DEFINING A COUNTRY'S "FAIR SHARE" OF TAXES

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ABSTRACT

The international tax regime is facing a defining moment. As stories of multinational companies expatriating and shifting income around the world with seeming impunity continue to emerge, the question of how to divide the international tax base among the countries of the world increasingly draws attention from policy-makers and academics. To date, however, the debate has tended to devolve into one over the two traditional tools used to divide worldwide tax base—transfer pricing and formulary apportionment. This Article demonstrates that such focus is misplaced on the instruments of dividing the worldwide tax base rather than on first principles. Instead, this Article will adopt the first principle of maximizing the efficiency of the worldwide tax regime under two key, but realistic, assumptions: first, that the presence of multiple states in the world is efficient and, second, that there is a declining marginal utility to public goods. Under these assumptions, dividing worldwide tax laws and the provision of public goods across all countries.

Based on this result, this Article explains how the modern debate has inappropriately focused on how to capture tax base or prevent corporations from shifting income across jurisdictions rather than how to build a new international tax regime for the modern international order. The Article then demonstrates that the traditional approaches to international tax will be inefficient under the stated assumptions. Instead, this Article will propose a hybrid regime in which each country is entitled to tax a portion of worldwide tax base based on that country's amenities and then the relevant countries will divide the remaining common tax base among themselves so as to maximize the return to worldwide public goods. By taking into account both capital flows and public goods provisions in this manner, the efficiency of the international tax regime can truly be maximized.

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I. INTRODUCTION

A graduate student in biophysics in San Francisco toils in the laboratory all hours of the night, struggling to complete the research

^{*} Professor of Law, Washington University School of Law. This Article was selected for presentation at the 2013 Harvard/Stanford/Yale Junior Faculty Forum. I would like to thank Joseph Bankman and Daniel Markovits, as well as the other participants of the Forum, for their extremely helpful comments on the version of this Article presented at the Forum.

necessary to earn her Ph.D. At long last, with the help of her supervising professor, the student discovers a way to genetically engineer bacteria. The discovery is momentous. By feeding simple sugar to these bacteria, the student can engineer the bacteria to produce colored dyes, industrial solvents, and even biodiesel fuel, with no emissions or other pollution created through the process and no cost to scale. In essence, they have discovered a pollution-free, renewable replacement for oil-based diesel fuel.

After earning her Ph.D., the student and professor decide to start a business to exploit this incredible discovery. The problem is they do not have the money necessary to start a laboratory sophisticated enough to do so. To solve this, they find an "angel" investor, a former oil executive from Mexico interested in alternative energy, to put up \$500,000 in seed financing to continue their research. Using that money, the pair opens a laboratory in Redwood City, California, to create a "proof of concept" to present to new investors. Private investment funds formed in Bermuda, but operated primarily out of London, are very excited and contribute \$10 million to the venture.

With that money, the company is able to secure a long-term stable source of sugar to feed the bacteria by purchasing sugar plantations in Brazil. Now the company begins marketing the product, finding distributors in Canada extremely interested in selling their biodiesel within Canada. The United States has not approved the sale of products generated by genetically engineered organisms, however, so the company cannot yet sell its product in the United States. Unfortunately, it turns out shipping biodiesel is very expensive, but shipping sugar is quite cheap and easy. So the company opens a processing plant in Ontario and ships sugar directly from Brazil to Ontario to be processed into biodiesel for sale throughout Canada.

At this point, the private investors want to realize some of their profits, so the company goes public, listing on the NASDAQ stock exchange in New York. To do so, the lawyers insist on forming a parent company in Delaware due to its well-established corporate laws. That same year, the company sells \$1 billion worth of biodiesel for a profit of \$600 million.

So which country should get to tax the \$600 million in profit? Should it all be taxed in the United States, where the initial research was undertaken and where the company is legally formed and publicly traded? Should it be in Mexico, from where the project was initially funded? How about Canada, where the product is sold, or Brazil, where the raw material is produced? What is each country's "fair" share of the \$600 million in profits?

Of course, no one country can claim complete ownership over this business. The business, and thus the profit, would not exist without the combination of factors from all these countries. Thus, the issue comes down to how to *divide* the tax on the \$600 million tax base among the relevant countries. But on what basis should it be divided among the countries? Should it matter if, for example, the sugar in Brazil would have otherwise gone unsold? Which is more important access to markets or access to capital? Do ideas belong to a country, to a company, or only to a person? Does it depend whether the ideas were funded with public grants or private capital? Should it matter if one country has greater natural resources, or other endowments, than another? If so, in which direction?

As this hypothetical demonstrates, the basis upon which one chooses to allocate tax base impacts both the distributive and normative consequences of any allocation. Allocating to the country where ideas are generated benefits countries with well-established research and development capacities, such as universities. Allocating to the country where the sales ultimately occur benefits countries with high consumption over countries with high savings or low incomes. Allocating to the country with raw materials benefits countries based on the happenstance of what is under the ground rather than productive capacity or need. Allocating to the country that funds the project benefits capital-rich countries, while allocating to the poorest country means the richest countries have little incentive to build the infrastructure and other public goods necessary to create the product in the first place or sell it in their markets. No choice is neutral; all choices have consequences. The question, therefore, is how should it be divided?

This issue has proven the ultimate source of almost a century's worth of debate over international tax law. Regardless of the methodology used or complexity of the issue, ultimately the question of how to structure an international tax regime comes down to this tantalizingly-simple, yet exceedingly-complex, question. Until recently, however, the literature has tended to reduce this question to two relatively-simplistic and competing alternatives: (1) transfer pricing or dividing income based on hypothetical arm's-length prices and (2) formulary apportionment or dividing income based on a ratio of a taxpayer's attributes located in a country (such as sales or employees).¹ Proponents of transfer pricing contend that it more "fairly" allocates tax base because it reflects as closely as possible comparable real economic transactions; proponents of formulary apportionment contend it more "fairly" divides tax base because it reflects the under-

^{1.} See generally ORG. FOR ECON. CO-OPERATION AND DEV., ADDRESSING BASE EROSION AND PROFIT SHIFTING (2013) [hereinafter OECD BEPS REPORT], available at http://www.oecdilibrary.org/taxation/addressing-base-erosion-and-profit-shifting_9789264192744-en (recommending an action plan to address tax base erosion).

lying economic activity generating the income.² But to date the literature has not, for the most part, explicitly defined from first principles what they mean by "fair" for these purposes.³ This Article will fill that gap.

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The international tax debate has tended to devolve into labeling of certain countries as "tax havens" and income as "vanishing" or "disappearing" into these havens from the "proper" country.⁴ But knowing which countries are entitled to tax base as an initial matter and whether income has therefore disappeared from that country to another requires some normative framework, other than mere intuition, upon which to make that determination.⁵ Merely pointing to the fact that the parent corporation of Google is incorporated in the United States provides no normative justification in and of itself for the United States and no other country to tax the income of Google. In fact, the ultimate premise of international tax law is and must be that more than one country has a legitimate claim to impose tax on a taxpayer or item of income; otherwise the issue would merely be one of domestic tax law.

