

# Would Introducing Formula Apportionment in the European Union Be a Dream Come True or the EU's Worst Nightmare?\*

By Joann Martens Weiner

## Contents

- I. Introduction
- II. The Commission's Proposals
- III. Formula Apportionment in the European Union
- IV. Conclusion

## I. Introduction

In late 2001, the European Commission presented a new strategy for EU company tax policy.<sup>1</sup> It proposed a long-term comprehensive reform that would allow companies to achieve a consolidated corporate tax base under a single set of tax rules for their EU activities. The Commission explained that in addition to undertaking a piecemeal approach to removing tax obstacles, the Member States could pursue an ambitious strategy that would eliminate a majority of the tax obstacles in the EU in a "single stroke". Implementing the consolidated tax base across the EU would also require adopting a mechanism to distribute the EU-consolidated tax base to the Member States for taxation at the local rate.<sup>2</sup>

---

\* This paper was first presented as "Formula Apportionment in the EU: A Dream Come True or the EU's Worst Nightmare?" at the conference "Corporate and Capital Income Taxation in the European Union: The EU Commission Report on Company Taxation and Beyond," ARPEGE/CESifo conference, 7-8 December 2001, Mons, Belgium, and published as CESifo Working Paper No. 667 by the Center for Economic Studies and the Ifo Institute for Economic Research, Munich, Germany. The author would like to thank conference participants, professor *Charles McLure*, the journal editors and the anonymous referees for helpful comments.

<sup>1</sup> See Commission of the European Communities "Towards an Internal Market without tax obstacles. A strategy for providing companies with a consolidated corporate tax base for their EU-wide activities" COM(2001) 582 final and "Company Taxation in the Internal Market" SEC(2001) 1681, 23 October 2001. For an analysis of these documents, see *Weiner* (2001b). The Commission released these documents in a book form under the title *Company taxation in the internal market* in April 2002. All references to the Study are to the April 2002 publication.

<sup>2</sup> A formula would not be required if all of the revenue collected from the corporate income tax accrued to the European Union, an option that is not under serious considera-

Many large EU multinational enterprises applaud this move and cite numerous benefits they would achieve in using one company tax system with cross-border consolidation for their EU-wide activities.<sup>3</sup> Arm's length transfer pricing and cost allocation between members of the group located in different member states would no longer be necessary for tax purposes. Tax-based distinctions between branches and subsidiaries would disappear. Cross-border mergers would not incur adverse tax consequences. Most importantly, cross-border loss offset would automatically occur, an option that appears to be particularly attractive to some EU businesses.<sup>4</sup> Thus, in many respects, consolidated base taxation with formula apportionment may be an EU multinational taxpayer's dream come true, as it *appears* to solve all of these issues at once.

However, while much of the immediate focus has centered on how to achieve a consolidated tax base, the concurrent adoption of formula apportionment merits a critical examination. Defining an appropriate and acceptable apportionment, or allocation, mechanism presents significant technical and political difficulties. As implementing formula apportionment would be a departure from the system of separate accounting with arm's length pricing currently incorporated in EU company tax systems, such a move raises complicated tax policy matters. Critics have suggested that the system might even conflict with the basic principles underlying international tax rules and treaties. Finally, formula apportionment introduces a host of new distortions to cross-border business activity. As a result, implementation of a consolidated tax base with formula apportionment may appear to be the EU's worst nightmare.

## II. The Commission's Proposals

Drawing from its intensive two-year program of research and analysis, the Commission concluded that the existence of 15 separate sets of company tax rules creates numerous tax obstacles to cross-border business in the Union. Eliminating these separate tax systems is a key priority.

---

tion. In all other cases, the consolidated tax base would be distributed to the member states for taxation at the local rate using a formula. While the details of the four options vary, apart from the exception just noted, all of the options use a formula to apportion the tax base to the member states.

<sup>3</sup> See Union of Industrial and Employers' Confederations of Europe (2000). UNICE explains that the system should be optional because not all companies are so integrated that they need a European system. The choice would be irreversible.

<sup>4</sup> The Commission's Study presents an example provided by UNICE where one of its companies would have saved ECU 320 million if it had been able to use its losses of ECU 880 million in some member states to offset profits of ECU 870 million in other member states (2002, p. 327).

