

The Borders of E.U. Tax Policy and U.S. Competitiveness

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I. INTRODUCTION

In March of 2011, the European Commission (E.C.) proposed that the member states of the European Union allow corporations to elect a harmonized corporate income tax.² A particularly interesting feature of the proposal is that income would be allocated among the member states using a mathematical apportionment formula rather than, as currently is the law, by determining the source of income on a case-by-case basis.³

1. The author would like to thank Professor Stephen Shay for his comments, particularly since he disagrees with much of what is herein.

2. *Proposal for a Council Directive on a Common Consolidated Corporate Tax Base (CCCTB)*, at 10, COM (2011) 121 [hereinafter *E.C. Proposal*]; *Commission Staff Working Document: Impact Assessment: Accompanying Document to the Proposal for a Council Directive on a Common Consolidated Corporate Tax Base (CCCTB)*, SEC (2011) 315 final (Mar. 16, 2011) [hereinafter *E.C. Impact Assessment*]. As discussed in more detail in Notes 7 and 8, *infra*, this article does not take into account the electivity features of the E.C. proposal, and so views it as applying to all business in the E.U.

3. *E.C. Proposal*, *supra* note 2, at 49. Allocation would only apply with regard to multinational business. Multinational passive investment (investment not through a related party or permanent establishment) would continue to be subject to traditional “withholding taxes.” *E.C. Proposal*, *supra* note 2, at 39. For this reason, this article focuses on sourcing for purposes of taxing active businesses. Sourcing issues for purposes of withholding taxes are usually viewed as involving the same concerns, but do not necessarily. Stephen E. Shay, J. Clifton Fleming, Jr. & Robert J. Peroni, *The David R. Tillinghast Lecture: “What’s Source Got to Do With It?”: Source Rules and U.S. International Taxation*, 56 *TAX L. REV.* 81, 146–54 (2002).

European countries generally tax only locally-sourced income. *See generally* Paul W. Oosterhuis, Fred T. Goldberg, Jr., Kimberly Tan Majure, LaBrenda Garrett-Nelson & Francis Grab, *Territorial Tax Study Report*, NAT’L FOREIGN TRADE COUNCIL (June 11, 2002), http://www.nftc.org/default/Tax%20Policy/06_13_02_Territorial_Tax_Study_Report.pdf. The U.S. taxes foreign persons only on (i) some U.S.-sourced passive income, (ii) U.S. wages, and (iii) income effectively connected with a U.S. trade or business, which consists almost entirely of U.S.-sourced active income. *See* I.R.C. §§ 871, 881 (2006). U.S. bilateral income tax treaties cut this taxation a bit when applicable. In contrast, the U.S. taxes U.S. persons on worldwide income, but a credit is allowed for foreign taxes on foreign-sourced income. *See* I.R.C. §§ 1, 11, 902 (2006). The credit is limited to the U.S. tax on foreign-sourced income. I.R.C. § 904 (2006). As a consequence of the

The E.C. proposal presents a number of interesting and important issues. One of the most interesting is how the apportionment feature of the proposal would impact business risk-taking within the European Union.⁴ This article agrees and goes further to note that, by making the E.U. a more attractive location for investment, the E.C. proposal would put the U.S. at a competitive disadvantage.⁵

The next section of this article explains the E.C. proposal and provides some context. This is followed by a section that discusses how an income tax impacts risky investments in the one-country case. Then, the cross-border case is reviewed. This discussion illustrates the benefits of the E.C. proposal. The succeeding section of this article considers the significance of all this to the U.S. and any possible U.S. response. A conclusion follows. For the reader interested in understanding the general policy foundation for formula apportionment, this is discussed in this article's appendix.

II. FORMULA FOLLOWS FUNCTION?

One goal of the European Union is to reduce legal obstacles to doing business across member states. Part of this project is to eliminate tax frictions to cross-border business.⁶ To this end, the European Com-

operation of this limit, any U.S. company whose average foreign tax rate (determined under U.S. principles) exceeds the U.S. rate is effectively U.S. tax-exempt on an additional dollar of foreign-sourced income. The extra dollar generates U.S. tax, but also increases the foreign tax credit by the same amount so that there is no net increase in U.S. tax. On 2006 returns, U.S. companies had almost \$108 billion of creditable taxes, but were only allowed \$78 billion in foreign tax credits. Nuria E. McGrath, *Corporate Foreign Tax Credit, 2006*, 30 STAT. OF INCOME BULL. 118, 118, 133 (2010). (This analysis was motivated by James R. Hines, Jr., *No Place Like Home: Tax Incentives and the Location of R&D by American Multinationals*, 8 TAX POL'Y & ECON. 65, 101-02 (1994).) Additionally, foreign-sourced income earned by a U.S. person through a foreign corporation is generally taxed by the U.S. only when repatriated to the U.S. (through dividends, interest, royalties, and the like). Interestingly, while some U.S. corporations had a total of \$30 billion of uncredited foreign income taxes (including carryovers from past years), other U.S. corporations paid roughly the same amount, \$30 billion, in U.S. tax on foreign-sourced income. McGrath, *supra*, at 135. Note that apportionment is merely a sourcing rule, not the entire international tax regime. As to active business income, apportionment can be used both under a territorial system, like those in Europe, or under a foreign tax credit system, like that in the U.S.

4. See *E.C. Proposal*, *supra* note 2, at 5. O.E.C.D. tax policy officials have problems with the apportionment aspect of the E.C. proposal. Joseph L. Andrus, Mary C. Bennett & Caroline Silberztein, *The Arm's-Length Principle and Developing Economies*, 20 TRANSFER PRICING REP. 495 (2011).

5. In this context, a country's "competitive advantage" is a feature of the country's tax system that encourages more investment or other business activity in the country than would occur in the absence of the tax provision.

