Contrasting Methodologies: A Systematic Presentation of the Differences Between An Arm's-Length/Source-Rule System and a Combined-Reporting/Formulary-Apportionment System

by Michael J. McIntyre[*]

The U.S. Supreme Court's decision in the *Barclays*[1] case has ended at long last the legal controversy over the constitutionality of California's methodology for taxing multinational enterprises. The California system, which was once used with some variations by several other states, may be called a worldwide combined-reporting/formulary-apportionment methodology. In California's original version of that system, the corporate members of a unitary multinational enterprise subject to California's tax jurisdiction were required to file combined reports on the worldwide taxable income of the domestic and foreign corporations that constituted the unitary multinational enterprise. California then taxed the multinational enterprise on a portion of that worldwide taxable income, with the amount taxable determined according to a three-factor (sales, payroll and property) apportionment formula.

Responding to strong political opposition from the international tax community to its original methodology, California has modified its tax system to allow what is referred to as a "water's edge" election. In general, the water's edge election allows multinational enterprises to exclude from the combined report the income of those foreign affiliates that are not engaged in business in California.

Over the past two decades, the *Barclays* controversy has poisoned the waters for serious academic and political debate over the merits of California's methodology. Anyone making a public statement about the relative merits of the California system could anticipate that the statement would be scrutinized to determine whether it advanced or harmed California's litigating position. As a result, partisans to the legal controversy sometime made extreme statements that undermined their credibility, and many knowledgeable individuals simply decided to keep their opinions to themselves. The settlement of the *Barclays*

---

[*]Professor of Law, Wayne State University Law School. I am grateful to Professor Richard D. Pomp of the University of Connecticut School of Law for comments on an early draft of this paper.

[1]Barclays Bank PLC v. Franchise Tax Board of California, 512 U.S. 298, 114 S.Ct. 2268 (1994). The author participated in the drafting of two *amici* briefs on behalf of the State of California.

controversy in favor of California, in conjunction with California's adoption of the water's edge election, should contribute to the creation of a more peaceful environment for academic discussion of the merits of a combined-reporting/ formulary-apportionment methodology.[2]

Although the combined-reporting/formulary-apportionment methodology has yet to be adopted by any national government as its primary method of apportioning income among countries, it does represent the only plausible alternative to the methodology that national governments are now employing. The current methodology generally is referred to either as the arm's length approach or the separate accounting approach. It attempts to allocate gross income, deductions, and other tax attributes among the corporate entities that make up a multinational enterprise by reference to the taxable income that each member corporation would be expected to earn if it operated independently as an unrelated entity.

The arm's length rules do not themselves determine national claims to tax revenues from multinational enterprises. To achieve that end, they work in concert with source rules (or some functional equivalent). The source rules come into play whenever a corporate member of the multinational enterprise is subject to taxation in two or more countries. In general, the international understanding is that countries will treat the tax claims of the country of source as having primacy over other claims, such as claims based on the residence of the corporation. To highlight the fundamental importance of transfer pricing rules *and* source rules in the current system, it is referred to here as the arm's-length/source rule methodology.[3]

---

[2]Some cooling off period may be necessary before peace breaks out. In its first public response to *Barclays*, the OECD Committee on Fiscal Affairs, traditionally a staunch supporter of arm's length pricing, issued a report that is highly critical of formulary apportionment methods. See OECD (1994). For an equally strong post-*Barclays* attack on formulary apportionment, see Wilkins & Gideon (1994).

[3]Some critics of formulary apportionment appear to be oblivious to the fact that it is a potential replacement not only for the arm's length rules but also for source rules. For example, Wilkins and Gideon (1994) claim that the arm's length method provides a "standard" whereas a formulary apportionment system is merely an invitation to negotiate. To illustrate their point, they note that several alternative formulas might be selected to apportion mining income between the extraction state and the sales or manufacturing states. Alternative rules for determining the source of mining income, however, can also be imagined easily. Indeed, the alternative formulas suggested by the authors probably reflect different views about the source of mining profits and not differences about how transfer prices should be established. Thus the arm's-length/ source-rule methodology may also be fairly characterized as an "invitation to negotiate."

No one anticipates that the combined-reporting/formulary-apportionment methodology will soon displace the arm's-length/source-rule methodology on the international scene, notwithstanding the criticisms that can fairly be directed at the arm's-length/source-rule methodology. If the combined-reporting/ formulary-apportionment methodology is to gain a foothold with national governments, it is likely to be in such economic communities as the EC or NAFTA, where the defects of the current system are likely to become increasingly significant and where the member states may have the political cohesion needed to adopted a coordinated taxing strategy.[4] Or perhaps some group of developing countries, despairing of their ability to deal with the complexity of an arm's-length/source-rule system, might move toward some formulary approach. Before a combined-reporting/formulary-apportionment methodology is put into effect, however, tax analysts should subject that methodology to some intense scrutiny.

To advance research on the combined-reporting/formulary-apportionment methodology, this paper compares the basic design features of the U.S. system — the paradigm of an arm's length/source rule system — with a somewhat idealized national combined-reporting/formulary-apportionment system. No attempt is made in this paper to determine the relative merits of the two systems.