## 1. The Commission's Four Proposed Methods

The Study presented four comprehensive methods that may achieve its long-term goal: Home State Taxation (HST), Common Consolidated Base Taxation (CCBT); a European Union Corporate Income Tax (EUCIT); and a compulsory harmonized EU tax base. Except for a variation of EUCIT where the revenue from the company tax accrues to the Commission, each method also uses a formula to allocate the tax base to the member states.<sup>5</sup> While all methods require adopting a formula to implement a comprehensive solution, the implications of adopting a formula have not been analyzed in-depth for any of the methods. To a great extent, the debate has centered on which of the four proposals is more feasible in political terms, rather than on which proposal is more practical in economic terms.

The options for obtaining consolidated base taxation in the European Union are summarized below<sup>6</sup>:

### 1. Home State Taxation

Under Home State Taxation, companies would have the option of computing their income for their operations located in various Member States participating in the home state tax system according to the company income tax rules of the Member State where their headquarters are located (the "home" state). Under the notion of mutual recognition, member state tax administrations accept the validity of other Member State's tax codes for computing the consolidated tax base. The tax authorities of the home state would administer their particular home state tax system.

All groups in the home State area would share their net profit according to the same formula, but the method for offsetting profits and losses would vary according to the rules in the home State. Post-allocation profits would be taxed at local rates. Current national systems would apply for non-participating Member States and for companies remaining outside the home state system.

### 2. Common Consolidated Base Taxation

Under Common Consolidated Base Taxation, all or a group of Member States would agree on a set of common rules for establishing the taxable base of certain enterprises. Companies would then have the option of calculating their income according to the rules for the new common EU tax base. This EU tax base would operate in parallel with existing national rules. The Member State where the company was headquartered would administer the common EU tax base.

All groups choosing this method would share their net profit according to the same formula, and the method for offsetting profits and losses would be identical. Post-allocation profits would be taxed at local rates. Current national sys-

---

<sup>5</sup> For an analysis of the various approaches, see the set of papers presented in "Special issue on Company Tax Reform in the European Union: Targeted Measures and Comprehensive Approaches," European Taxation 42 (8), August 2002.

<sup>6</sup> Source for descriptions: Part IV. Chapter 13 "Options for comprehensive approaches to EU company taxation", in: Company Taxation in the Internal Market, Commission of the European Communities (2002).

terms would apply for non-participating Member States and for companies remaining outside the common consolidated base system.

### 3. European Union Company Income Tax

Under a European Union Company Income Tax, a new EU tax base would be developed and would operate in parallel with existing national rules. It would be optional for companies. In one form, it would be administered by a new tax authority, with a single EU tax rate, with revenues funding EU institutions and activities and any excess allocated to the Member States according to an agreed formula. In another form, individual Member States could administer the EU company income tax and apply its own tax rate to its allocated share of the tax base.

### 4. Compulsory Harmonized Tax Base

Under this approach, a single EU tax base and tax code would replace national company tax systems. This EU tax system would apply to all enterprises in all Member States. Member States would administer the tax so there would be no need to create a centralized tax authority. Consolidated profits would be allocated to the Member States according to the terms of an agreed mechanism, where they would be taxed at local rates.

## III. Formula Apportionment in the European Union<sup>7</sup>

### 1. What Are Separate Accounting and Formula Apportionment?

Separate accounting and formula apportionment are two different ways to determine the amount of a company's income attributable to a jurisdiction.<sup>8</sup>

#### *Separate Accounting*

The company tax systems currently used in the EU are based on separate accounting with arm's length pricing. Under this system, companies apply traditional accounting methods to calculate the income earned by the legally separate entities located in different jurisdictions, treating transactions with affiliated entities as if they had occurred with independent entities. For tax purposes, corporate entities are required to price internal transactions with their related entities at the level that would have prevailed had these transactions occurred with unrelated parties. These market-based, or arm's length prices, are those that approximate the prices that independent entities would use when selling goods and services to each other in a market relationship. When operations are lo-

---

<sup>7</sup> The author addressed many of these issues in *Weiner* (2001a). See also *McLure* and *Weiner* (2000). For an evaluation of a range of issues involved in adopting formula apportionment at the international level, see the U.S. Treasury Department formulary apportionment conference paper by *Weiner* (1999).