6. *Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee: An Internal Market Without Company Tax Obstacles, Achievements, Ongoing Initiatives and Remaining Challenges*, at 3-6, COM (2003) 726 final (Nov. 24, 2003); *Communication from the Commission to the Council, the European Parliament, and the Economic and Social Committee: Towards an Internal Market Without Tax Obstacles: A*

mission proposed a common consolidated corporate income tax base: Every corporation doing business in the European Union would be allowed to elect⁷ to use one common measure of taxable income for the purpose of determining its tax obligation to all member states of the European Union.⁸ This would simplify tax compliance and eliminate the existing inconsistencies in tax treatment (which can result in partial double taxation or tax exemption), which undermine trade. The determination of the amount of worldwide income that is treated as E.U. income would be made under existing practice—transfer pricing.⁹ Then, the question arises as to how the common E.U. tax base would be allocated among the member states. Current law, which involves separately accounting for each geographic piece of the multinational enterprise, was rejected. The European Commission proposed formula apportionment. It was decided not to allocate on the basis of either macro-economic factors or local value added.¹⁰ The suggested formula uses three taxpayer-specific factors:

Local Base = EU Base X

$$\left[\left[\frac{1}{3} * \frac{\text{Local Sales}}{\text{EU Sales}} \right] + \left[\frac{1}{3} * \left[\left[\frac{1}{2} * \frac{\text{Local Payroll}}{\text{EU Payroll}} \right] + \left[\frac{1}{2} * \frac{\text{Local E'ees}}{\text{EU E'ees}} \right] \right] \right] + \left[\frac{1}{3} * \frac{\text{Local Property}}{\text{EU Property}} \right] \right]^{11}$$

The total amount of income in the E.U., the “EU Base,” would be apportioned among the member states by the formula in order to determine

Strategy for Providing Companies with a Consolidated Corporate Tax Base for Their EU-Wide Activities, at 10–21, COM (2001) 582 final (Oct. 23, 2001).

7. The E.C. indicates that this election is provided so that one-nation businesses are not burdened with adapting to a new tax regime. *E.C. Proposal, supra* note 2, at 5. In the spirit of the E.C.’s analysis, this article assumes that the proposal would apply to all international business in the E.U.

8. *Id.* at 21–22. The E.C. proposal provides that, if the common base is elected, formula apportionment that mandatorily looks through related corporations—combined reporting—is required. *Id.* at 38. (What we in the U.S. call “combined” reporting, the E.C. proposal calls “consolidated” reporting.)

9. *See id.* at 23.

10. Common Consolidated Corporate Tax Base Working Group (CCCTB WG), *An Overview of the Main Issues that Emerged During the Discussion on the Mechanism for Sharing the CCCTB*, at 3–5, CCCTB/WP/052/doc/en (Feb. 27, 2007). The E.C. proposal contains special apportionment rules for financial institutions, insurance undertakings, oil and gas, and air and water shipping and transport. *E.C. Proposal, supra* note 2, at 53–54. This article focuses on the general three-factor formula.

11. The reader might note that the formula could be simplified by distributing out the three “1/3d” factors. The presentation above, however, best captures the intuition of three *evenly weighted* factors.

each state's share of the EU Base, the respective "Local Base."¹² Income apportioned to a member state would be taxed by that state at the local rate.¹³ The formula uses three evenly-weighted factors: sales, labor, and property. The sales factor compares the total sales (in Euros) with a local destination to the total E.U. destination sales (in Euros). The labor factor uses two evenly-weighted sub-factors: payroll (in Euros) and number of employees.¹⁴ First, the local payroll is compared to total E.U. payroll. Second, the number of local employees is compared to the total E.U. number. Finally, the property factor compares local tangible assets (at tax book value) to the total E.U. tangible assets (at tax book value).¹⁵

The European Commission identifies reduced compliance costs for taxpayers and tax enforcement agencies as the principal advantage of its apportionment proposal.¹⁶ Under current law, a business operating in multiple member states must treat each local piece as if it were free-standing and each piece must be accounted for separately.¹⁷ Transfer prices are set for the dealings between the pieces based on a hypothetical "arm's-length" standard. The Appendix explains that, as to a modern integrated multinational, there is no economic basis for determining these hypothetical prices in most cases. As a consequence, determining these prices and then policing them consumes considerable resources with no economic point:

12. *E.C. Proposal*, *supra* note 2, at 14. All income would be subject to apportionment. In contrast, some U.S. states apportion only passive income. Joann M. Weiner, *COMPANY TAX REFORM IN THE EUROPEAN UNION* 66 (2006). The general approaches of U.S. states are discussed in the Appendix.

13. An overall loss would be carried forward to be applied against future years' income and allocated by the factors in the relevant future years. *E.C. Proposal*, *supra* note 2, at 35.

14. In the U.S. and Canada, the labor input is customarily applied by valuing labor at its cost (payroll). But, in the E.U., the less well-developed countries argued that their relatively lower wages would inappropriately limit their tax base under such an allocation formula factor. So, the European Commission proposed that labor be reflected in any apportionment formula both (i) with respect to the cost of payroll and (ii) with respect to the number of employees, with the two components equally weighted. Common Consolidated Corporate Tax Base Working Group (CCCTB WG), *Report and Overview of the Main Issues That Emerged During the Discussion on the Sharing Mechanism*, at 5, CCTB\WP\056\doc\en (Aug. 20, 2007); Common Consolidated Corporate Tax Base Working Group (CCCTB WG), *CCCTB: Possible Elements of the Sharing Mechanism*, at 6–9, CCCTB\WP060\doc\en (Nov. 13, 2007).

There is a considerable irony here: The primary goal of the E.U. is to open markets. Open markets have freely mobile labor. In theory, if labor were freely mobile within the E.U., the (risk-adjusted) wage differential between the member states would not exist. Under these circumstances, the E.C.'s adoption of a number-of-employees factor testifies that the E.U. still has a long way to go in achieving an open E.U. labor market.

15. For purposes of the property factor, an ad hoc capitalization of research and development (R&D) expense is provided, but the location thereof is not specified, perhaps since it is assumed to be situated in the locality where the R&D is incurred. *See E.C. Proposal*, *supra* note 2, at 51.

16. *E.C. Impact Assessment*, *supra* note 2, at 32–43.

17. *See generally* Weiner, *supra* note 12, at 3–4.

A key obstacle in the single market today involves the high cost of complying with transfer pricing formalities using the arm's length approach. Further, the way that closely-integrated groups tend to organise themselves strongly indicates that transaction-by-transaction pricing based on the 'arm's length' principle may no longer be the most appropriate method for profit allocation.¹⁸

These extra costs are not present in a purely local business, so that these costs discourage cross-border business.¹⁹ (Of course, taxpayers' ability to game transfer pricing can create an incentive for multinational operation.²⁰) The costs of transfer pricing are particularly troublesome with regard to small- and medium-sized businesses.²¹ The E.C. Staff Impact Assessment bases its estimates here on detailed business financial data collected in a Deloitte poll of tax experts and in a PricewaterhouseCoopers poll of multinational companies located in the European Union.²²

No change in national revenues is intended by the E.C. proposal.²³ Nevertheless, the Staff Impact Assessment estimates material changes, from a loss of nearly 40% for Finland to a gain of nearly 17% for Germany.²⁴ It is expected that these base changes would be offset by rate changes.²⁵ The estimated respective national welfare changes vary also, from an approximately 1.2% of GDP gain for Belgium to a loss of approximately 1.6% of GDP for Luxemburg.²⁶

18. *E.C. Proposal*, *supra* note 2, at 4.

