisconsin</td>
<td>7.90</td>
<td>8.90</td>
<td>7.90</td>
<td>7.90</td>
</tr>
</tbody>
</table>

1. Corporations pay an excise tax equal to the greater of the following: (1) $2.6 includes 14% surtax per $1,000 of value of Massachusetts tangible property not taxed locally or net worth allocated to Massachusetts, plus 9.5% includes surtax of net income, or (2) $456, whichever is greater (a surtax of 14% is imposed). Minimum tax $456.

2. State uses a single business tax (which is a modified value-added tax) rather than a corporate income tax. The 2.35% rate is applied to an adjusted tax base. Other nonfederal components also are used in the tax base. The first $44,000 of the tax base is.

3. Washington has no income tax but has a gross receipts tax called the Business & Occupation (B&O) Tax which is levied at various rates. The major rates are 0.471% for retail sales, 0.484% for wholesale and manufacturing, and 1.5% for service and other activities.

4. Texas imposes a Franchise Tax, known as the margin tax. It is imposed at 1% (0.5% for retail or wholesale entities) with gross revenues over $300,000 with a variable discount allowed for revenues between $300,000 and $900,000. In 2016, the rate is 0.75% for entities with revenues exceeding $1,110,000; or, 0.375% for entities engaged in retail or wholesale trade, on the lesser of 70% of total revenues or 100% of gross receipts after deductions for either compensation or cost of goods sold.

5. Ohio no longer levies a tax based on income (except for a particular subset of corporations), but instead imposes a Commercial Activity Tax (CAT) equal to $150 for gross receipts sitused to Ohio of between $150,000 and $1 million, plus 0.26% of gross receipts over $1 million. Banks continue to pay a franchise tax of 1.3% of net worth. For those few corporations for whom the franchise tax on net worth or net income still applies, a litter tax also applies.

Source: U.S. ACIR, Tax Policy Center and Federation of Tax Administrators.
States with Combined Reporting, 2016

Source: Commerce Clearing House
b. Developments in EU corporate tax rates

As of 2016, the 28 EU Member States define their own tax bases and set their own tax bases. The CCCTB proposal would establish a common tax base, leaving tax rates for Member States to set.

Among these member states, Bulgaria has the lowest tax rate at 10 percent while France has the highest tax rate at 38 percent, as shown in the table. The UK’s 20 percent rate is below the 22.8 percent unweighted EU average. The table also shows that while the EU member states have been reducing their corporate tax rate, the U.S. rate has not changed.

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As shown in the chart, EU corporate tax rates have converged downward over time.
VI. Brexit and the CCTB: Guidance from the U.S. states

a. Options for the UK to leave the European Union

Brexit is shorthand for the United Kingdom’s decision to leave the European Union following a referendum in June 2016. This option, which has never been used, was introduced with the Lisbon Treaty in 2009. Prime Minister Theresa May has indicated that the exit will be “hard” but other options are available. She said that she would invoke Article 50 of the Lisbon Treaty, which triggers the process of leaving the European Union, by the end of March 2017.34 Once the UK triggers Article 50 by notifying the European Council of its intent to leave the EU, the EU and UK officials have two years to reach final agreement.35 EU treaties and law continue to apply until the UK formally leaves the EU. If the parties have not reached agreement within two years, then the UK’s membership in the EU will end.

35 For the technical details on article 50, see http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/577971/EPRS_BRI(2016)577971_EN.pdf
automatically, unless the European Council and the member states jointly agree to extend the period. At that time, EU Treaties and Protocols cease to apply in the UK, although any national laws the UK had adopted would continue to be valid until amended or repealed. The withdrawal agreement could specify transition rules, especially with respect to rights that arise due to EU citizenship that would otherwise expire with withdrawal.36

A “hard” or “clean” exit would mean that all links between the UK and the European Union --- a customs union and the single market --- would be cut. Thus, the UK would essentially deal with the European Union under rules set by the World Trade Organization.37

Under this scenario, the United Kingdom would have a relation similar to the one that the United States, China and most other countries that are not members of the European Union. This option means that the UK would not abide by the Single Market’s essential four freedoms: Freedom of movement of capital, goods, labor and services. The UK wouldn’t have to allow immigration from EU countries and wouldn’t have to make any payments to the European Union or accept the EU’s laws. However, its banks, for example, would no longer have a “passport: to do business in the EU, meaning that London would likely lose significant financial services to places in the EU, such as Frankfurt and Amsterdam. Neither UK nor EU nationals would have free access to work in the other location.