<sup>8</sup> There is a wide body of literature analyzing the strengths and weaknesses of both separate accounting and formula apportionment. See *McDaniel* (1994), *Hellerstein* (1993), *Musgrave* (2000), among others.

cated in different countries, this process identifies the amount of profit attributable to each country where the multinational company does business. The separate entity approach is the current international standard and is incorporated in the worldwide income tax treaty network.

Two key difficulties in applying separate accounting concern finding transfer prices for non-market based transactions by multinational companies and in monitoring transfer prices by tax authorities. In many cases, arm's length prices may simply not exist for firms that are highly integrated or that exploit economies of scale; it may be particularly difficult to price the internal transfer of intangibles. Difficulties also arise for tax authorities in monitoring transfer prices. When tax rates differ across jurisdictions, companies have an incentive to manipulate transfer prices to shift income from high-tax locations to low-tax locations.

### Formula Apportionment

#### *What is formula apportionment?*

Under formula apportionment, companies do not attempt to separate the income of an affiliated corporate group along geographic lines. Instead, under apportionment, a corporate group first calculates its net income for the entire group and then apportions that income to each location where it does business using a formula. It should be recognized that formula apportionment as traditionally used does not necessarily attempt to identify the geographic source of a company's profits. Instead, apportionment provides a rough approximation of the amount of income generated from the company's activity in each location where it does business. The formula used to apportion a multistate company's income typically includes factors that relate to that activity, e.g., property, payroll, and gross receipts (sales).

The U.S. states have used the apportionment system for nearly a century. Under the U.S. state apportionment method, a company doing business in several states would use its federal taxable income as its total income and, after making certain adjustments, apportion that income to each state using a formula based on location of its business activity in the various states.<sup>9</sup> For example, if the formula is based on property, payroll, and sales, the company would apportion its income to each state according to the ratios of the amount of property, payroll, and sales located in each state to the total amount located in all the states. Each state would tax its apportioned share of income at the local tax rate. The Canadian provinces also use apportionment. But, whereas the formulae differ across the states, in Canada, multi-provincial companies use a common payroll and sales formula to apportion federal income to the provinces.<sup>10</sup>

---

<sup>9</sup> These adjustments include eliminating income that states are constitutionally prohibited from taxing and adjusting for differences between state and federal tax law.

<sup>10</sup> Apportionment practices vary across the individual states. For a discussion of the detailed variations in the formula apportionment system as used in the U.S. states and Canadian provinces, see *Weiner* (1994).

The box below illustrates how the formula apportionment system operates in the United States and Canada.

### Box

#### The Apportionment Formula Used in the U.S. States and in the Canadian Provinces

The particular formula for the tax liability in a jurisdiction under an apportioned profits tax as used in the U.S. states is shown below

$$T_i = t_i [\alpha^K (K_i / K) + \alpha^L (L_i / L) + \alpha^S (S_i / S)] \cdot \Pi_i$$

Where  $T_i$  is the company's tax liability in state  $i$ ;  $t_i$  is the tax rate in state  $i$ ;  $\Pi_i$  is the company's taxable profits as defined in state  $i$  (this amount is usually the federal income tax base with adjustments);  $K_i$ ,  $L_i$ , and  $S_i$  are the company's property, payroll, and sales in state  $i$  and  $K$ ,  $L$ , and  $S$  are the company's total property, payroll, and sales; and  $\alpha^K$ ,  $\alpha^L$ , and  $\alpha^S$ , are the weights given to property, payroll, and sales in each state (where  $\alpha^K + \alpha^L + \alpha^S = 1$ ).

As practiced in the US, states may freely alter the tax rate, the weights on the factors (including setting the weight of any factor equal to zero) and the definition of taxable profits (most states use the adjusted federal tax base, but this is not required. At times when the federal government has significantly narrowed the tax base, say through accelerated depreciation, many states have chosen to break the link between their tax base and the federal base to avoid revenue losses). The states have adopted similar definitions of the factors.

#### Canada

The Canadian provinces have much less diversity in their apportionment system relative to the U.S. states. The tax liability in each province under the Canadian method of formula apportionment is shown below (the variables are defined as above):

$$T_i = t_i [1/2(L_i / L) + 1/2(S_i / S)] \cdot \Pi$$

The provinces all use a payroll and sales formula, with each factor weighted equally. The definition of company profits,  $\Pi$ , is derived from the federal income tax base and is essentially invariant across provinces (provinces may offer tax incentives once the tax base has been apportioned.) Tax rates vary across provinces.