19. *E.C. Impact Assessment*, *supra* note 2, at 10–11.

20. *Id.* at 30–31; Marcel Gérard & Joann M. Weiner, *Cross-Border Loss Offset and Formulary Apportionment: How Do They Affect Multijurisdictional Firm Investment Spending and Interjurisdictional Tax Competition*, 19 (CESifo. Working Paper No. 1004, 2003).

21. *E.C. Proposal*, *supra* note 2, at 8.

22. *E.C. Impact Assessment*, *supra* note 2, at 23. Some disagree with the analysis. *See, e.g.*, Ernst & Young LLP, *COMMON CONSOLIDATED CORPORATE TAX BASE: A STUDY ON THE IMPACT OF THE COMMON CONSOLIDATED CORPORATE TAX BASE PROPOSALS ON EUROPEAN BUSINESS TAXPAYERS* (2011).

23. *E.C. Proposal*, *supra* note 2, at 6.

24. *See E.C. Impact Assessment*, *supra* note 2, at 30. These changes arise from other changes, like in depreciation, as well as from apportionment. Two of the big winners (in terms of tax base) are France and Germany, which likely goes a long way toward explaining their support for the E.C. proposal. Lee Sheppard, *France, Germany Push Europe Closer to CCCTB*, *WORLDWIDE TAX DAILY* (Apr. 14, 2011).

25. *E.C. Proposal*, *supra* note 2, at 6; *E.C. Impact Assessment*, *supra* note 2, at 28–29. The Impact Assessment based its estimate on financial information from a sample of about 6,700 E.U. multinational groups in the financial sector and about 2,000 groups in the non-financial sector for 2002 through 2005. *Id.* at 23. These numbers are for the proposal that pierces veils by requiring a group combined return in the E.U. *Id.* at 30.

26. *E.C. Impact Assessment*, *supra* note 2, at 136.

III. DOMESTIC RISK

In order to evaluate how formula apportionment might change risk-taking, it is necessary to consider how income taxation in a single jurisdiction impacts risk. Discouraging risk-taking is troubling, as it would undermine economic efficiency.²⁷

There are many ways to think about risk. In the tax policy literature, the analysis frequently starts by looking at how a flat-rate income tax might influence a taxpayer's choice between either (i) investing in (buying) a riskless bond or (ii) investing in a risky bond.²⁸ The risky bond promises a higher rate of interest—"extra" interest—to compensate the investor for the risk of nonpayment of principal and interest. If the investment works out as hoped, the extra interest is taxed. This alone would discourage risk-taking. But, if the tax also allows a full deduction for any principal lost if things do not work out, this would encourage risk-taking, balancing out the taxation of any extra profit. Even with this balance, however, an income tax still might impact risk-taking. Taxing profit and allowing losses reduces the net risk to an investor, which could change investment decisions (depending on investors' risk preferences).²⁹ Also, the income tax taking wealth from the investor might impact her risk aversion.³⁰ Nevertheless, it seems pretty clear that balanced taxation of both any extra return and any loss experienced is required in order for an income tax not to discourage risk-taking. Current U.S. law can limit the benefit of losses.³¹ Any such limit discourages risk-taking.³²

A more interesting example for purposes of this article is a business that takes risk by creating and bringing to market a new product or service. Here, the accounting is trickier. There is no distinct investment, like buying a bond.³³ Rather, there are costs of research and development. Most of these costs, even if viewed as part of an investment, are

27. See Harvey S. Rosen & Ted Gayer, PUBLIC FINANCE 329–33, 341–43, 346–47 (9th ed. 2010).

28. The classic work here is Evsey Domar & Richard Musgrave, *Proportional Income Taxation and Risk-Taking*, 58 Q.J. ECON. 388, 389 (1944).

29. Roger Gordon, *Taxation of Corporate Taxable Income: Tax Revenues Versus Tax Distortions*, 100 Q.J. ECON. 1, 25–26 (1985); Martin Feldstein, *The Effects of Taxation on Risk Taking*, 77 J. POL. ECON. 755, 763–64 (1969); Joseph E. Stiglitz, *The Effects of Income, Wealth, and Capital Gains Taxation on Risk-Taking*, 83 Q.J. ECON. 263, 274 (1969).

30. See Gordon, *supra* note 29, at 25.

31. See I.R.C. §§ 1201, 1202 (2006).

32. Of course, because a taxpayer can pick and choose when to recognize profits and losses, there are good reasons to limit the deduction of losses that a taxpayer chooses to recognize while having unrecognized gains. Nevertheless, a failure to allow real losses discourages risk-taking.

33. An intermediary case is buying a depreciable asset. Here, proper measurement of depreciation is central to an income tax accommodating risk. See generally Jeremy I. Bulow & Lawrence H. Summers, *The Taxation of Risky Assets*, 92 J. POL. ECON. 20, 22–25 (1984).

immediately deductible in the U.S.³⁴ If the business has other income against which to use the deductions, the investment gets an immediate tax benefit, which encourages risk-taking. In Europe, research costs generally are deductible, but development costs sometimes are not.³⁵ The E.C. proposal would allow expensing of all R&D costs.³⁶ One can question whether a tax incentive for risk-taking through research and development is sound policy, but the incentive is well-established.³⁷

Matters are more involved when the relevant income tax has graduated rates.³⁸ To the extent that any loss would be allowed against income that is taxed at a lower rate than any profit would be taxed, risk-taking is discouraged and vice versa. Current corporate income taxes, including those in the U.S.,³⁹ generally have a fairly flat rate (particularly across years for a given taxpayer), so this concern is not particularly important in domestic taxation.⁴⁰ In the cross-border context, however, as discussed below, the loss and income may be taxed in different jurisdictions with different rate structures, so that the multiple rate problem is real.

IV. CROSS-BORDER RISK

With the background of the previous section of this article, the effect of income taxation on cross-border risk-taking, particularly the impact of the E.C. proposal, can be considered.

Consider the simple bond purchase choice example in the preced-

34. I.R.C. § 174 (2006). The U.S. also has credits for increases in expenses incurred in expanding research and experimentation activity and for some clinical drug testing. I.R.C. §§ 41(a), 45C(a) (2006). To encourage R&D, European countries have adopted similar credits or allow a deduction in an amount in excess of 100% of the actual costs of R&D. *See generally* Int'l Bureau of Fiscal Documentation, *TAX TREATMENT OF RESEARCH & DEVELOPMENT EXPENSES* (2004) [hereinafter *IBFD*]. Of course, allowing a deduction in the year incurred of any amount thereof that is properly viewed as an economic investment is an incentive. *See generally* George Mundstock, *Taxation of Business Intangible Capital*, 135 U. PA. L. REV. 1179, 1185–92 (1987).