The thesis of this Article is that international tax law has, for the most part, failed to take into account the real tradeoff necessary to build a new international regime based on first principles—the balance between maximizing the efficient allocation of capital worldwide and maximizing the worldwide efficient provision of public goods.⁶

^{2.} See generally Reuven S. Avi-Yonah et al., Allocating Business Profits for Tax Purposes: A Proposal to Adopt a Formulary Profit Split, 9 FLA. TAX REV. 497 (2009) (providing a detailed analysis of transfer pricing and formulary apportionment).

^{3.} *Cf.* DANIEL N. SHAVIRO, FIXING U.S. INTERNATIONAL TAXATION (2014) (criticizing current normative benchmarks used in international tax as not focused on the ultimate normative goal of an international tax regime).

^{4.} See, e.g., OECD BEPS REPORT, supra note 1; see also David Cay Johnston, The Conversation: Tax Havens Let Billions Vanish into Thin Air, SACRAMENTO BEE, Feb. 17, 2013, at 1E ("Imagine if you could move a dollar from your left pocket to your right and get a tax deduction.").

^{5.} For example, the idea that intuition drives a number of concerns behind more complex legal and normative questions has been identified in the context of the recent Apple Senate hearings. See Victor Fleischer, Finding the Economic Roots of Apple's Taxable Product, N.Y. TIMES DEALBOOK (May 21, 2013, 6:42 PM), http://dealbook. nytimes.com/2013/05/21/finding-the-economic-roots-of-apples-taxable-product/?nl=business &emc=edit_dlbkam_20130522 ("Economic intuition tells us that the source of Apple's income is in the United States, but the legal answer is less clear.").

^{6.} See, e.g., David Hasen, Tax Neutrality and Tax Amenities, 12 FLA. TAX REV. 57, 121 (2012) ("From a global welfare perspective, the object of designing a tax regime is not to maximize neutrality but to promote overall welfare, which may require promoting tax 'distortions' that improve total productivity."). Related, but distinct, questions of asymmetric tax competition and the role of tax revenue on productive public goods provision and capital location have started to enter the literature as well. See, e.g., Patrice Pieretti & Skerdilajda Zanaj, On Tax Competition, Public Goods Provision and Jurisdictions'

Specifically, this Article adopts the first principle of maximizing the efficiency of the worldwide tax regime under two key, but realistic, assumptions: (1) that the presence of multiple states is efficient and (2) that there is a declining marginal utility to public goods. Under these assumptions, dividing the tax base efficiently requires balancing the goals of maximizing the neutrality of tax laws and the provision of public goods across all countries.⁷

Based on this result, this Article demonstrates how the current focus of most international tax proposals on capturing "lost" tax base or preventing corporations from "artificially" shifting income across jurisdictions could be inefficient under the stated assumptions. In other words, allocating tax revenue based on factors that correlate with existing public goods will only serve to benefit those countries with greater public goods at the expense of other countries. But if there are an efficient number of countries greater than one, and decreasing marginal returns to public goods, using formulary apportionment based on factors that correlate solely with existing public goods will, at some point, prove inefficient.⁸ Thus, traditional notions of formulary apportionment cannot serve as a panacea for the problems plaguing transfer pricing.

In response, this Article will propose a hybrid transfer pricing/formulary apportionment regime for dividing worldwide tax base—the transfer pricing methodology to represent the legitimate claims of more developed countries and the apportionment methodology to represent the efficient distribution of public goods provision.⁹

8. This is separate from and, in addition to, the inefficiency arising from firms manipulating the factors in response to formulary apportionment. *See* James R. Hines Jr., *Income Misattribution Under Formula Apportionment*, EUR. ECON. REV., Sept. 2009, at 108, 110.

9. Hybrid proposals in this context are not new in and of themselves. See Ilan Benshalom, Taxing the Financial Income of Multinational Enterprises by Employing a

Size, 84 J. INT'L ECON. 124 (2009) (analyzing the use of taxes and public inputs to attract foreign capital).

^{7.} Taking into account both considerations of the impact of taxes on capital flows and the provision of public goods is a standard approach in the public finance literature, but it seems to have received less attention in the legal literature. See, e.g., Sam Bucovetsky, Public Input Competition, 89 J. PUB. ECON. 1763 (2005); Michael Keen & Maurice Marchand, Fiscal Competition and the Pattern of Public Spending, 66 J. PUB. ECON. 33 (1997); Ben Zissimos & Myrna Wooders, Public Good Differentiation and the Intensity of Tax Competition, 92 J. PUB. ECON. 1105 (2008); George R. Zodrow & Peter Mieszkowski, Pigou, Tiebout, Property Taxation, and the Underprovision of Local Public Goods, 19 J. URB. ECON. 356 (1986). The idea that public goods might create rents justifying local taxation has been discussed as a competing consideration, but allocating tax base to fund these public goods generally has not. See Harry Grubert, Tax Credits, Source Rules, Trade and Electronic Commerce: Behavioral Margins and the Design of International Tax Systems, 58 TAX L. REV. 149, 186 (2005) ("Education that produces skilled workers who can employ an advanced technology is another example of a government service that might justify a service charge because it increases the value of intangibles.").

First, the home country (or countries) would allocate a portion of a multinational taxpayer's tax base to itself (or themselves) based on a modified version of the "cost plus" method of transfer pricing, using country-specific attributes rather than taxpayer-specific attributes. For example, if Israel generates on average a ten percent return on investment in technology, the equivalent of a ten percent return on a particular multinational taxpayer's cost investment in technology would be allocated to Israel.

Second, after all relevant countries have done so, any remaining "common tax base" would be allocated among the countries involved using a modified version of formulary apportionment based on each country's respective public goods needs—the greater the need, the higher the apportionment factor. In this manner, international tax law would recognize both the legitimate claims of developed countries to exert authority over tax base developed in part utilizing their infrastructure or other amenities while also recognizing the importance of efficiently allocating public goods provision among the countries of the world.

Part II of this Article will summarize the issues underlying the problem of dividing worldwide tax base, using a two-state hypothetical to demonstrate the intuition behind the core normative problem of international tax law. Part III will review the literature on dividing the international tax base, using examples to highlight the implicit normative assumptions common to the various sides on the debate. In particular, Part III will highlight how most, if not all, of the debate over international tax, including the most technical aspects of tax law, can be brought down to the normative positions on resource allocation and development policy. Part IV will then attempt to reframe the international tax debate in terms of the normative framework developed in this Article, proposing the hybrid transfer pricing/formulary apportionment methodology as one example of overcoming the problems inherent in the current international tax debate. Part V will apply the normative framework to the context of tax competition, demonstrating that the framework is no worse than, and may well be superior to, the status quo.