Three important differences in the Canadian provincial apportionment practices stand out when compared with practices in the U.S. states. First, property is not a factor in the Canadian formula. Second, the factor weights are the same in each province. Third, the formula and the tax base are the same (or effectively the same) in all provinces. However, the provinces do not allow consolidation of legally-separate entities.

#### *Distortions caused under a formula apportionment system*

One key distortion arises from the interaction of the formula with the firm's factor choices. McLure (1980) examined how the system of formula apportion-

ment may affect business decisions. His work showed that by using a formula based on firm-specific factors, such as property, payroll, and sales, to determine state income, the states effectively transform the state tax on corporate income into a direct tax on whatever factors are included in the formula. For example, the payroll portion of the income tax has effects similar to a direct tax on payroll. Gordon and Wilson (1986) showed the complex incentives created under an apportionment system. For example, a formula with property as an apportionment factor can create incentives for firms to undertake cross-border mergers, while a formula with sales can encourage cross-hauling of sales. Mintz and Weiner (2001) found distortions to investment location under two of the Commission's proposals.

If profits are apportioned according to firm-specific factors, rather than according to factors that are independent of the firm's decisions, then formula apportionment distorts a company's business decisions. This distortion arises because the effective tax rate under apportionment equals not only the direct effect caused by the taxation of the factor but also the indirect effect caused by the use of a firm-specific factor to allocate profits.<sup>11</sup> The indirect effect can be positive or negative, depending on the relationship between the tax rate in any particular location and the weighted average tax rate over all locations. When a multistate company undertakes new investment in a state, the change in the tax burden depends on the firm's overall profitability and the apportionment systems and tax rates in the other states where the firm does business. Thus, apportionment can create an additional 'tax' or grant a 'subsidy' to new investment, with the size of the tax or subsidy depending on the company's profitability, the distribution of the factors across locations, apportionment systems, and the statutory tax rates.

In his analysis of potential reforms to EU company taxation, Gérard (2002a, b) finds that consolidated base taxation with formula apportionment will not be neutral if the tax base depends on the location of the parent company. Any formula that apportions according to firm-specific factors will lack this independence. Gérard does find, however, that the transfer pricing and tax competition effects are smaller under this alternative than under separate accounting, suggesting some gains to making this move. Harmonizing tax rates and tax bases is the only way to eliminate transfer pricing manipulations, a conclusion that would appear to hold under separate accounting systems as well.<sup>12</sup> Nielson, Raimondos-Moeller, and Schjelderup (2001) also found that moving to formula apportionment does not eliminate the tax spillovers and in many cases will even worsen the spillovers.

Weiner (1994) calculated apportionment-adjusted marginal effective state tax rates to test whether cross-state variation in apportionment practices had a measurable affect on a state's industrial structure. After taking into account the cross-state differences in apportionment practices and in the treatment of federal tax deductibility and various other state parameters, the variation in cross-state effective tax rates was not large enough to have a measurable impact on

<sup>11</sup> Direct taxation of the factor occurs if expenses on that factor are not fully deductible.

<sup>12</sup> A non-firm specific formula can also lead to distortions, as it may encourage a company to shut down its operations entirely.



cross-state industrial structure. Goolsbee and Maydew (2000) found that the payroll factor had a significant impact on state employment levels.

With relatively low maximum statutory tax rates and a floor of no taxation, the range of variation in state METRs is limited to a few percentage points and, while there may be some impact, the apportionment system may not greatly influence investment and employment. However, European Union statutory tax rates range from 10 percent to over 40 percent and companies tend to have their operations located in just a few member states, indicating that the range of EU effective tax rates under apportionment could be much larger than the range in the U.S. states. Thus, the formula apportionment system might have a noticeable impact on business investment and employment decisions in the European Union.

#### *Defining and maintaining a common apportionment formula*

The formula can be defined in many different ways. The traditional formula used in the U.S. states includes property, payroll, and sales (gross receipts), while the formula in the Canadian provinces includes payroll and sales (gross receipts). Many U.S. states have adopted the definitions contained in the Uniform Division of Income for Tax Purposes Act (UDITPA). This Act, which was established in 1957, provides standard definitions of the factors and other apportionment practices.