35. *IBFD*, *supra* note 34, at 222–30.

36. *E.C. Proposal*, *supra* note 2, at 23. This presumably is a product of the European Commission's ongoing work to encourage innovation in the European Union. Expert Group on Impacts of R&D Tax Incentives, *Design and Evaluation of Tax Incentives for Business Research and Development: Good Practice and Future Developments*, at 3, 7 (Nov. 15, 2009), available at http://ec.europa.eu/invest-in-research/policy/tax_incentives_en.htm [hereinafter *E.C. R&D Expert Group*].

37. *See generally* Expert Group on R&D Tax Incentives Evaluation, *Comparing Practices in R&D Tax Incentives Evaluation*, at 5 (Oct. 31, 2008), available at http://ec.europa.eu/invest-in-research/pdf/download_en/rd_tax_incentives_expert_group_report2008_rtd_final1.pdf; Mundstock, *supra* note 34, at 1185–92.

38. *See generally* David A. Weisbach, *Taxation and Risk-Taking with Multiple Tax Rates*, 57 NAT'L TAX J. 229, 233–35 (2004).

39. I.R.C. § 11 (2006).

40. Jane Gravelle, *International Corporate Income Tax Reform: Issues and Proposals*, 9 FLA. TAX REV. 469, 476 n.16 (2009). Ms. Gravelle's note 16 motivated this article.

ing section of this article. Assume that the bond will be purchased by a U.S. person. Interest would be sourced based on the location of the borrower.⁴¹ Any loss would be situated in the U.S.⁴² Thus, the U.S. bears its share of the risk of loss although it does not have primary tax jurisdiction over the “extra” interest. Only in the extremely unusual case that the foreign tax rate on the interest exceeds the U.S. rate is risk discouraged.⁴³ But, the U.S. is bearing the potential cost of preventing taxes on foreign investment from discouraging offshore risk.⁴⁴

While the bond choice example has a distinguished pedigree, the research and development example in the previous section of this article seems more poignant in the modern global, high-tech economy. Assume that a U.S. company engages in U.S. research and development in the hope of creating technology that can be licensed worldwide. The costs of the R&D can be deducted immediately and most reduce U.S. taxes.⁴⁵ If the project is successful, the royalties are sourced where the technology is licensed—mostly offshore.⁴⁶ Again, as with the bond example, the U.S. encourages foreign risk-taking. Matters are worse here, however. In the bond example, the U.S. has a revenue loss only if there is a realized

41. I.R.C. §§ 861(a)(1), 862(a)(1) (2006). It is assumed that the bond is not held as inventory by the U.S. person, which inventory status could only be the case with a securities dealer. As discussed in note 3, *supra*, the U.S. exercises secondary tax jurisdiction over foreign-sourced income of U.S. persons. As to the bond example itself, this can be important, since source countries frequently do not exercise their primary tax jurisdiction over investment interest of foreign persons. *See, e.g.*, I. R. C. §§ 861(h), 881(c) (2006). However, as discussed in note 3, *supra*, (i) many U.S. businesses usually are effectively U.S. tax-exempt on foreign source active income and (ii) overall U.S. businesses pay no net U.S. tax on foreign source income (assuming that all foreign taxes ultimately are credited). Therefore, the instant analysis does not reflect secondary tax jurisdiction.

42. *See* I.R.C. § 865(a)(1) (2006).

43. *See* Gravelle, *supra* note 40, at 476 n.16.

44. *See id.*

45. I.R.C. § 174(a) (2006). Many of these deductible costs reduce U.S. tax liability (because the costs are U.S.-sourced and therefore do not reduce the company’s foreign tax credit). *See* I.R.C. § 904(a); Treas. Reg. § 1.861-17(a)(1) (2011). Under the regulation just cited, R&D expense is allocated between U.S. and foreign sources (i) partially based on where the R&D activity is performed and (ii) partially based on sales or gross earned currently in the broad product category of the technology to be developed. This regulation was adopted with an eye toward allocating as much of the cost of R&D conducted in the U.S. to domestic sources fairly generously based on a Treasury model. Treas. Dec. 8646, 60 Fed. Reg. 66502, 66502 (Dec. 22, 1995); *Allocation and Apportionment of Research and Experimental Expenditures*, 60 Fed. Reg. 27453, 27454 (proposed May 24, 1995); TREASURY DEP’T, DOC. NO. 95-5090, TREASURY REPORT ANALYZES RELATIONSHIP BETWEEN U.S. R&D AND FOREIGN INCOME (1995). These sourcing rules for R&D deductions are of less import as multinational groups of corporations use cost sharing agreements with regard to R&D activities. Under a cost sharing agreement, all of the corporations share the cost of R&D and share in the results. Treas. Reg. § 1.482-7 (2011). As to R&D done in the U.S., a cost-sharing agreement has the effect of creating a smaller U.S. deduction, but all future foreign benefits can be kept offshore without any issues under I.R.C. § 482.

46. *See* I.R.C. §§ 861(a)(4), 862(a)(4) (2006).

loss on the (principal of the) bond. In the R&D case, because of the immediate expensing of the up-front expenditures, the U.S. has a revenue loss even if the taxpayer has no economic loss. Foreign countries usually get to tax local proceeds, even proceeds that economically represent a return on the original investment in U.S. R&D.⁴⁷

Matters are different under the E.C. proposal.⁴⁸ In the bond case, the interest income and any loss would be shared by all relevant countries (based on the apportionment factors in the respective years that the deduction is allowed and that the income is earned).⁴⁹ A similar sharing would apply in the R&D case.⁵⁰ Profits and losses would be roughly matched in the relevant taxing jurisdictions. (“Roughly” because of year-to-year changes in the respective apportionment factors.)

This risk focus gives another view of one of the key problems in taxing multinational businesses: the location of the return on intangibles. The classic example is the R&D example above with the additional aspect that the multinational transfers the locally-developed technology into a foreign subsidiary if successful. Here, the U.S. provides tax benefits for the R&D and yet collects little or no tax on any return from the risk-taking until it is repatriated as dividends from the subsidiary.⁵¹ Current U.S. law tries to limit this strategy by looking through the subsidiary or by imputing a royalty to the parent.⁵² These rules, however, only create foreign-source income.⁵³ Even any later dividend likely will be treated as having a foreign source.⁵⁴ Apportionment that looks through subsidiaries (mandatory “combined” or “consolidated” reporting) would provide a balanced solution.⁵⁵ The deduction and income would be spread among the relevant taxing jurisdictions using the factors, not, as currently, (i) as to the deduction, by ham-handed regulations, and (ii) as to the income, solely by where the technology is used.