Section I, below, explains the steps that a multinational enterprise would take to determine its tax liability under the arm's-length/source-rule methodology, as used by the United States. Many details of the U.S. system that are not relevant to the comparison of the methodologies are ignored. Section II provides an analysis of a somewhat idealized tax system using a combined-reporting/formulary-apportionment methodology. The discussion in Section II assumes that the combined-reporting/formulary-apportionment methodology is being used by a mythical Country C. In most respects, the Country C system corresponds to the system originally used by California before it allowed the water's edge election. Use of a combined-reporting/formulary-apportionment methodology at the national level may allow some simplification of the original California system. Those simplifying opportunities are noted.

Section III compares the two methodologies. The focus of that section is on the differences in the composition of the tax base under the two systems even when the two systems would impose equivalent burdens on multinational companies. Section IV notes some areas where further research would be particularly useful.

---

[4]For the suggestion that the EC will need to move towards some type of formulary system, see McIntyre (1990, 1990a and 1991) and Munnell (1992). For a similar suggest regarding NAFTA, see McIntyre & McIntyre (1993). See also McDaniel (1993 and 1995).

I. Arm's-Length/Source-Rule Methodology

In the U.S. income tax system, source rules are primarily tax jurisdictional rules. As applied to foreign corporations, they help determine the scope of U.S. primary tax jurisdiction. As applied to domestic corporation, they help determine the extent to which the U.S. yields tax jurisdiction over foreign source income to foreign governments by allowing a credit for foreign national and subnational taxes.

Domestic corporations are taxable in the Federal tax system on their worldwide income. They must determine their U.S. source and foreign source taxable income in order to compute the limitations on the foreign tax credit. The source of income is also important in determining the eligibility of U.S. corporations for certain tax incentives and for determining the application of certain anti-avoidance rules.

Under the Internal Revenue Code, a foreign corporation engaging in business activities within the United States must determine the amount of its income effectively connected with a U.S. trade or business. To make that determination, it must determine the amount of its U.S. source gross income and the deductions properly allocable thereto. A controlled foreign corporation (CFC) must also determine its worldwide income under Federal tax concepts in order to calculate the amounts taxable to its U.S. shareholders under subpart F and related provisions of the Code.

A. U.S. Corporations

The following four steps are involved in using the arm's-length/source-rule methodology for determining the taxable income of a domestic corporation. When a group of domestic corporations is filing a consolidated tax return, the consolidated group generally is treated in effect as if it were one domestic corporation for purposes of computing the consolidated taxable income of the group. Source of income, however, is generally determined for each separate corporation.[5]

Step #1: Books-of-Account Income. The Federal taxing scheme generally assumes that a domestic corporation will use its worldwide income, as reported on its books of account, as its starting point in computing its U.S. source and foreign source taxable income. Many adjustments must be made

---

[5]Recently published proposed regulations would require members of a consolidated group to determine the source of manufacturing and sales income on a consolidated base. See Prop. Reg. § 1.1502-13(c)(ex. 17) (1994).

to book income in accordance with the applicable tax accounting rules and other provisions of the Code.

Step #2: Transfer Pricing Rules. When a domestic corporation has had dealings with a related person, the amount determined in Step #1, above, is adjusted by applying the transfer pricing rules contained in Code section 482 and the accompanying regulations. The result is what those regulations refer to, without apparent irony, as the taxpayer's "true taxable income."[6]

Step #3: Source of Gross Income. After determining its true taxable income, a domestic corporation must apply the source rules of the Code to determine the amount of gross income assigned to U.S. sources and to foreign sources. The source rules employ a variety of formulas and other special rules to apportion gross income derived from cross-border transactions. Some of those rules allocate income from cross border transactions to a single country. For example, the interest source rule attributes 100 percent of the income from a cross-border loan transaction to the country of residence of the payor. Other source rules, such as the source rule for transportation income, use a 50/50 splitting formula. In some circumstances, income from cross-border manufacturing and sale is sourced according to a two-factor apportionment formula (sales and property).

Step #4: Allocation of Deductions. As the final step in determining its U.S. source and foreign source taxable income, a domestic corporation must subtract its allowable deductions either from foreign source gross income or from domestic source gross income. Rules for allocating and apportioning deductions between foreign and domestic sources are contained in the Code and regulations, and especially in Reg. § 1.861-8. In some circumstances, the allocation and apportionment of deductions is accomplished by formula.

B. Foreign Corporations

The steps involved in computing the U.S. source taxable income of a foreign corporation differ in some respects from those set forth above for U.S. corporations. The main differences are summarized below.

Adjustments to Step #1. A foreign corporation engaged in business in the United States is not required to report its worldwide income on its Federal tax return. Foreign corporations resident in a country having an income tax treaty with the United States need only report taxable income that is attributable to a permanent establishment located within the United States. The starting point

[6] See Reg. § 1.482-1(a)(1) (1994).

in determining the amount of such income is the books of account of the U.S. permanent establishment.