II. OPTIMIZING WORLDWIDE TAX BASE: THE BASIC PROBLEM

It is impossible to design a model that affirmatively proves a single ideal allocation of tax base among countries. This would require

Hybrid Formulary and Arm's Length Allocation Method, 28 VA. TAX REV. 619 (2009). What is new is attempting to use a hybrid approach, not based on different types of income or for practical or logistical purposes, but rather, as a way to recognize competing efficiency goals within the international tax regime.

knowing the relative implicit pre-tax returns to capital in every country of the world, as well as the actual return to every public good and the reaction of capital flows to changes in the allocation of public goods worldwide. Even attempts to measure this empirically require significant simplifying assumptions to overcome these limitations.¹⁰

Instead, this Section will attempt to begin building the framework for a new legal regime to divide worldwide tax base based on certain realistic assumptions. For example, if allocating tax base to states with higher initial allocations of capital and/or public goods was always efficiency-enhancing, then this should be the normative starting-point. If not, however, something else should be. What emerges from such an approach is that formulary apportionment based solely on factors corresponding with existing returns to capital cannot be efficient in the long-run, at least under certain fairly realistic assumptions. Recent public finance literature has established this basic premise, but the legal literature has mostly not incorporated this point. This section will briefly summarize the concept for purposes of developing a framework to analyze the legal institutions necessary to implement this normative framework.

As a starting point, all real world taxes distort the decisions of taxpayers by raising the price of one option and not the other. For example, taxing market wages but not self-provided services, like washing one's own car, makes home-based work relatively cheaper than market-based work. In the international context, the distortion potentially arises between domestic and international business activity. The simplest example would be if a widget business in the United States sells a widget to Mexico, resulting in both the United States and Mexico imposing a tax. By contrast, if the taxpayer sold the widget to a customer in the United States, the taxpayer would only pay the U.S. tax. This so-called "double tax" could provide a disincentive for the business to sell the widget to Mexico, even if the Mexican customer was willing to pay more than the U.S. customer in pre-tax dollars. The double-tax distortion provides the baseline of most international tax analysis, although it is not the only distortion relevant to the international tax analysis.

The second problem unique to international tax involves tax competition: countries using taxes to compete for investment. For example, if a firm based in the United States pays tax at 35% it may seek to move to Ireland to pay tax at a rate of 12.5%. Correspondingly, Ireland would have an incentive to offer a 12.5% rate of tax to attract the firm to leave the United States and move to Ireland. In response, the United States could have the incentive to lower its rate to ten in

^{10.} See Hasen, supra note 6, at 59.

return. Thus, the second problem in international tax involves a potential "race to the bottom" in tax rates where countries continue to lower their tax rates solely due to tax competition.¹¹

The third problem unique to international tax is so-called double non-taxation. Double non-taxation is the general term for the phenomenon where taxpayers can exploit differences among national tax systems so to effectively pay tax to no country on an item of income. An example of this would be if a U.S. company formed a subsidiary in Switzerland but managed the subsidiary in the United States. Under U.S. tax law, the company would be considered Swiss since it was legally formed in Switzerland, but under Swiss law it would be considered U.S. because it is managed in the United States.¹² In such a case, income earned by that subsidiary could effectively escape taxation by any country whatsoever.

These three problems—double taxation, tax competition, and double non-taxation—have formed the core of most international tax law scholarship. The public finance literature, however, focuses on another aspect that is equally as important but which has received less attention—that tax revenue is used to pay for public goods, which themselves could increase the return to capital in a given country. Thus, countries can compete not only through tax rates but also based on public goods provision. For example, the United Kingdom might be able to charge a higher tax rate than Bermuda and still attract businesses if the businesses are willing to pay the higher tax to be resident in London with its sophisticated financial markets, strong currency, and stable legal and regulatory regimes.

This last feature significantly complicates the traditional analysis, because competing over tax rates pushes countries to lower rates while competing over public goods pushes countries to raise rates to fund the public goods.¹³ How these factors interact depends on a number of factors, including the mobility of capital, the heterogeneity of firms, the heterogeneity of countries, and the costs to distance of

^{11.} See Zodrow & Mieszkowski, supra note 7, at 312. It is also possible that the presence of tax competition could offset otherwise inefficiently high tax rates in other countries. See John Douglas Wilson & David E. Wildasin, Capital Tax Competition: Bane or Boon, 88 J. PUB. ECON. 1065, 1065 (2004).

^{12.} See Memorandum from Sens. Carl Levin, Chairman, and John McCain, Ranking Minority Member, Permanent Subcomm. on Investigations, to the Members of the Permanent Subcomm. on Investigations (May 21, 2013) [hereinafter Permanent Subcomm. on Investigations Memorandum] (regarding Offshore Profit Sharing and the U.S. Tax Code - Part 2 (Apple Inc.)).

^{13.} See Amrita Dhillon et al., Tax Competition Reconsidered, 9 J. PUB. ECON. THEORY 391 passim (2007).

transport, shipping, etc.¹⁴ Taken together, determining the efficiency of an international tax regime proves quite complicated. While a regime could be efficient based on minimizing the distortions to ownership of capital, for example, it may be inefficient in the provision of public goods. A regime could be efficient in the provision of public goods, but inefficient in terms of tax rate competition.¹⁵

What emerges from this short review of the public finance literature is that the efficiency analysis of the international tax regime can prove much more difficult than it would first seem. Not only must distortions to capital and taxpayer behavior be taken into account, but also public goods provision and returns on capital across borders. Thus, rates, method of division, and public goods provision all need to be taken into account in determining the efficiency of the international tax regime. Conversely, any analysis focusing on any one or two of these considerations to the exclusion of the others will necessarily be incomplete.

A simple example can demonstrate the intuition. Assume two countries, A and B, and two periods, 1 and 2. Country A has greater returns to capital than Country B, for example, because of greater natural resources or higher skilled labor. Country A and B both need to consume 100 units each of Widgets and Gizmos. It costs Country A \$10 per widget and \$20 per gizmo and it costs Country B \$15 per widget and \$25 per gizmo. Although Country A has an absolute advantage in each, Country A has a comparative advantage in widgets and B has a comparative advantage in gizmos.

To demonstrate, if Country A makes 100 widgets and 100 gizmos, then A spends \$3,000, while if Country B makes the same then Country B spends \$4,000, for a worldwide total of \$7,000. If instead Country A makes 200 widgets and 44 gizmos, it expends \$2,880 while B makes no widgets and 156 gizmos it expends \$3900. If Country A trades 100 widgets to Country B for 56 gizmos, each country consumes 100 of each, but the total worldwide cost drops from \$7,000 to \$6,780. Clearly, specialization and trade benefits both countries.

This difference of \$220 represents the joint surplus generated by the combined efforts of Country A and Country B. For simplicity, assume this also represents the taxable profit associated with the trade. How should that profit be divided between Country A and

^{14.} See Zissimos & Wooders, *supra* note 7, at 1105-06. Even more complex, not only can rates distort taxpayer behavior, but so could the definition of the base. For example, it could potentially be efficient for a large country to tax worldwide income of multinational companies and use some of the revenue to transfer money to a poorer country to pay for public goods.

^{15.} See Michael Keen & David Wildasin, Pareto-Efficient International Taxation, 94 AM. ECON. REV. 259, 261-62 (2004).

Country B for tax purposes? If profit was divided based on each country's absolute advantage, Country A should be allocated the entire \$220 profit to tax. Assume this is correct, and Country A uses the revenue to improve its public goods such that it can produce each widget for \$9 instead of \$10. In period 2, the joint surplus would increase to \$420 all of which again would be allocated to Country A. This time, however, after investing tax revenue in public goods, the cost of producing widgets does not go down at all.