The E.C. proposal looks even more desirable once one takes loss

47. There is no offshore tax only in the unusual case where, under a foreign country’s tax system, development costs are capitalized and amortized, so that some later return is not taxed because it is offset by a deduction for amortization.

48. The basic approach here was motivated by Gérard & Weiner, *supra* note 20.

49. This discussion assumes that the bond is held for use in a business so as to be associated with a permanent establishment. Different issues are presented by purely passive investments. The E.C. proposal would not change the rules applicable to purely passive investments, so it is reasonable not to consider the associated issues herein.

50. Interestingly, this is similar to the result today in the U.S. when a group of taxpayers use a qualifying cost sharing agreement under which the parties share R&D costs and any fruits thereof. *See* Treas. Reg. § 1.482-7.

51. Hines, *supra* note 3, at 76.

52. *See* I.R.C. §§ 482, 951, 952(a)(2), 954(a)(1), 954(c)(1)(A) (2006).

53. Hines, *supra* note 3, at 77.

54. I.R.C. § 904(d)(3).

55. *See supra* text accompanying note 8.

limitations into account. Most countries, including the U.S., do not give a refund if a taxpayer has an overall loss (negative taxable income) in a given year. In the U.S., such an overall loss can be carried back two years and forward twenty to use against any overall net taxable income in such years carried to.⁵⁶ (When a carryback is used with respect to a past year, that triggers a refund.⁵⁷) In Europe, similar carrybacks and carryforwards are allowed.⁵⁸ To the extent that these overall loss limits reduce the value of (tax savings from) losses, risk is discouraged. Currently, in the U.S., the foreign tax credit limit⁵⁹ has the effect that losses are limited separately with respect to a taxpayer's domestic and foreign income.⁶⁰ As a consequence, an overall loss in either category can reduce the U.S. tax savings from the loss. In Europe, a foreign loss also generates limited tax savings.⁶¹ Under the E.C. proposal, E.U. losses reduce E.U. income and so are limited only if the taxpayer has an overall E.U. loss.⁶² The E.C. proposal is less likely to discourage risk-taking than current law.

This feature of apportionment is one of the reasons that the European Commission was attracted to it. Under current law in the member states of the European Union, a multinational business is more likely to invest in risky activities in countries where the multinational has other income to use any loss against, which usually are the larger countries.⁶³ This interferes with commerce between the member states and inappro-

56. I.R.C. § 172 (2006).

57. See I.R.C. § 6411 (2006).

58. *EC Impact Assessment*, *supra* note 2, at 13.

59. See *supra* text accompanying note 3.

60. For a U.S. person, an overall loss in either U.S. or foreign-sourced income reduces U.S. taxable income. I.R.C. § 63. Thus, a foreign-sourced overall loss immediately reduces U.S. taxes. See I.R.C. §§ 1, 11, 55. If there are any later overall foreign profits, however, some of them are treated as U.S.-sourced for purposes of the limit on creditable foreign taxes. I.R.C. § 904(f). This reduces the U.S. foreign tax credit limit in the foreign profit year, which recaptures some or all of the U.S. benefit of the original foreign loss. I.R.C. § 904(a). Conversely, an overall U.S. loss reduces U.S. taxes, which reduces the creditability of foreign taxes for that year (but the foreign taxes that are not allowed as a credit with respect to the current year carry forward to be used in later years). I.R.C. § 904(a), (c). If there is a later overall U.S. profit, foreign-sourced income that increases the amount of creditable foreign taxes is created. I.R.C. § 904(g). So, only in the unusual cases of (i) an overall U.S. loss not being followed eventually by an overall U.S. profit and (ii) an overall foreign loss not being followed eventually by an overall foreign profit is the statement in the text inaccurate. The foreign tax credit limit applies separately to active and passive income. I.R.C. § 904(d)(1). But, for purposes of this article, the effect of these baskets is unimportant, since both the R&D deduction and related income will be in the active basket.

61. Charles E. McLure, Jr., *Harmonizing Corporate Income Taxes in the European Community: Rationale and Implications*, 22 *TAX POL'Y & ECON.* 151, 160–61 (2008).

62. Under the E.C. proposal, an overall loss would be carried forward to be applied against future years' income, with no carryback. *E.C. Proposal*, *supra* note 2, at 22, 35, 49.

63. McLure, *supra* note 61, at 160–61.

priately benefits the larger member states.⁶⁴

The E.C. proposal would not harmonize tax rates, only tax bases (electively).⁶⁵ To the extent that losses are in countries with lower rates than the rates of the countries where the income is taxed, risk-taking would be discouraged, and vice versa. Formula apportionment would soften this effect. Profit and loss would be taxed at one blended rate, with that rate based on the location of the factors in the relevant years. As a consequence, there would be fewer obstacles to cross-border business.⁶⁶

V. U.S. IMPACT

The E.C. proposal would stop at the water's edge: In allocating income between the U.S. and the E.U., traditional separate accounting would continue to be used.⁶⁷ Nevertheless, adoption of the E.C. proposal would have economic effects in the U.S. In the E.U., businesses would be able to make more efficient business decisions without artificial tax obstacles. As a consequence, the E.U. as a whole would become a more attractive business environment. If the U.S. were to harmonize with the E.U. proposal, the analysis above suggests that worldwide economic efficiency would be enhanced, but there is no reason to believe that there would be a net gain for the U.S. solely from improved worldwide location decisions of businesses subject to (or potentially subject to) U.S. taxation.⁶⁸

This article has focused on the evocative R&D example. The U.S. and many countries in the E.U. provide tax incentives for R&D in the form of a tax credit or an over 100% deduction for R&D expenditures.⁶⁹ Most of these incentives only apply to domestic R&D, although the European Commission has formally expressed concern that such limitations are inconsistent with the goals of the Union.⁷⁰ The obvious question here is whether the effects of these incentives would drown out any effects from the E.U. switching to apportionment. There are two reasons that the concerns herein still are important: First, the analysis in this article applies to all activities, not just to activities that qualify for any

64. *E.C. Impact Assessment*, *supra* note 2, at 26–27.

65. *E.C. Proposal*, *supra* note 2, at 6.

66. Gérard & Weiner, *supra* note 20, at 2.

67. See *E.C. Proposal*, *supra* note 2, at 22–23, 38.

68. As discussed in the Appendix, many do believe that the U.S. would gain by switching to apportionment.

69. See *E.C. R&D Expert Group*, *supra* note 36, at 17.

70. *Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee: Towards a More Effective Use of Tax Incentives in Favour of R&D*, at 4, COM (2006) 728 final (Nov. 22, 2006).