If a foreign corporation engaged in business in the United States is not resident of a treaty country, it is taxable on its income effectively connected with its U.S. trade or business. Again the starting point in computing its effectively connected income will be the books of account of its U.S. branch. Under the force-of-attraction rule,[7] however, it must also report all of its U.S. source income, whether or not attributable to its U.S. business, other than certain investment income taxable under Code section 881 (i.e. "fixed or determinable annual or periodical gains, profits and income" not attributable to a U.S. business). Such income normally is not included in the books of account of a U.S. branch. To adjust book income for such unrelated U.S. source income, the foreign corporation must go to step #3 (source rules) before going to step #2 (transfer pricing).[8]

Although foreign corporations generally do not have to report their worldwide income on their federal tax return, they may be required to disclose their worldwide income to Federal tax authorities under the reporting rules of Code sections 6038A and 6038C. A controlled foreign corporation (CFC) must report its worldwide income under the provisions of Code section 6038, and its foreign source income may be taxable to its U.S. shareholders under subpart F and related provisions of the Code. The effectively-connected income of a CFC is taxable under the rules generally applicable to foreign corporations, and such income is exempt from taxation under subpart F.

Adjustments to Step #2. The transfer pricing rules formally apply to transactions between juridical persons, not to transactions between parts of a single corporation.[9] In U.S. Federal tax parlance, those parts are referred to as

---

[7]See IRC § 864(c)(3).

[8]Assume, for example, that F, a foreign corporation, manufactures women's clothing in Country A for sale through a U.S. office. F also sells cheese in the United States through a travelling salesman, with title to the cheese passing in the United States. The cheese income is effectively connected income under IRC § 864(c)(3) despite the fact that it is not attributable to the U.S. office. F must first adjust the books of the branch to include the cheese income and then apply the section 482 pricing rules to determine whether the amount of reported income conforms with the arm's length standard.

[9]The traditional U.S. position appears to be that arm's length principles may be applied in appropriate circumstances in determining the gross income of a branch. The OECD would apply arm's length principles more extensively at the branch level. The United States has strongly rejected the arm's length approach for apportioning some

the "branch" and the "remaining portion of the corporation." The income of a branch may be understated as a result of transactions between the corporation of which it is a part and a related person. In such circumstances, the book income of the branch might have to be adjusted.

A foreign corporation having a U.S. branch or U.S. permanent establishment must adjust the income shown on the books of account of that branch or permanent establishment to take account of the transfer pricing rules of Code section 482. If a foreign corporation has additional income attributed to it as a result of an adjustment under Code section 482, it must then determine the amount of such income that is attributable to its U.S. branch or U.S. permanent establishment. To make that determination, it may be required to move to Step #3 (source rules) because additions attributable to the U.S. branch or permanent establishment of a foreign corporations are likely to be due to additions to the corporation's U.S. source taxable income.[10]

Adjustments to Step #3. As indicated above, a foreign corporation must consult the source rules in computing the income initially attributable to its U.S. branch and in determining the impact on the income of that branch of a transfer price adjustment under Code section 482. In addition, the foreign corporation may be allowed under the source rules to exclude from U.S. taxable income certain book income of the branch that does not have a U.S. source. In limited circumstances, foreign source income that is attributable to a U.S. branch may be subject to U.S. taxation.[11] In general, however, a foreign corporation is not taxable on income attributable to a U.S. branch unless the income is sourced within the United States.

Adjustment to Step #4. A foreign corporation engaged in business in the United States is taxable on its net business income. Thus it must determine the amount of its allowable deductions that are attributable to its business operations in the United States. The substantive rules for attributing deductions to a U.S. branch of a foreign corporation are generally the same as those applicable in allocating deductions to the U.S. source income of U.S.

---

deductions — most notably the deduction for interest payments.

[10]Assume, for example, that F, a foreign corporation, buys cheese from G, a related foreign corporation. Some portion of that cheese is sold by F in the United States through a U.S. branch. If the price that G charged F for the cheese is improper under the arm's length approach, then the gross income of the U.S. branch would need to be adjusted. Similarly, if G performed head office functions for F and did not make a proper charge for those functions, then the taxable income of F's U.S. branch might have to be adjusted.

[11]See IRC § 864(c)(4).

corporations. There are some important differences in the substantive rules, however, particularly with respect to the deduction for interest payments.

II. Combined-Reporting/Formulary-Apportionment Methodology

This section describes a somewhat idealized combined-reporting/formulary-apportionment system that mythical Country C might use for determining the business income of corporations engaged in business within its borders. Special rules not addressed here may be applicable in determining the amount of investment income taxable by Country C. The following four steps are involved in computing the taxable business income of a domestic or foreign corporation that is engaged in business in Country C.

Step #1: Combined Reporting. A corporation engaged in business in Country C must report to the Country C tax authorities its worldwide net business income. If other members of its corporate group are engaged with it in a business enterprise (in a "unitary business" in U.S. state parlance) that is conducted in part in Country C, then the worldwide net income of each member of the corporate group engaged in that business (the "unitary group" in U.S. state parlance) must be reported.

The starting point in computing the business income of each domestic member of the corporate group is worldwide taxable income, determined under rules such as those applicable in an arm's-length/source-rule system. Certain intercorporate transactions would need to be netted out, under rules comparable to the consolidated return rules of the U.S. tax system. The netting rules are discussed in Step #2, below. If a group of related corporations is engaged in multiple enterprises, some arm's length pricing rules might be applied in determining the true taxable income of each enterprise.