In principle, states should define the factors identically, but in practice, the U.S. states do not follow the same definitions. In general, the property factor includes real and tangible personal property owned or rented and used in the state during the tax period. Such property includes land, buildings, machinery, stock, equipment, etc. Owned property is valued at its original cost (i.e., without adjustment for depreciation). Rented property is valued at eight times its net annual rental rate. The property factor does not include Intangible property. The states vary widely in whether they treat computer software as tangible or intangible property.

The definition of the sales factor has been particularly problematic. In general, the sales factor includes income from the sale of inventory or services, and interest, dividends, rentals, royalties, and sales of assets. The sales factor does not include receipts from sales of intangible assets. Most states follow the UDITPA rule and assign sales to their ultimate destination, rather than to the location where the shipment originates. Many states have adopted a sales throwback rule. Under this rule, if the seller is not subject to tax in the destination state, either because the sale is made to the US government or if the seller does not have a taxable presence in the destination state, the sales are returned ("thrown back") to the origin state for taxation. The throwback rule is designed to prevent out-of-state sales from escaping taxation. In general, if the income producing activity occurs in more than one state, the sale is assigned in its entirety to the state where the greatest proportion of the income producing activity was performed, based on the costs of performance.

The payroll factor generally includes employee compensation, including wages, salaries, commissions and any other form of remuneration paid or accrued to employees for personal services. In-kind compensation, such as the



value of room and board, may also be included in the payroll factor if it would be included in federal gross income. The payroll factor does not include payments made to independent contractors.

States also can adjust the weight applied to each element of the apportionment formula, as long as the sum of the weights does not exceed one. In the early years of state corporate income taxation, the states weighted each factor equally. The most common formula included property, payroll, and sales with each factor weighted by one-third. In recent years, many states have moved to a formula with a relatively heavy weight on sales to encourage inward investment and to shift the tax burden to out-of-state firms (i.e., by increasing the weight on the sales factor and reducing the weight on the property and payroll factors). This shift in factor weights can dramatically alter the income allocation, depending on whether the state is a net importer or net exporter.

The traditional U.S. state formula that includes property and payroll not only affects a company's investment and employment decisions, it also affects state tax policymakers decisions. Because the effective tax rate is a function of the firm's investment and employment decisions, the states have an incentive to manipulate the formula to stimulate economic development. For example, a state can reduce the weight on property (capital) and payroll (labor) and increase the weight on sales to encourage inward investment and employment. Other states, particularly those with a relatively immobile industrial base, might choose to modify the formula to reach revenue goals.

Experience in the U.S. states shows that many states modify their formulae in pursuit of an economic development policy, with nearly half of the states now using a double-weighted (or more) sales factor formula (instead of the equally-weighted three factor formula), up from just a handful of states two decades earlier. Empirical evidence suggests that these policies are successful in stimulating new investment, at least until other states adopt the same formula.<sup>13</sup>

In contrast to the situation in the U.S. states, the experience in the Canadian provinces shows that it is possible to reach agreement on a common formula and to adhere to that formula. The provinces have used the same payroll and sales formula since adopting the provincial corporate income tax more than 50 years ago. As a result of this agreement, the problems concerning the strategic use of the formula have not arisen in Canada. This stability results largely from a set of agreements with the federal government under which in exchange for maintaining conformity, the federal government incurs all of the costs associated with collecting the provincial taxes.

#### *Tax planning under formula apportionment*

Companies doing business in several jurisdictions can employ a variety of techniques to minimize their tax liabilities within an apportionment system.<sup>14</sup> Whereas under separate accounting, tax planning might take the form of manipulating transfer prices to shift income artificially, under formula apportion-

---

<sup>13</sup> See Goolsbee, Maydew, and Schaedewald (2000); Weiner (1994; 1998); and Gupta and Hoffman (2000).

<sup>14</sup> For a general discussion of these opportunities in the U.S. states, see Healy (2001).

ment, this tax planning might take the form of manipulating the location of factors. For example, a company could shift the location of its sales by altering the location where sales reach their ultimate destination, say by delivering the sales to a location where the company does not have a permanent establishment. Likewise, a company could store its inventory (which is included in the property factor) in a low-tax area to reduce the property fraction and consequently the amount of income attributed to a high-tax area. The payroll factor could be reduced in a state by hiring independent contractors, whose compensation is not included in the payroll factor. Similar income shifting could occur by establishing distribution centers in low-tax areas.