R&D tax incentive. The R&D example just proved helpful in illustrating the general point. Second, this article looks at the effect of the E.U. switching to apportionment, not on the overall impact of all relevant tax provisions, including tax incentives for R&D. The effects of adopting apportionment include (i) the benefits from loss offset and the blended rates applied to profit and loss as well as (ii) the material benefits from reducing the costs of complying with transfer pricing, which, after all, the E.C. itself views as the primary selling point. The impact of these benefits is important no matter what. In any event, the economic literature has yet to find that R&D activity incentives, such as an R&D credit or an over 100% deduction, have a particularly strong impact on the location of R&D activities.⁷¹

VI. CONCLUSION

The current worldwide business income tax regime rests on the assumption that income has a natural source. As the Appendix reviews, there is no economic basis for determining a geographic location for most types of income. Under these circumstances, sourcing rules can have surprising effects. It is well-known that sourcing rules impact where businesses operate. This article has shown how a change in European sourcing rules can hurt the competitive position of the U.S.

71. See generally Chiara Criscuolo, *The Effect of R&D Tax Incentives on Location of R&D Investment*, Annex 1, E.C. R&D EXPERT GROUP (Nov. 15, 2009) at 7 (“However, the econometric evidence on the role of tax incentives on the location of R&D is still scarce.”); Michael Devereux, *The Impact of Taxation on the Location of Capital, Firms and Profit: A Survey of Empirical Evidence* 40 (Oxford Univ. Ctr. for Bus. Taxation, Working Paper No. 0702, 2006), available at <http://ideas.repec.org/p/btx/wpaper/0702.html>. Professor Hines concluded that the U.S. sourcing rules can have more of an impact on the location of R&D than the explicit U.S. tax incentives for domestic R&D. Hines, *supra* note 3, at 101–02.

APPENDIX

THE CASE AGAINST TRADITIONAL SOURCING AND
FOR FORMULA APPORTIONMENT

The core principle of the current international tax system is that the primary jurisdiction to tax business income belongs to the country where the income is sourced.⁷² Unfortunately, as discussed below, there is no ready way to source most types of income.⁷³ For this reason, some policy experts and the European Commission now propose replacing the current case-by-case source rules with general apportionment formulae for allocating income worldwide.⁷⁴ Formula apportionment has been the

72. There is a large literature on whether source-based taxation is sound policy. Shay, Fleming & Peroni, *supra* note 3, at 88–115. Unfortunately, because of uncertainty in the incidence of a business income tax, this literature is inconclusive. See Maarten F. de Wilde, *Some Thoughts on a Fair Allocation of Corporate Tax in a Globalizing Economy*, 38 *INTERTAX* 281, 294–97 (2010). If a business income tax (whether imposed by the source country or the country where the ownership of the local business is situated) is borne by capital (because of lower after-tax returns), that suggests that economic neutrality is advanced when a tax comports with “capital export neutrality.” Under capital export neutrality, a source-based tax by itself is undesirable. In contrast, if a business income tax is borne by local labor (through lower wages) and/or local consumers (through higher prices), “capital import neutrality” is desirable, and source-based taxation is consistent with economic efficiency. If a home-imposed business tax is borne by capital, but a source-based tax is borne by labor and/or consumers, “national neutrality,” both home-based and source-based taxes make sense. See generally David Hasen, *Tax Neutrality and Tax Amenities* (Santa Clara Sch. of Law Digital Commons, Working Paper No. 22, 2011), available at <http://digitalcommons.law.scu.edu/working/22/>; Michael S. Knoll, *Reconsidering International Tax Neutrality*, 64 *TAX L. REV.* 99 (2011); George Mundstock, *Section 902 Is Too Generous*, 48 *TAX L. REV.* 281, 283–96 (1993). Moreover, in light of increasing skepticism regarding whether unilateral reductions in trade barriers benefit the U.S., it is not clear that the U.S. should unselfishly pursue tax policies that advance worldwide economic efficiency. Michael Graetz, *The David R. Tillinghast Lecture: Taxing International Income: Inadequate Principles, Outdated Concepts, and Unsatisfactory Policies*, 54 *TAX L. REV.* 261, 280–98 (2001); George Mundstock, *Comment: What’s on Second?*, 51 *U. MIAMI L. REV.* 1079, 1079–81 (1997).

One concern considered in connection with income sourcing is that local taxes should be related to local benefits. Lawrence Lokken, *What Is This Thing Called Source?* 25–31 (Univ. of Miami Legal Studies, Research Paper No. 2011–12, 2011), available at <http://ssrn.com/abstract=1795265>. But, an analysis of the connection between local taxation and local benefits should also take the rate of tax into account, as discussed *infra* note 95.

73. See generally Lokken, *supra* note 72; Graetz, *supra* note 72, at 261.

74. Susan C. Morse, *Revisiting Global Formulary Apportionment*, 29 *VA. TAX REV.* 593, 599–606 (2010); Walter Hellerstein, *International Income Allocation in the Twenty-First Century: The Case for Formulary Apportionment*, 12 *INT’L TRANSFER PRICING J.* 103, 111 (2005); Reuven S. Avi-Yonah, Kimberly A. Clausing & Michael C. Durst, *Allocating Business Profits for Tax Purposes: A Proposal to Adopt a Formulary Profit Split*, 9 *FLA. TAX REV.* 497, 510–23 (2009).

The inherent arbitrariness of any such formula was first noted rigorously in Charles E. McLure, Jr., *The State Corporate Income Tax: Lambs in Wolves’ Clothing*, in *THE ECONOMICS OF TAXATION* 327, 335–36 (Henry J. Aaron & Michael J. Boskin eds., 1980). Professor Weiner applies Professor McLure’s insight to the European Union in making a case for formula apportionment. Weiner, *supra* note 12, at 89–98. Because of this arbitrariness, apportionment, per se, is not likely to have efficiency advantages. See James R. Hines, Jr., *Income Misattribution Under Formula Apportionment*, 54 *EUR. ECON. REV.* 108, 117–18 (2010); Rosanne Altschuler &

custom of state and local taxing jurisdictions in Canada and the U.S. for some time.⁷⁵

The classic definition of economic income, which usually is referred to as the “Schanz-Haig-Simons” definition, is:

Income = Consumption + Change in Wealth.