By contrast, if Country B had been able to tax the incremental \$200 of profit in period 2 it could have invested in public goods such that the cost of producing one gizmo would have dropped to \$20. If that had occurred, the worldwide joint surplus would have increased by \$780 (156 widgets costing \$5 less per widget). Obviously, it would have been better from a worldwide welfare standpoint—that is, for both Country A and Country B—for the additional tax revenue to be allocated to Country B instead of Country A in period 2. Yet, because tax revenue was allocated based on the initial division of public goods, this did not occur.¹⁶

The intuition behind this result is that as countries continue to grow in capital base, and thus returns to capital, they overinvest in domestic public goods as compared to public goods in other countries. In other words, from a worldwide efficiency standpoint at some point another port or road or bridge could add little value to a capital rich country but could have a huge impact on a poorer country. This could be because there is a declining marginal utility to public goods for all countries,¹⁷ or that at some point there are higher returns to wealthier countries as capital accumulates in those countries independent of additional public goods.¹⁸

Alternatively, this could be thought of as if one country provided public goods for another (or that two countries merged). To the extent that there is an optimal number of countries in the world greater than one and those countries are asymmetric, it is inefficient for one country to "over" tax and use some of the proceeds to provide public goods for the other country (or for the countries to merge).¹⁹ This could be true if, for example, there was a cost to distance in providing

^{16.} See Dhillon et al., supra note 13, at 399-400.

^{17.} This has been referred to as the "marginal public good valuation." See Dhillon et al., supra note 13, at 392.

^{18.} See Richard E. Baldwin & Paul Krugman, Agglomeration, Integration and Tax Harmonisation, EUR. ECON. REV., Oct. 2004, at 1, 2.

^{19.} Depending on the circumstances, over-taxation and direct fiscal transfers could be efficient. *See* Keen & Wildasin, *supra* note 15, at 266.

public goods or some other cost to heterogeneity.²⁰ Assuming direct fiscal transfers are not an option, at some point the larger country should forego tax revenue in favor of the smaller country notwith-standing that the returns to capital *and* public goods are greater in the first country.²¹ While this may seem like a counter-intuitive result, it presents an excellent example of why any efficiency analysis needs to take into account all the relevant factors in determining a policy prescription for the international tax regime.

III. DEFINING A "FAIR SHARE": THE CONCEPTUAL PROBLEM IN BUILDING A LEGAL REGIME FOR INTERNATIONAL TAX

A. Transfer Pricing Versus Formulary Apportionment

Having framed the theoretical issue, the issue of building a legal and institutional framework for an international tax regime is possible. Returning to the hypothetical in the Introduction, what methods are available to a country such as the United States to allocate a portion of the \$600 million profit to its tax base? Typically, the two most common are referred to as transfer pricing and formulary apportionment.

Under transfer pricing, inter-company transactions are reconstructed to reflect, as closely as possible, arm's-length transactions with third parties.²² For example, assume the company grows too much sugar in Brazil for its own needs in Canada, and thus sells some sugar to an unrelated third party to be used in food manufacturing. If the company sells the sugar to the third party for fifty dollars a pound, it is possible to assume that Brazilian division of the company would sell the same sugar to the Canadian division for fifty dollars a pound. Assuming it costs ten dollars a pound to produce the sugar, this would result in forty dollars of profit per pound being allocated to Brazil. Further, assuming the Canadian division can sell finished biodiesel for one hundred twenty dollars per pound and it costs ten dollars a pound to process, Canada would have sixty dollars of profit allocated to it.

^{20.} See Alberto Alesina & Enrico Spolaore, On the Number and Size of Nations, 112 Q. J. ECON. 1027, 1029 (1997); see also David Friedman, A Theory of the Size and Shape of Nations, 85 J. POL. ECON. 59, 61 (1977).

^{21.} In some ways, this result is similar to that found by Oliver Hart with respect to the efficient number of corporate owners of property. *See* OLIVER HART, FIRMS, CONTRACTS, AND FINANCIAL STRUCTURE 126-55 (1995).

^{22.} See, e.g., Reuven S. Avi-Yonah & Ilan Benshalom, Formulary Apportionment— Myths and Prospects: Promoting Better International Tax Policy by Utilizing the Misunderstood and Under-Theorized Formulary Alternative, (Univ. of Mich., Law & Econ. Working Paper Art. 28, 2010), available at http://repository.law.umich.edu/cgi/viewcontent.cgi? article=1138&context=law_econ_current.

In essence, by using unrelated third-party benchmarks (the price of raw sugar to third parties and the price of refined biodiesel to third parties) the tax law is able to divide the total of one hundred dollars of worldwide profit (one hundred twenty dollars final sale price less twenty dollars total processing costs) between the countries: sixty dollars to Canada and forty dollars to Brazil.

By contrast, formulary apportionment would disregard any actual third party sales and look instead to allocate worldwide income based on certain factors located in each country.²³ For example, assume the factor at issue was cost of production. In this case, each of Brazil and Canada incur half—that is, ten dollars—of the total cost of production. Thus, the one hundred dollars of worldwide profit would be allocated equally between Canada and Brazil. By contrast, if Brazil needed forty field workers to grow the sugar and Canada only needed ten engineers to process the biodiesel, using number of employees would result in eighty percent of the profit (i.e., eighty dollars) allocated to Brazil and twenty allocated to Canada. Even further still, if total sales were used as the factor then all one hundred of profit would be allocated to Canada.

To date, transfer pricing has dominated the actual workings of international tax law. The United States has historically been one of the largest proponents of transfer pricing, and the OECD has recently renewed its support of transfer pricing as an appropriate methodology for allocating tax base.²⁴ Critics of transfer pricing point to its numerous shortcomings, however, in particular to how remarkably easy it is to manipulate.²⁵

Since transfer pricing applies only to intercompany transactions for which there are rarely non-controlled comparables, companies are free to report any price they like solely to manipulate the allocation of income between countries. In fact, much of the value from multinational corporations comes from using proprietary methods or intellectual property that, by definition, has no direct comparable.²⁶ For example, what would be the closest comparable to an intercompany license of the name Coca-Cola from the United States to China? What about the licensing of Microsoft software to an affiliate in Russia?

^{23.} See, e.g., Julie Roin, Can the Income Tax Be Saved? The Promise and Pitfalls of Adopting Worldwide Formulary Apportionment, 61 TAX L. REV. 169, 206-07 (2008).

^{24.} See OECD BEPS REPORT, supra note 1, at 6-7.

^{25.} See, e.g., Reuven S. Avi-Yonah, *The Rise and Fall of Arm's Length: A Study in the Evolution of U.S. International Taxation*, 15 VA. TAX REV. 89, 90 (1995) (referencing the multiple arguments that the manipulation of transfer pricing has led to the existence of multi-national enterprises).

^{26.} Ilan Benshalom, Sourcing the "Unsourceable": The Cost Sharing Regulations and the Sourcing of Affiliated Intangible-Related Transactions, 26 VA. TAX REV. 631, 643-46 (2007).

Clearly, neither company would ever engage in such transactions with third parties, and even competitors such as Pepsi Cola or Sun Microsystems only compete with end products and not the intercompany transactions.