Foreign corporations[12] that are part of a corporate group engaged in business in Country C must also report to Country C their worldwide net income. Such corporations generally would not be required to file a tax return in an arm's-length/source-rule system. The tax return would be prepared in accordance with the rules applicable to domestic corporations.

As a practical matter, most of the foreign corporations required to file a Country C tax return would be subsidiaries of a Country C parent corporation. Such foreign corporations generally would constitute controlled foreign

---

[12]In the tax parlance of the U.S. states, a "foreign corporation" is a corporation that is not domiciled in the reference state. The term "foreign corporation" is used here in the Federal sense — a corporation that is not a domestic corporation. See IRC § 7701(a)(5).

corporations (CFCs) under the subpart F rules of the U.S. tax Code. In such circumstances, their U.S. parent corporation would have been required in an arm's-length/source-rule system to file an information return with the national government that included the worldwide income of the CFC.

Foreign corporations that operate in Country C through a branch generally would be taxable under an arm's-length/source-rule system only on net income effectively connected with a domestic trade or business. Because such foreign corporations would not report their worldwide taxable income to the national government in an arm's-length/source-rule system, they would have an enhanced reporting obligation under a combined-reporting/formulary-apportionment system. One reason for the intensity of the controversy over the *Barclays* case was that California imposed a new reporting obligation on Barclays Bank.

*Step #2: Elimination of Intra-Group Transactions*To determine the worldwide income of a business enterprise being conducted in part in Country C, Country C would require reporting corporations to eliminate from the aggregate worldwide income of the corporate group engaged in the business the internal transactions conducted among members of the group. For example, to avoid double taxable, dividends paid out of business income from one member of the corporate group to another would be eliminated. This elimination of intra-group transactions is similar to the elimination of transactions among members of a consolidated group under the Federal consolidated return rules. The amount determined after the elimination of intra-group transactions is referred to in U.S. state tax parlance as the pre-apportionment income of the unitary business.

Step #3: Apportionment Formula. Country C would claim the right to tax only a portion of the aggregate income of a group of corporations engaged, directly or indirectly, in a business enterprise in Country C. In accordance with constitutional principles, as articulated by the Supreme Court in *Container Corp.*[13] and *Barclays*, the U.S. states are allowed to apply their apportionment formula only after determining that the business enterprise of the group of related corporations constitutes a "unitary" business. This constitutional limitation presumably would not restrict the taxing powers of a national government (including the U.S. government). Elimination of the "unitary" rule would simplify substantially the operation of a formulary system.[14]

After determining the worldwide income of a business enterprise, Country C would apportion that income between Country C and the rest of the world

[13]Container Corp. of America v. Franchise Tax Board, 463 U.S. 159 (1983).

[14]See Pomp (1994).

according to some formula, perhaps using the three-factor formula (sales, payroll, and property) in wide use in the United States. The effect of the formula is to include some fraction of each dollar of income earned by the business enterprise in the Country C tax base.

Step #4: Allocation of Income to Specific Corporations. Although Country C asserts the right to tax a share of the aggregate income of a group of related corporations, it probably would not claim the right to impose the tax on corporations that do not have a direct nexus with Country C. It might be necessary under Country C tax law, therefore, to allocate the taxable income of the business among those members of the corporate group that are doing business in Country C or that are otherwise subject to taxation in Country C. This allocation of Country C apportioned income to specific Country C taxpayers is called a "second level apportionment" in U.S. state tax parlance. The method used to make a second level apportionment may be important when one member of the group has losses or is entitled to special tax benefits.

If only one corporation is doing business in Country C, then second level apportionment is trivial — all of the income of the corporate group is attributed to that corporation for purposes of filing a Country C tax return and paying the taxes due. When two or more members of the corporate group are Country C taxpayers, the second-level apportionment is more complex. The details of the second-level apportionment are beyond the scope of this paper. It is enough here to note that the person taxable on some share of the apportioned income of a corporate group is not necessarily the person that has the income attributed to it under the Country C apportionment formula. The second-level apportionment is done primarily to provide Country C with a convenient way of collecting tax on the Country C apportioned income of the corporate group that is operating a business enterprise partly within and partly without Country C.

III. Comparing the Two Methodologies

In the combined-reporting/formulary-apportionment methodology, a business enterprise deriving taxable income from cross-border transactions is treated as having derived some portion of each dollar of income within each taxing jurisdiction in which its apportionment factors (sales, payroll or property) are located. Thus taxable income may be attributed to a particular country whether the books of the branch or entity conducting the business enterprise in that country are showing a profit or a loss on its books of account. The assumption underlying a combined-reporting/formulary-apportionment methodology is that the activities of the business enterprise represented by the apportionment factors actually contribute to the profitability of the business.[15]

As an illustration of the basic philosophy of the combined-reporting/formulary-apportionment methodology, assume that corporation A is conducting a business enterprise in Country X and Country Y and that Country X uses the combined-reporting/formulary-apportionment methodology and the three-factor (sales, payroll, and property) apportionment formula. A earns a total of $500 from the manufacture of goods within Country X and the sale of those goods within Country Y. The three-factor apportionment formula used by Country X would assign some fraction of each dollar earned by A to itself and the balance of each dollar to Country Y. Thus if one-quarter of the sales, payroll, and property of A were located in Country X, then 25 cents of each dollar of income earned by A would be assigned to X and taxable by it. In total, $125 ($500 × 1/4) of taxable income would be attributable to the activities conducted in Country X.