Other options allow the UK to maintain some links with the EU.

For example, if the UK wished to keep all existing access to the EU, then it could adopt a Norway-style exit. Norway, along with Iceland and Liechtenstein, is a member of the European Economic Area (EEA) that allows Norway to trade freely with the EU. Although Norway’s voters have twice rejected joining the European Union, Norwegians do have full access to the Single Market, including free movement of labor, in exchange for making regular payments into the EU’s budget and accepting decisions from the European Court of Justice relating to the Single Market. This arrangement means that Norway has implemented about 75 percent of EU legislation without having any say in shaping those laws.

Switzerland, which is not a member of the EEA, has a similar, but not as close, relationship with the EU compared with Norway. It has negotiated bilateral agreements, pays into the EU budget, but isn’t involved in designing the rules. The Swiss agreement doesn’t provide free trade in services.

Canada has a slightly different arrangement with the EU. Canada and the EU have reached agreement on a Comprehensive Economic Trade Agreement (CETA) that would eliminate almost all trade tariffs but wouldn’t allow free movement of labor between Canada and the EU. This agreement took five years to negotiate and the deal was signed at the end of October 2016 when the Commission overcame opposition from the Wallonian region in Belgium that had objected to some terms of the

36 The European Council will conclude the agreement with the UK on behalf of the European Union. It must reach agreement by a qualified majority and after receiving consent from the European Parliament. The UK will not participate in the European Council’s discussions
37 Before taking this step, however, the UK would have to join the WTO as a full member.
agreement. Although almost all of CETA will apply as of 2017, all EU national and regional governments must approve the deal before it is fully in effect.

Any deal other than a “clean” exit would require reaching agreement from all EU-27 member states. Given the divergence of views in these countries regarding the UK’s decision to leave the EU, any exit that allows the UK to pick and choose the policies it wishes to keep, seems highly unlikely. In particular, many of the remaining EU countries insist that any agreement with the UK must continue to allow free movement of labor into the UK from the EU. With around 3 million EU citizens living in the UK and two million UK citizens living in the EU, the treatment of labor is a key matter in any agreement.

b. Guidance from the U.S. States

In contrast with the EU member states, the U.S. States have a Federal corporate income tax as a source of common tax base (with state-specific adjustments) and a threat of federal preemption and case law that limits their definition of net income. However, they also have the constitutional authority to impose their corporate income tax on a worldwide combined reporting basis without violating treaties. There are limits, however, to the power of states to impose their tax beyond their borders is constrained. Federal law, (PL 86-272), prohibits a state from imposing its tax on business whose only activity within the state is soliciting orders and delivering them via common carrier. In addition, there is a threat of federal preemption should Congress believe the states have gone too far in imposing their tax on out-of-state businesses.

States impose different types of combined reporting tax – worldwide combined reporting and combined reporting with water’s edge election. Below is a simple example of how worldwide combined reporting both with and without a water’s edge election could work.

The unitary business (U) consists of 3 companies (A, B, and C). Assume that State A, for example Montana, requires (U) to file a combined report and uses a double-weighted sales apportionment formula. A is the manufacturing arm of (U) and sells its output to B and C only thus C has no production assets. Under full worldwide combined reporting, the net income of C and its apportionment factors

38 See “Handful of Walloon MPS hold fate of EU-Canada trade deal,” The Financial Times, October 7, 2016 https://www.ft.com/content/515e1d14-8bdd-11e6-8cb7-e7ada1d123b1?desktop=true&segmentId=7c8f09b9-9b61-4fbb-9430-9208a9e233c8
40 Twenty five states use line 28 of the federal Form 1120 as the starting point, 20 states use line 30 as their starting point, Texas uses lines 1c and 4-10 for their margins tax. Five states do not impose a corporate income tax. Commerce Clearing House http://smartcharts.cch.com/SmartCharts.Template1.aspx/TreeView?product=INCTAX&DI=CC26DF7C-3A7F-42DF-A6A9-9533EB17E8AF&U=edubin%40mtc.gov&cfu=TAA&cpid=WKUS-TAA-IC
41 Another form of state corporate income tax reporting is separate entity reporting. Under separate entity reporting, each company with nexus in the state must file its own separate return, regardless of whether it is part of an affiliated or consolidated group. A number of states that allow only separate filing, that is, each and every company with nexus must file a separate return. It is irrelevant whether the corporation is a standalone entity or a member of a controlled, affiliated or consolidated group.
would be included in the combined report. Under water’s edge system, neither the net income nor the apportionment factors of C will be included in the combined report. EU insists on conformity.