A second, related, concern over transfer pricing is not just how to apply and enforce it, but which countries should be entitled to be allocated any profit. This issue has received significant attention as of late in the popular press with respect to both Google and Apple, both of whom reportedly used a "[D]ouble Irish" structure to hold significant portions of their intellectual property and then ultimately pay royalties out to Cayman affiliates.²⁷ While the Irish companies existed solely to own intellectual property and manage royalty payments with respect to it, both Google and Apple reported a significant portion of their income attributable to Ireland. Under a transfer pricing methodology this makes some sense. After all, almost the entire value of technology companies lies in their intellectual property, so it is not surprising that the bulk of the profits should be allocated to the intellectual property.²⁸

What critics of these transactions point to, however, is not that intellectual property does not provide the bulk of the value to these companies, but rather that Ireland has no legitimate claim to tax any of the revenue attributable to the intellectual property solely because a legal entity formed in Ireland owns legal title to the intellectual property.²⁹ Instead, they contend that the country of "origin" should be entitled to tax the revenue. The difficulty is determining precisely what this is. Some contend it is the place of incorporation of the parent company of the multinational, while other contend it is the place where the research and development was conducted, and while others still point to the jurisdiction issuing legal protection for the intellectual property. Regardless, this worst case scenario of multinational companies using transfer pricing and other structures to shift profit around the world has received a name in the literature—"stateless income."³⁰

^{27.} See, e.g., Jane G. Gravelle, The Corporate Income Tax: Persistent Policy Challenge, 11 FLA. TAX REV. 75, 76 (2011).

^{28.} See Yariv Brauner, Value in the Eye of the Beholder: The Valuation of Intangibles for Transfer Pricing Purposes, 28 VA. TAX REV. 79, 115 (2008).

^{29.} See, e.g., J.C. Stewart, Transfer Pricing: Some Empirical Evidence from Ireland, J. ECON. STUD., 1989, at 40.

^{30.} See Edward D. Kleinbard, Stateless Income, 11 FLA. TAX REV. 699, 701-02 (2011). A related concept is sometimes referred to as "homeless income." See Bret Wells & Cym Lowell, Tax Base Erosion and Homeless Income: Collection at Source Is the Linchpin, 65 TAX L. REV. 535, 538 (2012).

B. What Is Wrong with Stateless Income?

The "stateless income" literature has made an invaluable contribution to the international tax literature and to the development of the international tax law. It has brought certain tax planning techniques, primarily those of multinational corporations, into the light, demonstrating the remarkable results that can be generated by certain taxpayers and proposing detailed fixes for these specific transactions. By demonstrating these gaping holes in the modern international tax regime, the stateless income literature has redefined the debate and opened the possibility for much more nuanced and sophisticated discussions over the topic of international tax law.

For valid reasons, stateless income has come to be seen as undesirable from a policy standpoint. The metaphor inherent in its name runs throughout the analysis—stateless income threatens the integrity of the worldwide tax regime, undermining the rule of law, permitting certain multinational corporations to avoid paying their fair share of taxes.³¹ From an inductive reasoning standpoint this makes sense. If stateless income provides examples of problems with the existing international tax regime, identifying them and providing solutions not only makes sense but is extremely valuable to the development of the tax law.

But if confronting an issue as a matter of first principles, from a deductive standpoint, such an approach—no matter how correct it is does not supply an answer. In other words, without some sense of what normative baseline the international tax regime should strive for, it is difficult to develop a set of rules to do so. The problem is that the term "stateless income" has been used, at times, beyond its initial usage to make normative claims rather than descriptive and doctrinal claims about defining a country's fair share of taxes. The first step is to understand what is normatively troubling about stateless income from first principles before specific solutions can be developed.

So what precisely is so bad about stateless income from a first principles standpoint? The leading proponent of the concept defines stateless income as follows:

income derived by a multinational group from business activities in a country other than the domicile (however defined) of the group's ultimate parent company, but which is subject to tax only in a jurisdiction that is not the location of the customers or the fac-

^{31.} See Edward D. Kleinbard, *The Global Tax Avoidance Dance*, HUFFINGTON POST (Mar. 31, 2011, 6:49 PM), http://www.huffingtonpost.com/edward-d-kleinbard/the-global-tax-avoidance-_b_843318.html ("General Electric's global effective tax rate for 2010 was 7.4%. Pfizer's was 11.9%; Cisco came in at 17.5%.").

tors of production through which the income was derived, and is not the domicile of the group's parent company.³²

Notice what the definition does: it assumes that the country of domicile of the parent corporation of a multinational group has the right, at least as a default, to tax the income of that group, as well as the countries in which customers are located or in which factors of production are located. But why these three? Why not the country of the second-tier subsidiary of the multinational group? Why not the country of location of the investors in the corporation? Why not the country where the investors in the corporation themselves earned the money invested in the company in the first place?

Ultimately, the primary assumption underlying most of the stateless income literature is that income has a clearly defined state to which it belongs. But income has no citizenship. It has no passport. Income cannot vote. Rather, income is the result of private transactions undertaken by private actors either wholly within or among states, and is used by states with an income tax as a proxy to measure relative ability to pay.

Taken from this perspective, stateless income per se cannot hurt anyone. Presumably, then, what the critics of stateless income are worried about is that the normative underpinnings of their preferred income tax regime are being undermined by stateless income.³³ For example, one possibility is that stateless income proponents dislike that certain corporations pay a very low rate of total tax. The problem with this explanation is that the solutions proposed by the stateless income literature rarely map onto merely raising total taxes.³⁴ For example, if Apple paid too little total tax the law could simply impose an excise tax, disallow Apple's foreign tax credits, apply the anti-deferral rules of Subpart F, or some other relatively straightforward means of increasing Apple's total tax. Yet that typically is not what is proposed by this literature. Rather, it tends to propose fixes to the international regime itself, from changing transfer pricing to formulary apportionment to adopting aggressive thin capitalization rules.³⁵ Thus, unsurprisingly, a low effective tax rate by itself cannot be the fundamental concern of the stateless income literature.

Alternatively, the literature could be concerned about a violation of a sense of horizontal equity, that is, that some corporations pay

^{32.} Kleinbard, supra note 30, at 701.

^{33.} See Edward D. Kleinbard, *The Lessons of Stateless Income*, 65 TAX L. REV. 99, 124-29 (2011) ("Stateless income tax planning enables multinational firms to capture high-tax country pretax yields on which those firms pay tax only at low rates in other countries.").

^{34.} See id. at 139-52 (describing a number of proposals to mitigate stateless income).

^{35.} See, e.g., id.

relatively high tax rates while others pay relatively low ones in an inappropriate manner. For example, Walmart reportedly pays a tax rate close to thirty-five percent as contrasted to rates below ten percent for Apple or Google. Yet this too cannot be the ultimate concern. The fundamental basis of the existing international tax regime, one not challenged by any of the stateless income literature, is that of double tax relief.³⁶ In other words, if a U.S. corporation does business in another country the United States should find some way to prevent that corporation from paying two taxes—one to the United States and a second to the other country.

While there are myriad ways to accomplish double tax relief, the simplest would be to exempt foreign income from U.S. tax.³⁷ Under such a regime, U.S. companies doing business in the United States will pay more U.S. tax than U.S. companies doing business abroad. In addition, if the foreign countries charge lower tax rates than the United States (which currently includes almost all members of the OECD),³⁸ then the U.S. corporation doing business abroad will pay lower *total* tax than U.S. corporations doing business in the United States. Yet nothing in the stateless income literature challenges this result as normatively troubling. Thus, the mere presence of differences in the tax rates of domestic and multinational corporations cannot, by itself, prove normatively troubling for the stateless income literature either.