The arm's-length/source-rule methodology generally assigns some portion of the total taxable income derived by a business enterprise from cross-border transactions exclusively to each of the tax jurisdictions in which the business enterprise operates. Each unit of taxable income is considered to have a source in one or another tax jurisdiction but not in more than one jurisdiction. For example, the total taxable income derived from the manufacture and sale of goods is bifurcated into two parts, one part having a source exclusively in the country of manufacture and the other part having a source exclusively in the country of sale.

The philosophy of the arm's-length/source-rule methodology can be illustrated by assuming that corporation A in the example above is taxable in Country Y under that methodology. In that event, Country Y would apply its source rules to determine the portion of A's taxable income of $500 associated with manufacturing and the portion associated with sales. It would impose its income tax on all of the taxable income associated with sales and would exempt from its primary tax jurisdiction all of the income associated with

[15]Contrary to the assertion of some commentators, a formulary system does not contain an implicit assumption that the factors themselves generate any particular amount of income. As Martin Sullivan noted in his oral presentation at the NTA 87th Annual Conference, a formula based on the number of paper clips held by each branch would be an acceptable formula as long as it produced a distribution of tax revenues that was acceptable to the relevant governments and some method was available to prevent the artificially shifting of paper clips among branches for tax avoidance reasons. Thus the property component of an apportionment formula might not include hard-to-value and hard-to-locate intangible property as long as what remained in the formula produced a fair sharing of tax revenue among the relevant tax jurisdictions.

manufacturing.[16] If $400 is associated with sales and $100 with manufacturing, then each dollar of the $400 associated with sales would be taxable by Country Y and no portion of the remaining $100 of income would be taxable by Country Y.

The difference in the philosophies of the combined-reporting/formulary-apportionment methodology and the arm's-length/source-rule methodology is particularly clear when a business enterprise has separated the cross-border activities of the businesses into separate corporations. For example, assume that corporations B and C are related persons conducting a business that produces total taxable income of $500. B manufactures goods in Country S and sells the goods to C. C resells the goods through its retail channels in Country T.

Under an ideal arm's-length/source-rule methodology, corporation B is viewed as having only one type of income — manufacturing income — and all of that manufacturing income is attributed to Country S.[17] The sales income of the enterprise is attributed exclusively to corporation C and Country T. If the amount of the sales income, determined under the arm's length rules, is $400, then $400 would be taxable in Country T and the $100 of manufacturing income would be taxable in Country S.

In contrast, the combined-reporting/formulary-apportionment methodology would attribute a portion of each dollar of the $500 of combined income of B and C to Country S and the remaining portion of the combined income to Country T. Thus if the apportionment formula attributed one quarter of the income to Country S, then Country S would tax $0.25 of each dollar of combined income, for a total tax base of $125. The remaining $375 of combined income would be taxable in Country T. Note that the apportionment between Country S and Country T would be the same under the combined-reporting/formulary-apportionment methodology if C and D had been organized as a single corporation. The separate corporate existence of B and C simply changes the identity of the person liable for the tax.

The diagram below illustrates the difference in the two methodologies discussed above. In that diagram, the square labeled *Y* represents the total net income under national tax concepts of U, a unitary business enterprise engaged

---

[16] If A is organized under the laws of Country Y, it might be subject to taxation by Country Y on its worldwide income, but it presumably would be allowed a foreign tax credit for taxes paid to Country X.

[17] In fact, U.S. tax law might provide a much more favorable result if the taxpayer is able to use the apportionment formula provided in Reg. § 1.863-2(b)(2)(Ex. 2). That formula is badly designed from a policy perspective and has been retained in its present form primarily as an incentive for exporters.

in the production of widgets in Country A and their sale in Country A and Country F. "Net income" in this context is taxable income prior to the deduction or other allowance for income taxes paid to foreign tax jurisdictions. The square is subdivided horizontally into three parts. Area *a* represents the net income derived from the production and sale of widgets in Country A, determined under the national source rules. Area *b* represents the Country A source net income attributable to the production of the widgets in Country A and their sale in Country F. Area *c* represents the Country F source income arising from the sale of widgets in that country. Under arm's-length/source-rule tax concepts, the sum of areas *a* and *b* represents Country A source income, and area *c* represents foreign source income.