Since the traditional formula is subject to manipulation, some have suggested using value added to apportion the consolidated tax base.<sup>15</sup> This option has the advantage of using a relatively large base, thus reducing the scope for manipulating the location of factors. Two issues arise in considering the VAT base.

First, the current EU transitional VAT system excludes exports and includes imports in the tax base. To be used for apportionment purposes, exports should be included in the base as these sales form part of the company's business activity, while imports should be excluded. The EU plans to move to an origin-based VAT system, which would make this change in treatment, but as Gibert (2002) has noted, one of the main reasons why the EU has not been able to move to the definitive VAT system is an inability to agree on how to allocate income to the member states. Additional adjustments to the VAT base would be necessary, such as introducing depreciation instead of immediate expensing for capital expenditures.

Second, as Westberg (2002) explains, income taxation relates to the taxation of companies resident in a jurisdiction while consumption taxation relates to the taxation of transactions within a jurisdiction. Under current international law, there is no justification for levying an income tax on an entity that does not have a permanent establishment or sufficient connection with the location. He warns of the risk that the proposal "might conflict with a basic principle of international tax law".<sup>16</sup>

Tax planning can occur regarding the corporate tax structure. For example, should a taxpayer wish to avoid any resulting increase in tax burden that might result from cross-border consolidation, the taxpayer could take a subsidiary out of the consolidated group. Suppose, for example, the EU adopts the Danish definition of a corporate group under which the group includes only wholly-owned subsidiaries. A company could remove from the group a profitable entity located in a low-tax jurisdiction by reducing its ownership share by a small percentage. Detailed anti-abuse rules would be necessary to prevent such arbitrary transactions.

Likewise, the parent company could bring an entity into the group by raising its ownership percentage to the threshold required for consolidation. A taxpayer

---

<sup>15</sup> See Commission (2002), p. 504. VAT can also be manipulated using transfer prices; see *Gérard* (2002a; b).

<sup>16</sup> *McLure and Hellerstein* (2002) have argued that a destination-based sales-only apportionment formula may violate WTO obligations.

may consider employing this strategy, for example, during a period in which one of its entities was incurring losses due to the expenses associated with its start up. It could then dilute its ownership share at a point when the tax costs made it worthwhile to do so. Thus, this situation might lead companies to “fracture their identities in a corporate shell game” to avoid taxation.<sup>17</sup>

Furthermore, if these separate entities were still related to the parent, even though they were not statutorily considered part of the consolidated group, the parent company could once again employ transfer pricing techniques to shift income out of the legally-consolidated group into the related, separate entities. This is the situation that exists in the Canadian provinces, where legally-separate entities are not consolidated with the parent company (see Mintz and Smart 2001). The upshot of these arguments is that a system of consolidation with apportionment can create the conditions that encourage companies to alter their corporate structure for tax purposes and continue to engage in tax planning to minimize their tax burden.

*Issues concerning the interaction of formula apportionment with separate accounting and income arising outside of the European Union*

Another key, relatively unexplored issue concerns the interaction between the formula apportionment system to be used in the European Union and the separate accounting system that will be maintained outside of the European Union. As the two systems follow different approaches to measure the amount of income earned in a country, a potential for tax disputes arises. At present, when such disputes arise under the separate accounts system, the competent authorities of the relevant countries are able to pursue a mutual agreement procedure, which is generally set forth in bilateral tax treaties, to resolve the conflict.

However, if one country has determined the income distribution according to formula apportionment while the other has used separate accounting, there is no underlying common system on which to make necessary adjustments. Complicated issues may arise when integrating the foreign relief system (whether exemption or credit) with the formula apportionment outcome. Even if the comprehensive solution is limited to the European Union Water's Edge (EUWE), tax authorities and many EU companies would need to maintain expertise in arm's length pricing under separate accounting for transactions with a connection outside the European Union. Thus, EUWE limitation effectively means that two systems will be maintained.

---

<sup>17</sup> The U.S. Supreme Court made this argument when it rejected the bright-line unitary test in *Allied-Signal* (1992). *Allied-Signal Inc. v. Director, Division of Taxation*, 504 U.S. 768 (1992) and *Mobil Oil Corp. v. Vermont*, 445 U.S. 425 (1980). Of course, U.S. constitutional issues have no legal force in EU law; however, the line of reasoning can help establish the contours of an EU apportionment system.