Instead, turning to the foundational-normative starting points for an income tax more generally may provide some insight. Specifically, an income tax is adopted when a polity believes that *income* is the appropriate measure of taxation to fund itself as a society.³⁹ If this were not the case, the polity could use, *inter alia*, a broad-based cash

^{36.} Whether double tax relief should be the focus of the international tax regime is a different issue. See SHAVIRO, supra note 3, at 4-7.

^{37.} In fact, this has been the primary focus of tax reform, at least in the Ways & Means Committee, in recent years. See Tax Reform Act of 2014, H.R. __, 113th Cong. (Discussion Draft 2014), available at http://waysandmeans.house.gov/uploadedfiles/statutory_text_tax_reform_act_of_2014_discussion_draft_022614.pdf.

^{38.} See OECD, CORPORATE INCOME TAX RATE, at tbl.II.1 (2014), available at http://www.oecd.org/ctp/tax-policy/Table%20II.1-May-2014.xlsx.

^{39.} See AJAY K. MEHROTRA, MAKING THE MODERN AMERICAN FISCAL STATE: LAW, POLITICS, AND THE RISE OF PROGRESSIVE TAXATION, 1877–1929, at 9-11 (2013). A corporate income tax can be adopted for a number of reasons, for example, as a proxy for a tax on capital, as an efficient collection mechanism, as a means of disciplining management, or as a type of excise tax on the privilege of incorporation. See, e.g., Reuven S. Avi-Yonah, Corporations, Society, and the State: A Defense of the Corporate Tax, 90 VA. L. REV. 1193 (2004) (providing a summary of traditional defenses for the corporate income tax and proposing a justification based on limiting the power of corporate managers). Regardless, once measured by income the corporate income tax faces the same measurement issue as the individual income tax.

flow consumption tax which taxes only amounts actually consumed and not saved; specific types of consumption taxes such as excise taxes on gasoline, liquor, cigarettes; or tariffs and duties or ad valoremtype taxes on property to fund itself. Once a state determines that income should be the proper measure for calculating how much each taxpayer should pay into the system, it naturally follows that taxpayers with high incomes paying low taxes violate this policy.⁴⁰

Fundamental to this conception of an income tax, therefore, is the ability to measure the income of a taxpayer. Without knowing a taxpayer's income, it is impossible to know how much the taxpayer should properly pay in taxes. This idea arose in the context of the U.S. income tax as early as 1930, when the Supreme Court decided the infamous case of Lucas v. Earl.⁴¹ In Lucas, the taxpayer was a husband who earned a salary while the taxpayer's wife worked at home. The taxpayer entered into a contract with the wife pledging half of his earnings to her for perpetuity.⁴² Based on this contract, the taxpayer contended that he was taxable on only half of his earnings, while his wife was taxable on the other half.⁴³ The result would be the tax law observing two relatively poor taxpayers rather than one relatively wealthy taxpayer. This was seen as such a fundamental threat to the integrity of the income tax itself that the Court held that all the income was properly taxable to the husband. According to the Court:

There is no doubt that the statute could tax salaries to those who earned them and provide that the tax could not be escaped by anticipatory arrangements and contracts however skilfully [sic] devised to prevent the salary when paid from vesting even for a second in the man who earned it. That seems to us the import of the statute before us and we think that no distinction can be taken according to the motives leading to the arrangement by which the fruits are attributed to a different tree from that on which they grew.⁴⁴

Crucially, the Court held that this was not some narrow antiabuse concept. Rather, as commentators have noted, the job of the courts in the tax law has been to build a sort of "common law" of taxation to defend the underlying premise that the income tax is ultimately a tax measured by some ability to pay.⁴⁵ For example, the

^{40.} See, e.g., J. Clifton Fleming et al., Fairness in International Taxation: The Abilityto-Pay Case for Taxing Worldwide Income, 5 FLA. TAX REV. 299, 306-09 (2001).

^{41. 281} U.S. 111 (1930).

^{42.} Id. at 113-14.

^{43.} Id.

^{44.} Id. at 114-15.

^{45.} See, e.g., Charles S. Lyon & James S. Eustice, Assignment of Income: Fruit and Tree as Irrigated by the P.G. Lake Case, 17 TAX L. REV. 293, 296 (1962) ("[Assignment of

taxpayer in *Lucas* contended that the income should belong to the wife because she controlled it and could spend it on whatever she wanted, and he could receive no consumption benefit from it at all. The Court rejected this idea, focusing instead on who had the power to generate and dispose of the income rather than who had the ability to consume it.⁴⁶ In this respect, it was irrelevant whether the wife spent the money on herself or on family expenses, since the husband had generated the income through his labor and had chosen to assign the income to his wife by contract.

This doctrine, commonly known as the "assignment of income" doctrine, is not stated in any Code section. Rather, it is seen as the crucial underlying normative criteria to the concept of taxing income at all. If the law cannot properly measure the income of a taxpayer, the idea goes, how can the law decide ultimately what tax to impose? Since the entire point of an income tax is for taxpayers to pay taxes based on some measure of their incomes, the ability to shift income to other taxpayers existentially undermines the integrity of an income tax.⁴⁷ This basic premise has not been challenged for over eighty years.

Taken from this perspective, the concern of stateless income begins to become clearer. A corporation earns \$10 million dollars but, through some sleight of hand, is able to make it appear as if it only earned \$1 million while a foreign affiliate earned the other \$9 million. Without some way to prevent this, the corporation undermines the fundamental tenet of the income tax.

In many ways these examples are in fact quite similar. The corporation at issue "assigned" income to an affiliate (say, a wholly-owned subsidiary) and thus looked poorer than it otherwise would have and paid less tax as a result. At the same time, since the corporations were part of a single economic group, actual control and disposition of the income had not moved at all. So this looks a lot like an attempt to shift income away from one taxpayer, the husband in *Lucas* or a parent corporation, to another, the wife in *Lucas* or a foreign affiliate, solely to avoid tax.

Income] is a prime example of the important role in tax law that is played by the courts in spite of, and perhaps also because of, the ever-growing detail and complexity of the statute. This is one of many cases where the words of the Code are so general that the resulting corpus of case law may be thought of as amounting to a Common Law of Taxation.").

^{46.} Helvering v. Horst, 311 U.S. 112, 118 (1940) ("The power to dispose of income is the equivalent of ownership of it. The exercise of that power to procure the payment of income to another is the enjoyment and hence the realization of the income by him who exercises it."); *Lucas*, 281 U.S. at 113-14.

^{47.} See Mark L. Ascher, *The Grantor Trust Rules Should Be Repealed*, 96 IOWA L. REV. 885, 887 (2011) ("It is crucial to the integrity of any progressive income tax that income be taxed to the taxpayer who earns it.").