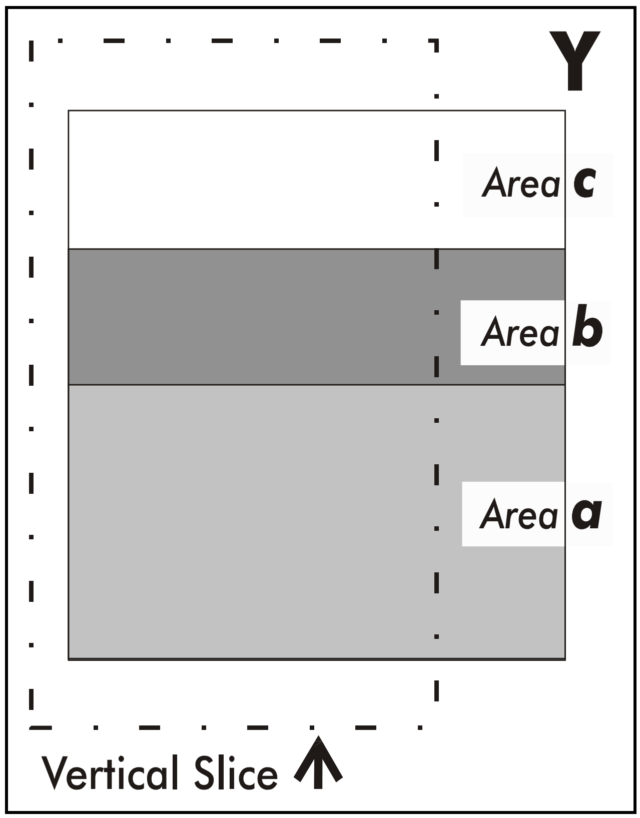

Diagram: Illustration of Methodologies

The vertical slice of *Y* bracketed by the dotted line represents the net income that would be taxable by Country A if it adopted a combined-reporting/formulary-apportionment system. The diagram shows a portion of area *a*, area *b*, and area *c*, within that vertical slice. The point being made is that a combined-reporting/formulary-apportionment system taxes a portion of each dollar of income derived by U, including income characterized as foreign source income under arm's-length/source-rule tax concepts. The portion of areas *a* and *b* included in the vertical slice represents the portion of the income of U that would be taxable under either system.

Conflicts arise between an arm's-length/source-rule system and a combined-reporting/formulary-apportionment system even when both tax systems are in agreement as to the amount of income derived by a business enterprise that ought to be taxable by a particular country. To emphasize the point, the area of the vertical slice in the diagram was chosen so that it exactly equals the sum of areas *a* and *b*. That is, in this highly stylized example, the arm's length/source-rule system and the combined-reporting/formulary apportionment system are in agreement on the total amount of income attributable to Country A. They are disagreeing, however, as to which dollars of that total are properly attributable to Country A.

Neither an arm's-length/source-rule system nor a combined-reporting/formulary-apportionment methodology can fairly claim to accurately determine the taxable income properly associated with a particular geographical region for each taxpayer or each group of related taxpayers. The realistic objective of both methodologies should be to provide some fair sharing of aggregate tax revenues among tax jurisdictions over time. Taxpayers have a legitimate complaint about the fairness of a methodology if it causes them to be subjected to double taxation, but they have no legitimate grounds for complaint if a particular methodology defeats their tax avoidance scheme or allows what they may consider the wrong government to impose its tax on them.

When the fairness of the two methodologies is evaluated on an aggregate basis over time, some of the apparent unfairnesses of those methodologies are greatly reduced. For example, by allocating all of the income from a loan transaction to the country of residence of the person obligated to pay interest on the loan, the arm's-length/source-rule methodology would appear to be treating the country of origin of the loan capital unfairly. As long as cross-border loans are originating in each country, however, the apparent fairness is mitigated.[18]

As another example, the combined-reporting/formulary-apportionment methodology might be criticized for allocating some portion of the taxable income of a business enterprise to a country in which that business is reporting a loss on its books of account. Viewed over some reasonable period of time, however, this criticism loses much of its force. In many circumstances, the losses of a business are more properly considered to be capital costs, to be recovered when the business turns profitable. In the typical case of a successful business,

[18]The unfairness is further mitigated by tax treaties that limit the source jurisdiction of the country of residence of the obligor. Some tax treaties eliminate all source jurisdiction over interest payments. The apparent unfairness of that rule may be mitigated or eliminated by the revenue sharing that may result from other provisions of the treaty.

a branch of a business enterprise that generates start-up losses will be a positive contributor to the business enterprise after the start-up period. Branches that continue to show losses over long periods probably are making some positive contribution to the enterprise; otherwise a prudent business manager would close the branch.

A goal of the arm's length rules is to equate a group of related persons conducting a business enterprise with a group of unrelated persons engaging in similar activities. The arm's-length rules do not come into play when a single corporation is conducting the business. In such circumstances, the only difference between a an arm's-length/source-rule methodology and a combined-reporting/formulary-apportionment methodology is the rules for allocating income among the branches of the single business. In the very importance case of a single corporation manufacturing in one country and selling in another, the U.S. government and the mythical Country C use an apportionment formula for allocating income between the sales branch and the manufacturing branch of a corporation. The U.S. formula apportions taxable income in proportion to the sales and property of the branches, whereas the three-factor formula typically used by U.S. states includes payroll in the apportionment formula.

The factual premises underlying the combined-reporting/formulary-apportionment methodology and the arm's-length/source-rule methodology are not self-evidently correct or self-evidently false. The combined-reporting/formulary-apportionment method assumes that some fraction of each dollar of income earned by a business enterprise relates to all of the tax jurisdictions where the business operates. This premise has some plausibility for many types of businesses. For example, if a business earns income from the manufacture and sale of goods, each dollar that it earns relates in part to its manufacturing activities and in part to its sales activities.