#### IV. Conclusion

The European Commission has taken a major step toward fundamental company tax reform in the European Union. By setting forth a long-term strategy providing for cross-border consolidated base taxation with formula apportionment within the European Union, the Commission has thrust the issue of formula apportionment to the top of EU policy makers' agendas.

This proposal may fulfill many dreams of EU businesses. In general, allowing companies to consolidate their EU activities under a single corporate tax base means that EU companies would no longer have to establish transfer prices for many internal transfers within the EU, they would be able to offset losses incurred by an affiliate in one member state against profits earned in another member state, and the tax consequences of cross-border reorganizations within the consolidated group would be simplified. In essence, providing for consolidated base taxation with formula apportionment would allow companies doing business in several EU member states to contend with one company tax system and to treat their operations as EU operations. As some EU business representatives have indicated, the desire to achieve a common consolidated tax base in the EU outweighs the disadvantages associated with using a formula to distribute that income to the member states (see Weiner 2002b).

Many may fear that moving to formula apportionment in the European Union would create a nightmare. For example, if the EU member states, or a subgroup of members, decide to adopt consolidated base taxation with formula apportionment, those countries must find a way to agree on the definition of the formula and the definitions of the factors used to apportion profits within the European Union and to find a means to bind the members to that formula. Such an agreement is critical, as allowing the member states complete freedom to define the formula and factors would likely eliminate many of the benefits of obtaining a consolidated tax base in the EU. However, once this agreement were reached, it is conceivable that adopting this policy could be a requirement for EU membership.

Given the incomplete economic integration in the European Union, and the current lack of political support for comprehensive company tax reform such as that proposed by the Commission, the time may not yet be ripe for formula apportionment. This paper has identified some difficult technical and political issues that arise in moving to a new approach for taxing EU businesses. However, as the EU economy becomes more integrated and companies increasingly operate on an EU-wide basis, apportionment may be seen as a better way to tax companies than the present arm's length system. Thus, the answer to whether consolidated base taxation with formula apportionment in the EU is a "dream come true" or the "EU's worst nightmare" may be that it is both.

## Summary

The European Commission recently presented a strategy for EU company tax policy that would allow companies to use one set of tax rules to consolidate their EU activities. This consolidated EU tax base would be apportioned to Member States for taxation at local rates. Many EU companies support this strategy as it would eliminate many cross-border tax obstacles. However, implementing formula apportionment would move away from the current separate accounting with arm's length pricing system and raise complicated tax policy matters. It also would introduce a new form of distortion to cross-border business activity.

## References

- Commission of the European Communities* (2002), *Company taxation in the internal market*, Luxembourg: Office of Official Publications for the European Communities.
- Commission of the European Communities* (2001a), *Towards an Internal Market without tax obstacles*, Communication COM (2001) 582 final, 23 October.
- Commission of the European Communities* (2001b), *Company taxation in the Internal Market*, Commission Staff Working Paper SEC(2001) 1681, 23 October.
- Commission of the European Communities* (1992), *Report of the Committee of Independent Experts on Company Taxation*, Luxembourg: Office of Official Publications for the European Communities, June.
- Gérard, M.* (2002a), *Interjurisdictional company taxation in Europe, the German reform and the new EU suggested direction*, CESifo working paper No. 636.
- Gérard, M.* (2002b), *Neutralities and Non-Neutralities in International Corporate Taxation: An Evaluation of Possible and Recent Moves*, ifo Studien 48 (4), 533–554.
- Gibert, B.* (2002), *A French Reaction to the Communication from the Commission 'Towards an Internal Market Without Tax Obstacles*, in: *Special issue on Company Tax Reform in the European Union: Targeted Measures and Comprehensive Approaches*, *European Taxation* 42 (8), 309–316.
- Goolsbee, A. and E.L. Maydew* (2000), *Coveting thy neighbor's manufacturing: The dilemma of state income apportionment*, *Journal of Public Economics* 75 (1), 125–143.
- Gordon, R. and J. Wilson* (1986), *An examination of multijurisdictional corporate income taxation under formula apportionment*, *Econometrica* 54 (6), 1357–1373.
- Gupta, S. and M.A. Hofmann* (2001), *The Effect of State Income Tax Apportionment and Tax Incentives on New Capital Expenditures*, *School of Accountancy and Information Management Working Paper*. Tempe, Arizona: Arizona State University.
- Healy, J.C.* (2001), *Multistate Corporate Tax Guide, Vol. 1 Corporate Income Tax*, New York: Panel Publishers.
- Hellerstein, J.*(1993), *Federal Income Taxation of Multinationals: Replacement of Separate Accounting with Formulary Apportionment*, *Tax Notes* 60 (10), 1131–1145.
- McDaniel, P.R.* (1994), *Formulary Taxation in the North American Free Trade Zone*, *Tax Law Review* 49 (4), 691–744.