Yet, when looked at closely, the analogy could start to run out of steam. Stateless income, as its name suggests, is not worried about income being assigned among taxpayers to manipulate their relative ability to pay, but rather is worried about income being assigned among states as part of dividing the international tax base.⁴⁸ The problem is that shifting income to another state does not implicate the same normative concerns as shifting income to another taxpayer within a state. The latter threatens to undermine the integrity of an income tax as a tax on income; that is, assignment of income threatens the statutorily adopted distribution of the burden of the cost of government among its constituents. The former merely implicates whether *more than one* country may tax an item of income. This may be problematic from a normative standpoint, but is quite different from the normative concern of the assignment of income doctrine.⁴⁹ Consider the following example.

Consider a husband and wife. The wife works in the market economy and earns a salary of \$100,000 per year while the husband works at home raising the children. In the eyes of the law, the wife is "rich" and the husband is "poor" in terms of income. Assume there are two rates of tax: zero for incomes up to \$20,000 and forty percent for incomes above that. Under these facts, the wife pays \$16,000 in tax. Now assume she can assign \$20,000 of income to her husband. Now, the wife pays \$12,000 in tax and the husband still pays no tax. This results in a savings of \$4,000. But both the husband and wife live in the United States, meaning Congress could simply change the law to fix the problem. For example, assume Congress amends the law to require spouses to combine their income. Now the problem is solved—no matter to whom the income is assigned, the \$100,000 of income will bear \$16,000 of tax. The same result arises if Congress adopts an assignment of income rule substantially similar to the one adopted in Lucas.

By way of contrast, consider two corporations: one formed in the United States, and one formed in Japan. For simplicity, assume the rate structures in the United States and Japan are exactly the same as above. The U.S. corporation earns \$100,000 in a year and assigns \$20,000 of its income to the Japanese corporation. As with the husband and wife, the U.S. corporation reduced its tax bill by \$4,000. The difference is that Japan now claims jurisdiction to impose tax on the \$20,000 of income.

Now, unlike in the example above, there is no unilateral action the United States can take to insure that the income bears a total of

^{48.} See Kleinbard, supra note 33.

^{49.} See SHAVIRO, supra note 3.

\$16,000 of tax to the United States or (2) it can insure the U.S. corporation pays \$16,000 of total worldwide tax, but it cannot unilaterally do both. The reason is that, unlike with the husband and wife, the United States cannot control what Japan might do with respect to the \$20,000 of income.⁵¹

For example, if the United States imposes \$16,000 of tax and Japan imposes a tax of \$2,000 on the income, the U.S. corporation's total tax bill increases from \$16,000 to \$18,000. The United States can mitigate this by charging only \$14,000 of tax so that the total worldwide tax is \$16,000. Both choices have well-known benefits and detriments, which are not directly relevant.⁵² What matters for these purposes is that the assignment of income among states is fundamentally different than the assignment of income among taxpayers within a state.

The obvious solution to this conundrum, therefore, is to do away with multiple states. If there were only one worldwide taxing authority, the inter-state assignment of income problem would collapse into the intra-state assignment of income problem.⁵³ Thus, this concern appears truly to be the (unspoken) heart of the stateless income concern. The real concern is not that income has no state per se, but rather that absent a single worldwide taxing authority no one state has the unilateral power to prevent taxpayers from shifting income from one state to another in a way that undermines the income tax regime as a whole.⁵⁴

Consequently, the barrels of ink (or millions of pixels) spent over stateless income ultimately comes down to a single question: would it

^{50.} See Julie A. Roin, The Grand Illusion: A Neutral System for the Taxation of International Transactions, 75 VA. L. REV. 919, 945 (1989).

^{51.} See, e.g., Adam H. Rosenzweig, Harnessing the Costs of International Tax Arbitrage, 26 VA. TAX REV. 555, 582 (2007) ("The difficulty in crafting a response to international tax arbitrage is that any response requires making choices between potentially incompatible policies, both between the laws of the two countries involved and between the domestic and international tax regimes of the United States. Changing domestic tax laws may sacrifice domestic efficiency or equity, changing international tax laws may sacrifice worldwide efficiency or international equity, while doing nothing would permit the arbitrage to proliferate.").

^{52.} See, e.g., Michael J. Graetz & Michael M. O'Hear, The "Original Intent" of U.S. International Taxation, 46 DUKE L.J. 1021, 1108-09 (1997).

^{53.} See, e.g., Arthur J. Cockfield, The Rise of the OECD as Informal World Tax Organization' Through National Responses to E-commerce Tax Challenges, 8 YALE J.L. & TECH. 136, 143-44 (2006).

^{54.} See, e.g., Reuven S. Avi-Yonah, All of a Piece Throughout: The Four Ages of U.S. International Taxation, 25 VA. TAX REV. 313, 328-31 (2005).

be efficient for there to be a single worldwide taxing authority if it were possible?

C. Single or Multiple States and Taxation

When it comes to taxation, what is the role of the state? While there can be disagreement over this question, the simplest form typically adopted in the literature, thus the one this Article will begin with, assumes that the state exists to provide for public goods and to use taxes to force constituents to contribute to public goods. In other words, public goods are those goods which are Pareto optimal but which would go un-provided absent some coercive cost internalization mechanism due to the presence of externalities and freeriding.

The problem with this definition is that it does not necessarily account for the number and size of countries in the world. Alesina and Spolaore were the first to attempt to comprehensively address this question.⁵⁵ They first observed the presence of multiple states of differing sizes and shapes in the real world and attempted to explain this. The problem was the well-accepted assumption of economies to scale in the provision of public goods. Assuming this is true and absent some countervailing cost, states should continuously merge without ever dividing, yet this was not true. They explained this by assuming a cost to heterogeneity (or geographic distance from the center which was assumed to be identical) that balanced out the economies to scale of providing public goods, thus resulting in multiple states. It was for this reason that it might be efficient for, say, Czechoslavakia to separate into the Czech Republic and Slovak Republic, notwithstanding the loss of economies of scale. Conversely, it might be efficient for independent states such as East and West Germany to recombine into unified Germany.

Intuitively this makes sense. At some point it would seem unwieldy for the United States to be responsible for road construction or pollution control in, for example, Shenzhen, China. This could be due to distance or differences in culture, language, economy, or other reasons. Regardless, once one accepts the premise that there is some cost to distance, the Alesina and Spolaore theory holds, at least in its most basic premise.⁵⁶

^{55.} See Alesina & Spolaore, *supra* note 20. The issue has been one of academic interest for some time prior to this as well. See Friedman, *supra* note 20. See generally ALBERTO ALESINA & ENRICO SPOLAORE, THE SIZE OF NATIONS (2005) (answering the questions of what determines a nation's size, how they grow overtime, and what that means for economic success).