The lack of significance given to the form of corporate organization under a combined-reporting/formulary-apportionment system also has some intuitive appeal. For example, a business enterprise is unlikely to change the way it earns income from business activities in any significant way by separating the manufacturing function and the sales function into separate corporations. Similarly, the before-tax profits generated by an oil business are not likely to be affected by whether the business organizes its chain of service stations as a single corporate entity or as a set of separate corporations. In contrast, the form of business organization often affects the reach of a country's tax jurisdiction under the U.S. version of the arm's-length/source-rule system.

The arm's-length/source-rule methodology has its strongest intuitive appeal when each of the separate corporations comprising a business enterprise earns its income without much sharing of corporate resources. For example, if a business engaged in retail sales has separately organized corporations in several countries and those corporations do not rely on each other to any substantial degree, the profits appearing on the books of each corporation, after some relatively minor adjustments, may provide a good measure of their profitability. Similarly, the arm's-length/source-rule methodology sometimes works reasonably well when the separate corporations of a group of related entities are independent profit centers, with the rewards to the managers of each corporation depending on its book profits. The arm's-length/source-rule methodology works particularly badly when a business enterprise has shifted ownership of valuable intangible property to a related offshore tax haven corporation.

IV. Research Agenda

The following topics need further research before a proposal for adopting a combined-reporting/formulary-apportionment system is ready for consideration by policy makers. Obviously this list is not intended to be comprehensive or exhaustive.

(1) *Regional Use of Combined-Reporting/Formulary-Apportionment System*. Is it possible to use a combined-reporting/formulary-apportionment system in a regional common market, such as the EC or NAFTA? What are the technical problems, and do those problems have solutions? Research on this topic is already underway.[19]

(2) *Efficiency Effects*. What are the relative efficiency costs of the two methodologies? Can they be measured? Are they important in deciding between the two methods?[20]

(3) *Unitary Concept*. Is some unitary concept needed if a combined-reporting/formulary-apportionment system is used by national governments?[21] At a minimum, can the concept be simplified?

(4) *Choice of Formulas* . What formulas should be used if a combined-reporting/formulary-apportionment system is to be adopted by national governments? Would a single-factor sales formula be acceptable, as some have

---

[19] A recent tax conference at New York University Law School explored some of those issues. See McDaniel (1995). The conference papers are expected to be published in the *Tax Law Review* in 1995.

[20] That work has also begun. See Sullivan (1994).

[21] See Pomp (1994).

suggested?[22] What are the consequences of alternative formulas for various countries or for categories of countries?[23]

(5) *Tax Haven Abuses*. Can the use of a combined-reporting/formulary-apportionment system substantially curtail tax haven abuses, as some commentators have suggested? Or would those opportunities expand? Can worldwide combined reporting be integrated into an arm's-length/source-rule system to deal effectively with tax haven problems?

(6) *Partial Adoption*. Would the use of formulas for apportioning income be useful in taxing in-bound transactions, as has been suggested by some members of the U.S. Congress? Or do the benefits of formulas arise only when they are the exclusive method for determining tax jurisdiction?

(7) *Improvement of Separate Factors*. What improvements can be made in the details of the traditional three-factor formula? For example, should the property component include only property that cannot be shifted easily through paper transactions? If so, how should "property" be defined? How should independent contractors (leased employees) be treated in the payroll factor? Similarly, how should leased property be treated in the property factor? How should gross interest and rental receipts be treated in the sales (receipts) factor?

Research on the combined-reporting/formulary-apportionment methodology will be useful even if national governments ultimately decide not to adopt it. That research obviously would be useful to subnational governments in Canada, Germany, the United States and elsewhere that are already using that method. A major objective of the research should be to clarify whether the combined-reporting/formulary-apportionment methodology is in fact a viable alternative to the arm's-length/source rule methodology.

Learning more about the combined-reporting/formulary-apportionment methodology may also prove useful in refining the arm's-length/source-rule methodology. Formulas are a major feature of the U.S. version of the arm's length approach, especially in apportioning gross income and deductions among branches of a single corporation. Unfortunately, some of those formulas are not well designed.

---

[22]The potential advantages of a single-factor sales formula are noted in McIntyre (1991). That concept is developed in Avi-Yonah (1993).

[23]Research on formulas would be a particularly useful activity for the U.S. Treasury because of its access to the actual tax returns of multinational companies. Treasury should be able to determine, for example, whether a particular formula could produce approximately the same distribution of tax revenues as the current system.

A logical development of the arm's-length/source-rule methodology is the current taxation of resident corporations on their worldwide income, including income earned through a foreign affiliate. Many countries have taken an important step in that direction by imposing worldwide taxation on income deflected to tax haven jurisdictions. Research on the combined reporting feature of the combined-reporting/formulary-apportionment methodology has obvious potential benefits for the design of a comprehensive solution to the tax haven problem arising under the current arm's-length/source-rule methodology.

References

Avi-Yonah, Reuven S., "Slicing the Shadow: A Proposal for Updating U.S. International Taxation," 58 *Tax Notes* 1511-1515 (1993).

Bird, Richard and Donald Brean, "The Interjurisdictional Allocation of Income and the Unitary Taxation Debate," 34 *Canadian Tax Journal* 1377 (1986).