Under this definition, income is not a thing. Income is a measure of change over a period. (In the case of an income tax, that period usually is the taxable year.) And, income is a change with respect to a person, not a place.⁷⁶ One might think that this should not present problems for sourcing. After all, in the case of a business, income is just its increase in wealth—how it did over the relevant period. So, perhaps it is possible to source business income on the basis of where the business’s wealth increases.⁷⁷

Unfortunately, looking to the location of the taxpayer’s wealth is not a satisfactory sourcing rule. Consider the simple case of a Swiss consultant who does a large project for a U.S. client. The consultant gets paid in Euros by check, which check is deposited in her Swiss bank account. No wealth (other than, perhaps, an intangible right to payment for services) is created in the U.S. Yet, most would say that the U.S. should be able to tax the consulting income if it is “earned” in the U.S. Maybe income should be sourced where it is “earned.”

Situating “earning” geographically presents its own set of problems: Consider our consultant further. Does she earn money where she is physically located when she performs a specific activity? If she is able to e-commute from Switzerland to do the work for the U.S. client, does she avoid U.S. tax jurisdiction? If she happens to do most of the hard thinking on the project while on vacation in a no-tax Caribbean tax haven, does she avoid tax altogether? It would seem that the consultant is benefiting from the U.S. by consulting with a U.S. client, so that the U.S. should be able to tax her regardless of the happenstance of where she performs the services. The U.S. certainly should be able to tax her if

Harry Grubert, *Formula Apportionment: Is It Better than the Current System and are There Better Alternatives?*, 63 NAT’L TAX J. 1145 (2010). The only advantages claimed by the E.C. for its proposal are lower administrative costs and loss offsetting facilitating more efficient risk-taking. See *supra* text accompanying notes 16–22.

75. Weiner, *supra* note 12, at 17–32, 47–60.

76. Over twenty years ago, Professors Ault and Bradford demonstrated that the Schanz-Haig-Simons definition of income presents real difficulties for sourcing. Hugh J. Ault & David F. Bradford, *Taxing International Income: An Analysis of the U.S. System and Its Economic Premises*, in TAXATION IN THE GLOBAL ECONOMY 11, 30–33 (Assaf Razin & Joel Slemrod eds., 1990).

77. Ault and Bradford point out that current law really is a tax on transactions, not on change in wealth per se, which further confuses sourcing. *Id.*

she works in the U.S., regardless of where she is paid or accumulates wealth.

Similar concerns are presented by the most frequently discussed sourcing problem: the income from intangibles. In the example that has become the focus of policy discussions, a U.S. company develops technology in the U.S., then transfers the technology to a German subsidiary of the U.S. company for use in Germany.⁷⁸ Which country should tax the return on the technology? The U.S. has a claim, since the technology was developed with the support of the laws and the economy of the U.S. Germany has a basis, because the income of the German subsidiary from managing and using the technology benefited from the laws and the economy of Germany.⁷⁹

The economics of the taxation of cross-border income related to intangibles is closely related to the special problems presented in taxing multinational enterprises.⁸⁰ Economists do not fully understand why these businesses are so profitable. Without this understanding, it is not possible to source much of their income. The economic research generally agrees that multinational enterprises are more than the sum of their parts: Multinational businesses earn extra profits that cannot be attributed to any of the pieces of the agglomeration.⁸¹ One theory for the extra profits is that multinational enterprises benefit from economies of

78. For simplicity, this hypothetical does not reflect issues presented by the legal form of, and consideration for, the transfer.

79. Under current law, the U.S. would try to tax (as foreign-sourced income) much of the return under the “super-royalty” rule of section 482 of the Internal Revenue Code (enacted in 1984). Germany would allow the German subsidiary a deduction for royalties paid or accrued, but impose a 10% withholding tax on royalties paid by the German subsidiary to the U.S. Any German withholding tax would be creditable against the U.S. tax on the super-royalty.

80. A key early article that notes this and its significance to international tax policy is Stanley I. Langbein, *The Unitary Method and the Myth of Arm’s Length*, 30 TAX NOTES 625, 628 (1986). This insight later was posited in the general literature on multinational business enterprise in Stanley I. Langbein, *A Modified Fractional Apportionment Proposal for Tax Transfer Pricing*, 54 TAX NOTES 719, 722–24 (1992).

81. Professor Chorvat refers to the extra profits as “synergistic” profits. Elizabeth Chorvat, *Forcing Multinationals to Play Fair: Proposals for a Rigorous Transfer Pricing Theory*, 54 ALA. L. REV. 1251, 1272–73 (2003). For example, one debate in the literature is whether multinational enterprises represent vertical integration of different cross-border activities or horizontal integration of similar economic activities. David J. Teece, *Multinational Enterprise, Internal Governance, and Industrial Organization*, 75 AM. ECON. REV. 233, 233 (1985). Horizontal integration is more suggestive of the possible business reasons for being multinational per se. There is considerable evidence of the importance of horizontally-integrated international businesses. See, e.g., James R. Markusen & Keith E. Maskus, *Discriminating Among Alternative Theories of the Multinational Enterprise*, 10 REV. INT’L ECON. 694 (2002). The rise of outsourcing is further evidence for the centrality of horizontal integration. John H. Dunning & Sarianna M. Lundan, *Institutions and the OLI Paradigm of the Multinational Enterprise*, 25 ASIA PAC. J. MGMT. 573, 575 (2008).

scale,⁸² perhaps amounting to oligopoly.⁸³ Such businesses are well-positioned to game tariffs.⁸⁴ Another theory is that these enterprises are best positioned to manage and exploit intangibles.⁸⁵ There are institutional advantages in being a multinational corporation.⁸⁶ Multinationals have cross-border flexibility that enables them to adapt to various types of international business risk.⁸⁷ One can argue that the post-modern trend toward outsourcing reflects, at least in part, that multinational businesses are peeling off merely profitable activities in order to focus on activities with the potential for extra profit. The problem that multinational businesses pose for source-based taxation was summarized in 1980—1980!—by Justice Blackmun in the course of upholding the constitutionality of the State of Vermont taxing Mobil Oil on an apportioned part of Mobil's dividends from foreign subsidiaries even though Mobil had only very limited, mostly retail, operations in Vermont: “[S]eparate accounting, while it purports to isolate portions of income received in various States, may fail to account for contributions to income resulting from functional integration, centralization of management, and economies of scale.”⁸⁸

Because of these extra profits of multinationals, a key feature of current international tax law cannot achieve its goal: Presently, a transaction between related companies situated in different countries is taxed based on what an arm's-length price between unrelated businesses

82. For example, there are considerable benefits from having an internal bank. Petr Polak, *“The Centre Holds”: From the Decentralised Treasury Towards Fully Centralised Cash and Treasury Management*, 3 J. CORP. TREAS. MGMT. 109 (2010).