The total revenue of the combined group from sales of its products is $8,000; B derives $4,000 from sales within State A and $2,000 from sales in other jurisdictions. C derives $2,000 from sales outside State A. Companies A, B, and C have a total of 10 employees worldwide, with a total payroll of $4,000. Company A has 4 workers in State A, paying compensation of $2,000. B has 2 workers in State A, paying compensation of $1,000, and 2 workers outside State A, paying compensation of $800. C has no workers in State A and 2 workers outside that State, paying compensation of $200. The combined production assets of A and B are valued at $20,000. A has assets worth $2,000 located in State A. B has assets worth $3,000 located in State A and assets worth $15,000 located outside State A. Company C has no production assets.

<table>
<thead>
<tr>
<th>Item</th>
<th>A Company</th>
<th>B Company</th>
<th>C Company</th>
<th>A &amp; B Total</th>
<th>A &amp; B &amp; C Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue in State A</td>
<td>$0</td>
<td>$4,000</td>
<td>$0</td>
<td>$4,000</td>
<td>$4,000</td>
</tr>
<tr>
<td>Revenue outside of State A</td>
<td>$0</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$4,000</td>
</tr>
<tr>
<td>Worldwide sales</td>
<td>$0</td>
<td>$6,000</td>
<td>$2,000</td>
<td>$6,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>Payroll in State A</td>
<td>$2,000</td>
<td>$1,000</td>
<td>$0</td>
<td>$3,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>Payroll outside of State A</td>
<td>$0</td>
<td>$800</td>
<td>$200</td>
<td>$800</td>
<td>$1,000</td>
</tr>
<tr>
<td>Worldwide payroll</td>
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<td>$1,800</td>
<td>$200</td>
<td>$3,800</td>
<td>$4,000</td>
</tr>
<tr>
<td>Property in State A</td>
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<td>$3,000</td>
<td>$0</td>
<td>$5,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Property outside State A</td>
<td>$0</td>
<td>$15,000</td>
<td>$0</td>
<td>$15,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Worldwide property</td>
<td>$2,000</td>
<td>$18,000</td>
<td>$0</td>
<td>$20,000</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

**Apportioned to State A**

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
<th>A Company</th>
<th>B Company</th>
<th>C Company</th>
<th>Water's Edge Combined Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>50.00%</td>
<td>0.00%</td>
<td>50.00%</td>
<td>0.00%</td>
<td>66.67%</td>
</tr>
<tr>
<td>Payroll</td>
<td>75.00%</td>
<td>50.00%</td>
<td>25.00%</td>
<td>0.00%</td>
<td>78.95%</td>
</tr>
<tr>
<td>Property</td>
<td>25.00%</td>
<td>10.00%</td>
<td>15.00%</td>
<td>0.00%</td>
<td>25.00%</td>
</tr>
<tr>
<td>Net Income</td>
<td>50.00%</td>
<td>15.00%</td>
<td>35.00%</td>
<td>0.00%</td>
<td>59.32%</td>
</tr>
</tbody>
</table>

Under worldwide combined reporting, 50 percent of the net income of U is assigned to State A. Company A has no revenues to record because all its sales are within the combined group. Company A has 50 percent of the unitary business’ payroll which is in State A and 10 percent of the unitary business’ production assets. Multiplying the apportionment weights: 0.50 revenues; 0.25 payroll and property to the apportionment factors yields 15 percent; i.e., 15 percent of the unitary business is apportioned to Company A. Repeating the process for Company B, we find that 35 percent of unitary business’s net.
income is attributable to Company B. If the total net income of U was $1,000, $500 would be taxable in A; Company A’s share would be $150 and Company B’s share would be $350.

If State A were Illinois, for example, which has adopted the water’s edge election, then Company C’s apportionment factors would be excluded as would its net income. Thus Company C’s $2,000 of sales and its $200 of payroll are excluded from the apportionment of U’s net income. Using the percentages of sales, payroll, and property of Companies A and B only, 59.3 percent of the water’s edge net income would be apportioned to Illinois. Worldwide combined reporting will not always yield greater revenue, in the aggregate, to a state than the water’s edge election.

VII. Application of the U.S. experience to the EU

a. Separate entity taxation

Alabama is a separate entity state. This means that the income of foreign affiliates of U.S. corporations is not taxed unless the affiliate has tax nexus in Alabama – usually a physical presence.