- McLure, Ch.E., Jr.* (1980), *The State Corporate Income Tax: Lambs in Wolves' Clothing*, in: *H.S. Aaron and M.J. Boskin* (eds.), *The Economics of Taxation*, Washington, DC: The Brookings Institution.
- McLure, Ch.E., Jr.* (ed., 1984), *The State Corporate Income Tax: Issues in Worldwide Unitary Combination*, Stanford, CA: Hoover Institution Press.
- McLure, Ch.E., Jr. and W. Hellerstein* (2002), *Does Sales-Only Apportionment Violate International Trade Rules?*, *Tax Notes International* 27 (11), 1315–1323.
- McLure, Ch.E., Jr. and J.M. Weiner* (2000), *Deciding whether the European Union should adopt formula apportionment of company income*, in: *S. Clossen* (ed.), *Taxing Capital Income in the European Union*, Oxford: Oxford University Press.
- Mintz, J. and M. Smart* (2001), *Income Shifting, Investment, and Tax Competition: Theory and Evidence from Provincial Taxation in Canada*, manuscript, University of Toronto.
- Mintz, J. and J.M. Weiner* (2001), *Exploring Formula Allocation in the European Union*, Hague conference paper.
- Musgrave, P.B.* (2000), *Interjurisdictional Equity in Company Taxation: Principles and Applications to the European Union*, in: *S. Clossen* (ed.), *Taxing Capital Income in the European Union. Issues and Options for Reform*, Oxford: Oxford University Press.
- Nielsen, S.B., P. Raimondos-Moller, and G. Schjelderup* (2001), *Tax Spillovers under Separate Accounting and Formula Apportionment*, Economic Policy Research Unit paper 01-07, Copenhagen Business School.
- Union of Industrial and Employers' Confederations of Europe* (2000), *Memorandum on cross-border company taxation obstacles in the single market*, 3 April.
- Weiner, J.M.* (2002a), *Formula Apportionment in the EU: A Dream Come True or the EU's Worst Nightmare?*, CESifo Working Paper No. 667.
- Weiner, J.M.* (2002b), *EU Commission, Member States Commit to EU-Wide Company Taxation, Formula Apportionment*, *Tax Notes International* 26 (5), 515–519.
- Weiner, J.M.* (2001a), *The European Union and Formula Apportionment: Caveat Emptor*, *European Taxation* 41 (10), 380–388.
- Weiner, J.M.* (2001b), *EU Commission Proposes Strategy for Consolidating Corporate Tax Bases, and EU Commission Study on Company Taxation and the Internal Market Considers Comprehensive Company Tax Reform*, *Tax Notes International* 24 (5), 511–518.
- Weiner, J.M.* (1999), *Using the experience in the U.S. states to evaluate issues in implementing formula apportionment at the international level*, Office of Tax Analysis, Paper 83, Washington, D.C.: U.S. Department of the Treasury.
- Weiner, J.M.* (1998), *Formula apportionment and unitary taxation: what works and doesn't work*, Proceedings of the 91<sup>st</sup> Annual Conference, Washington, DC: National Tax Association, 233–240.
- Weiner, J.M.* (1994), *Company taxation for the European Community. How subnational tax variation affects business investment in the United States and Canada*, Ph.D. dissertation, Harvard University.
- Westberg, B.* (2002), *Consolidated Corporate Tax Bases for EU-Wide Activities: Evaluation of Four Proposals Presented by the European Commission*, in: *Special issue on Company Tax Reform in the European Union: Targeted Measures and Comprehensive Approaches*, *European Taxation* 42 (8), 322–330.