83. Teece, *supra* note 81; see also Stephen H. Hymer, *THE MULTINATIONAL CORPORATION: A RADICAL APPROACH* (Robert B. Cohen et al. eds., 1979).

84. In fact, the earliest studies of multinational business were by scholars primarily interested in tariffs and trade, not by scholars focused on industrial organization. Paul R. Krugman, *“New Theories” of International Trade and the Multinational Enterprise*, in *THE MULTINATIONAL CORPORATION IN THE 1980S* 57, 62–63 (Charles P. Kindleberger & David B. Audretsch eds., 1983).

85. See Bruce Kogut & Udo Zander, *Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology*, 3 ORG. SCI. 383, 394–96 (1992); Richard E. Caves, *Multinational Enterprises and Technology Transfer*, in *NEW THEORIES OF THE MULTINATIONAL ENTERPRISE* 254, 274–75 (Alan M. Rugman ed., 1982). The dominant role of intangibles, rather than economies of scale, is advanced in Sourafel Girma & Holger Görg, *Multinationals' Productivity Advantage: Scale or Technology?*, 45 ECON. INQUIRY 350, 359–60 (2007).

86. Dunning & Lunden, *supra* note 81, at 580–84; see Teece, *supra* note 81, at 236.

87. Robert Z. Aliber, *Money, Multinationals, and Sovereigns*, in *THE MULTINATIONAL CORPORATION IN THE 1980S* 245, 257–58 (Charles P. Kindleberger & David B. Audretsch eds., 1983). Amusingly, one key valued-added aspect of a multinational corporation is a treasury function that, in addition to providing an internal bank (which includes managing foreign currency risk), also can game local tax laws through artful transfer pricing, a possibility not available to purely local businesses. Stephen L. Curtis, *Transfer Pricing for Corporate Treasury in the Multinational Enterprise*, J. APPLIED CORP. FIN. 97, 110 (2008).

88. *Mobil Oil Corp. v. Comm'r of Taxes*, 445 U.S. 425, 438 (1980).

would be, not on what actually is charged, because the stated charge can be manipulated without pre-tax consequences so as to locate the most income in the lowest tax country. For example, a foreign subsidiary can pay its U.S. parent a below-market royalty to use technology offshore. While current law tries to police such transactions by requiring an arm's-length price (royalty), even such a price, if achievable, does not reflect the extra profit in a multinational enterprise.⁸⁹ So, this key component of a cross-border business's profitability can be situated where the business chooses through artful transfer pricing.⁹⁰ Attempts to police transfer pricing have resulted in amazingly complicated, burdensome, and unsatisfactory law and administrative practice.⁹¹

Because of the difficulties in policing hypothetical arm's-length prices, U.S. states and Canadian provinces turned to formula apportionment.⁹² The classic apportionment formula used by many states⁹³ in the U.S., historically called the "Massachusetts Formula,"⁹⁴ has three factors, property, payroll, and sales, which are weighted equally:⁹⁵ One-third of the taxed business's income is apportioned to the taxing jurisdiction based on the proportion of property located in the jurisdiction compared to the total property of the taxed business. The other two factors work similarly. This formula is intuitive: Money and labor earn income, hence the first two factors. Without a market, property and payroll could not earn money, hence the third factor.

This classic (evenly-weighted, three-factor) formula presented problems for states that were trying to compete for business. To

89. The U.S. transfer pricing regulations can require a "prof-split" method for determining the price, which method takes this extra profit into account. Treas. Reg. §§ 1.482-4(a), -6(a) (2011).

90. The U.S. Subpart F rules place some limits on locating profits in a jurisdiction that has very little economic connection to a transaction. See I.R.C. §§ 951-965 (2006).

91. Avi-Yonah, Clausing & Durst, *supra* note 74, at 501-09.

92. Weiner, *supra* note 12, at 17-32, 47-60. Professor McDaniel, in much the same spirit as the recent E.C. proposal, in 1994 explored an apportioned base for the North American Free Trade Area. Paul R. McDaniel, *Formulary Taxation in the North American Free Trade Zone*, 49 TAX L. REV. 691, 698-706 (1994).

93. U.S. states usually tax businesses only on income sourced in the state.

94. Ferdinand P. Schoettle, *STATE AND LOCAL TAXATION: THE LAW AND POLICY OF MULTI-JURISDICTIONAL TAXATION* 581-83 (2003).

95. *Id.* As noted above, any apportionment formula is inherently arbitrary. McLure, *supra* note 74, at 334-36. Since arm's-length pricing cannot work and apportionment is inherently arbitrary, one can conclude that a source-based income tax on cross-border income (particularly when the relevant countries have different tax rates) is a bad idea. *Id.* at 341-46. But, complete repeal is not actively under consideration and the idea of a uniform worldwide rate is in but the earliest stages of consideration. Professors Baldwin and Krugman point out that a uniform worldwide rate of tax on the income from capital is inappropriate in light of the differing benefits different countries provide to agglomerates of business activities situated therein. Richard E. Baldwin & Paul R. Krugman, *Agglomeration, Integration and Tax Harmonisation*, 48 EUR. ECON. REV. 1, 22 (2004).

encourage businesses to set up or expand local operations, many states now give extra weight to the sales factor.⁹⁶

The Canadian provinces also use apportionment to share the tax base attributable to Canadian businesses. A two-factor, evenly-weighted sales and payroll formula is used. Corporate veils are respected.⁹⁷

Intangibles, by their nature, are hard to identify, locate, and evaluate. For these reasons, intangibles present particular problems for property factors in allocation formulae.⁹⁸

Professors Avi-Yonah and Clausing, along with Michael Durst, a practicing attorney who formerly was in charge of the I.R.S.'s advance (transfer) pricing agreements program, have proposed a very nuanced allocation formula: The income of each business activity of a taxpayer would be apportioned separately. First, the activity's income, up to a return (profit margin) on expenses (adjusted for all of the respective local conditions), would be allocated to a country based on a return on local expenses (again adjusted for local conditions). If the activity has additional income that is not accounted for by this risk-adjusted return on expenses, this residual income would be allocated proportionately to the destination of sales.⁹⁹ This proposal might seem complicated, but, the authors argue, in practice, it would be simpler than the current law's attempt to find arm's-length prices on a case-by-case basis.

96. Weiner, *supra* note 12, at 34.

97. *Id.* at 34, 50, 51, 69–70.

98. Charles E. McLure, Jr., *U.S. Federal Use of Formula Apportionment to Tax Income from Intangibles*, 75 *TAX NOTES* 109, 117–18 (1997). There is considerable debate on whether intangibles should be located where they are developed, where they are administered, or where they are used.

99. See Avi-Yonah, Clausing & Durst, *supra* note 74, at 14.