IF the EU follows a separate-entity approach, which is what it plans to do in the first phase of the CCCTB, then any affiliates outside of the EU will be excluded from the common tax base unless the affiliate has a physical presence in the EU.

b. Water’s edge election

Illinois is a water’s edge election unitary state. This means that it excludes the following entities: Insurance companies because they are excluded from unitary groups and taxed under a different tax regime, 80/20 companies (companies with less than 20 percent of the average of the percentage of their property and payroll in the U.S.), charitable corporations, and corporations organized in foreign countries. However, the corporate taxpayer can elect worldwide combined reporting if it is advantageous and the revenue department agrees.

If the EU follows the water’s edge election approach with the 80/20 rule, then once the EU moves to the CCCTB, it will exclude the foreign operations of EU companies that have less than 20 percent of their business activity in the EU and all corporations organized in foreign countries.

If the UK leaves the EU, then its companies will be treated as organized in foreign countries and excluded from the CCCTB if the EU does not adopt the 80/20 rule.

c. Application to a UK company before and after Brexit

Subject to the points made above, UK companies will generally fall outside of the EU’s corporate tax system after Brexit.

Using publicly-available financial reports, we can give a rough idea of how one of the UK’s largest companies might be treated under the EU’s CCCTB following the UK’s exit from the Single
Market. We examined the operations of Tesco PLC, a British multinational grocery and general merchandise retailer with headquarters in Hertfordshire, England, United Kingdom. We illustrate how various operations would be treated under worldwide combined reporting, water’s edge taxation, and separate entity taxation.

First, if the UK stays in the EU, then Tesco will include the UK and EU operations in its EU tax base under the CCCTB. However, if the UK leaves the EU, then Tesco will no longer be subject to the EU’s tax rules.

It is not clear how the EU’s proposal would operate, but potentially Tesco would calculate its tax base for the 84 EU subsidiaries and draw a line at the EU’s water’s edge, thus removing its 239 UK operations from its EU tax base. The company would then have to separate its UK operations from its EU operations using some form of arm’s length, separate-entity accounting. Subsidiaries in the US and the rest of the world would remain outside of the EU.

Box 4 identifies these cases. Note that if the EU applies worldwide unitary combination, then Tesco’s UK operations will be included in the EU tax base (this result is similar to how Barclay’s Banking Corporation, a UK-headquartered company, was treated under California’s worldwide unitary combination before the state adopted water’s edge taxation.) Depending on how the EU defines “nexus,” Tesco’s European operations might still be included within the EU’s CCCTB. To date, the EU Commission’s proposal has never allowed for taxation on a worldwide unitary basis under the CCCTB. That is, water’s edge taxation will be mandatory.

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of affiliates/subs</th>
<th>Example</th>
<th>Before Brexit</th>
<th>After Brexit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Worldwide</td>
<td>Water’s Edge</td>
<td>Worldwide</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>239</td>
<td>Acklam Management Company Limited</td>
<td>IN</td>
<td>IN</td>
</tr>
<tr>
<td>European Union</td>
<td>84</td>
<td>Chirac limited</td>
<td>IN</td>
<td>IN</td>
</tr>
<tr>
<td>United States</td>
<td>6</td>
<td>Dunnhumby, Inc.</td>
<td>OUT</td>
<td>OUT</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>36</td>
<td>Shuke Advertising (Shanghai) Co., Ltd</td>
<td>OUT</td>
<td>OUT</td>
</tr>
<tr>
<td>Total Related undertakings</td>
<td>372</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VIII. Conclusion

The European Commission remains committed to pursuing its plan to introduce a common tax system for companies doing business across the European Union. That system would simplify the tax base calculations for thousands of EU companies, which now must comply with 28 different sets of tax rules throughout the European Union. The proposal would establish a common tax base as a first phase,
and in a second phase, would require companies to consolidate their EU operations into a single corporate entity. The companies would then distribute the tax base throughout their operations in the European Union using a formula based on the location of the company’s assets, employees, and sales.

The European Commission derived significant aspects of its proposal from the experiences in the U.S. states. This experience has helped guide the Commission, especially in the areas of determining the consolidated, or combined, group and the composition of the apportionment formula.

As the EU refines its corporate tax reform proposal, the U.S. states will continue to provide valuable guidance. This guidance may be especially helpful in the complicated aftermath of the UK exiting the European Union and the consequent requirement that UK companies separate their UK operations from their EU operations as the EU implements the Common Consolidated Corporate Tax Base with formulary apportionment.