Coffill, Eric J. and Prentiss Wilson, Jr., "Federal Formulary Apportionment as an Alternative to Arm's Length Pricing: From the Frying Pan to the Fire?" 59 *Tax Notes* 1103 (1993).

Commission of the European Communities. *Report of the Committee of Independent Experts on Company Taxation* ["Ruding Report"] (1992).

Hellerstein, Jerome R., "Federal Income Taxation of Multinationals: Replacement of Separate Accounting With Formulary Apportionment," 60 *Tax Notes* 1131-1145 (1993).

Iekel, John, "Dorgan Calls for Formulary Apportionment in Some Situations," *Highlights & Documents* p. 4424 (Sept. 30, 1994).

Kauder, Louis M., "Intercompany Pricing and Section 482: A Proposal to Shift from Uncontrolled Comparables to Formulary Apportionment Now," 58 *Tax Notes* 485-493 (1993).

Kauder, Louis M., "The Unspecific Federal Policy of Arm's Length: A Comment on the Continuing Vitality of Formulary Apportionment at the Federal Level," 60 *Tax Notes* 1147-1155 (1993).

Langbein, Stanley, "A Modified Fractional Apportionment Formula for Tax Transfer Pricing," 54 *Tax Notes* 719 (1992).

MacKinnon, Julianne, "U.S. Senate Committee Considers Proposals to Institute Formulary Apportionment," 6 *Tax Notes Int'l* 828-830 (April 5, 1993).

McDaniel, Paul R., "NAFTA and Formulary Apportionment: An Exploration of the Issues," in Alpert, Herbert H. and Kees van Raad, eds., *Essays on International Taxation: In Honor of Sidney I. Roberts* at 293-309, Deventer & Boston: Kluwer Law and Taxation Publishers (1993).

McDaniel, Paul R., "Tax Policy in the North American Free Trade Zone," — *Tax Law Review* — (1995) (forthcoming). Paper presented at Colloquium, New York University School of Law, September 23, 1994.

McIntyre, Michael J. *The International Income Tax Rules of the United States* . Boston, MA: Butterworth Legal Publishers (updated 2 volume looseleaf, 1989), (paper, 2d. ed. 1992).

McIntyre, Michael J., "Harmonizing Direct Taxes in the EEC," 2 *Tax Notes Int'l* 131 (1990)

McIntyre, Michael J., "Harmonizing Direct Taxes on Business within the EEC," 2 *Tax Notes Int'l* 341 (1990).

McIntyre, Michael J., "Design of a National Formulary Apportionment Tax System," 1991 *NTA-TIA Proceedings, 84th Annual Conference* 118-124 (1991).

McIntyre, Michael J., "Commentary on Paper of Paul McDaniel," presented at Colloquium, New York University School of Law, September 23, 1994.

McIntyre, Robert S. and Michael J. McIntyre, "Using NAFTA to Introduce Formulary Apportionment," 6 *Tax Notes Int'l* 851-856 (April 5, 1993), reprinting testimony presented before the Senate Committee on Governmental Affairs, March 25, 1993.

McLure, Charles E., Jr. *Economic Perspectives on State Taxation of Multijurisdictional Corporations*. Arlington, VA: Tax Analysts (1986).

Munnell, Alicia, "Taxation of Capital Income in a Global Economy: An Overview," 1992 *New England Economic Review* 33-52 (Sept./Oct. 1992).

Musgrave, Peggy. *United States Taxation of Foreign Investment Income: Issues and Arguments*. Cambridge, MA: Harvard Law School International Tax Program (1969).

OECD Committee on Fiscal Affairs, "OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations," Discussion Draft of Part I: Principles and Methods, released July 8, 1994, and reprinted at 9 *Tax Notes Int'l* 155-187 (July 18, 1994).

Pomp, Richard D., "Commentary on Paper of Paul McDaniel," presented at Colloquium, New York University School of Law, September 23, 1994.

Pomp, Richard D. and Michael J. McIntyre, "Double Trouble: Double Tax Aspects of Formulary Apportionment in the International Context," paper prepared for NTA 87th Annual Conference, November 14, 1994 (forthcoming).

Sullivan, Martin, "Economic Efficiency and Alternative International Tax Regimes for Related Party Transactions," paper presented at NTA 87th Annual Conference, Nov. 14, 1994 (forthcoming).

Vann, Richard, "A Model Tax Treaty for the Asian-Pacific Region (Part I)," 45 *Bulletin for Int'l Fiscal Documentation* 99-111 (March 1991).

Vann, Richard, "A Model Tax Treaty for the Asian-Pacific Region (Part II)," 45 *Bulletin for Int'l Fiscal Documentation* 151-163 (April 1991).

Vogel, Klaus. *Taxation of Cross-Border Income, Harmonization, and Tax Neutrality under European Community Law*. Rotterdam: Foundation for Fiscal Studies (1994).

Wickham, Dale W. and Charles J. Karester, "New Directions Needed for Solution of the Transfer Pricing Tax Puzzle," 5 *Tax Notes Int'l* 399-425 (August 24, 1992).

Wilkins, William J. and Kenneth W. Gideon, "Memorandum to Congress: You Wouldn't Like Worldwide Formulary Apportionment," 65 *Tax Notes* 1259-1265 (1994).