^{56.} In fact, some have argued that this basic premise was ultimately behind post-World War II decolonization, particularly by Great Britain with respect to East Africa. See

Once it is taken as an assumption that the presence of multiple states is conceptually efficient, international tax issues arise. The issue, therefore, becomes what level of taxation in each state is efficient for the overall worldwide tax regime. This is actually the older question, most famously addressed by Tiebout in 1956.57 Tiebout assumed the presence of multiple jurisdictions and costless mobility. Under these assumptions, Tiebout hypothesized that localities would compete over taxpayers based on a basket of taxes and public goods such that taxpayers would sort among the options based on their preferences. Under these assumptions and in the international context, multiple states offering different levels of taxes (i.e., tax competition) would be efficient.⁵⁸ The main challenge to a Tiebout solution to tax competition is the ability of taxpayers to consume public goods in one jurisdiction but not pay taxes to that jurisdiction (for example by residing in another jurisdiction). In such a case, so-called Tiebout competition fails because taxpayers can free ride once again.⁵⁹

The classic Tiebout model assumed it was clear how to assign the income of a person to the place of residence, which solves this problem. In the context of labor income and localities within a state this makes sense—the locality entitled to tax is the locality in which the services are performed.⁶⁰

The difficulties with such an answer in the international context are standard Ricardian comparative advantage theory and gains from trade.⁶¹ Once the world separates into multiple states, it is efficient for states to specialize in their comparative advantage and trade rather than for each state to supply its own goods unilaterally. This means that in an Alesina and Spolaore world there must be income arising from trade that does not clearly belong to a single country, thus undermining the assumptions underlying the Tiebout model.⁶² This once again returns the focus squarely on how to efficiently

60. For an analysis of the difficulty of this approach in the international context, see Ruth Mason, *Tax Expenditures and Global Labor Mobility*, 84 N.Y.U. L. REV. 1540 (2009).

61. See, e.g., Yariv Brauner, International Trade and Tax Agreements May Be Coordinated, but not Reconciled, 25 VA. TAX REV. 251, 254 (2005).

62. See, e.g., John Douglas Wilson, Trade, Capital Mobility, and Tax Competition, 95 J. POL. ECON. 835, 853-54 (1987); see also Mutsumi Matsumoto, A Note on Tax Competition and Public Input Provision, 28 REGIONAL SCI. & URB. ECON. 465, 466 (1998).

generally John Flint, Planned Decolonization and Its Failure in British Africa, 82 AFR. AFF. 389 (1983).

^{57.} Charles M. Tiebout, A Pure Theory of Local Expenditures, 64 J. POL. ECON. 416 (1956).

^{58.} See John Douglas Wilson, Theories of Tax Competition, 52 NAT'L TAX J. 269, 270-71 (1999).

^{59.} See, e.g., Kjetil Bjorvatn & Guttorm Schjelderup, Tax Competition and International Public Goods, 9 INT'L TAX & PUB. FIN. 111, 117-19 (2002); Zodrow & Mieszkowski, supra note 7.

divide tax base among states when more than one state has a legitimate claim to impose tax on such income.⁶³

Conversely, another way to think about the same issue would be to say that once the efficient number of countries is established it cannot be assumed that any of those countries has a zero or negative revenue. Since revenue translates into public goods (under this approach) and a country exists only to provide public goods (under this approach), every country must have positive revenue for the system to be efficient. Thus, any international tax policy that could, either theoretically or in practice, result in even one country having zero revenue would, by definition, be inefficient.

D. Dividing Tax Base in a World with Multiple States

Once the premise of multiple sovereign states with independent taxing authority is accepted as efficient, the sole efficiency issue facing international taxation is how to divide the worldwide tax base.⁶⁴

This analysis has almost entirely turned on two, what appear at first glance to be unrelated, considerations. The first idea is capital neutrality; that is, that the tax laws should be neutral as to the decision whether and how to invest mobile capital across borders. While people differ as to what neutrality means or how to accomplish it,⁶⁵ it is clear that neutrality has served as one of the core underlying policies for international tax. In particular, this has often been stated in terms of preventing "double taxation" or two jurisdictions imposing a tax on a single item of income solely because it involved a crossborder transaction. In general, double taxation is considered undesirable because it distorts the decision to sell domestically (which results in only one level of tax), as opposed to internationally (which results in two levels of tax), from what it would be absent taxes, resulting in deadweight loss.⁶⁶

The second is preventing artificial transfer pricing or, in other words, stopping the artificial shifting of income from one country to

^{63.} This is emerging as a theme in recent literature. See, e.g., Yutao Han et al., Asymmetric Competition Among Nation States: A Differential Game Approach (Inst. of Mathematical Econ., Working Paper No. 460, 2012), available at http://ssrn.com/abstract=2026184 (analyzing the impact of foreign impacts on a small country's economy in the context of international competition).

^{64.} See, e.g., Moshe Justman et al., Fiscal Competition and Regional Differentiation, 35 REGIONAL SCI. & URB. ECON. 848, 849 (2005) (discussing how different countries compete for foreign investments).

^{65.} See, e.g., Mihir A. Desai & James R. Hines Jr., Evaluating International Tax Reform, 56 NAT'L TAX J. 487 (2003) (summarizing the differences among different standards of neutrality).

^{66.} See, e.g., Hasen, supra note 6, at 62-63; see also SHAVIRO, supra note 3, at 4-7, 12-14 (proposing to replace double taxation with a Marginal Rate of Reimbursement (MRR) theory).

another. This could be thought of either as a double non-taxation problem or as taxpayers artificially shifting income around the world solely to minimize worldwide tax liability without changing the allocation of real capital investment.⁶⁷ Since there is no real distortion to capital, there is no deadweight loss associated with "pure" transfer pricing (although there will be transaction costs like attorney and accounting fees that might or might not indirectly lead to efficiency losses). Thus, while the details can be complex, the issue of transfer pricing comes down to one of knowing the proper jurisdiction in which the income should be taxed and stopping taxpayers from avoiding this through artificial means.⁶⁸

The stateless income literature so far has almost exclusively focused on these as separate and unrelated issues, attempting to combat the latter while assuming away the former. Absent having some normative baseline upon which to determine the "proper" jurisdiction, however, it is difficult, if not impossible, to design rules to prevent "artificial" avoidance of this baseline.

Both goals ultimately come down to allocating the tax base between two countries which each have a legitimate claim to tax the income. For example, if the United States attempted to tax income earned by a French citizen and resident wine-maker with no connection to the United States for growing grapes, processing wine, and bottling and selling it entirely in France, any theory would perceive this as an inappropriate exercise of the taxing power. But if the same winemaker sold the wine in the United States, the issue would arise as to whether the United States or France should tax the winemaker, and if so based on what share of the income.

This question typically is resolved by looking at two concepts: the country of source and the country of residence. The country of source from the sale of the wine in this case is the United States while the country of residence is France. In general, the international tax regime has settled on a rough compromise as between source and residence countries: source countries are given the first opportunity to tax the income and residence countries apply a tax only if its tax exceeds that applied by the source country.⁶⁹

^{67.} See SHAVIRO, supra note 3, at 12-14; see also Steven A. Dean, Neither Rules nor Standards, 87 NOTRE DAME L. REV. 537 (2011).

^{68.} See Avi-Yonah et al., supra note 2, at 522-23; Reuven S. Avi-Yonah, Arguments For and Against Territoriality, 139 TAX NOTES 797, 799 (2013) ("[I]n the longer term I would be supportive of a different sort of territoriality: real territoriality, in which each country only taxes the corporate income that belongs to it... But that kind of territoriality requires allocation of profits by formula").

^{69.} See Reuven S. Avi-Yonah, The Structure of International Taxation: A Proposal for Simplification, 74 TEX. L. REV. 1301, 1306 (1996).

In essence, this approach gives the country of source the first "bite at the apple," so to speak. Implicitly, this means that the tax law perceives that some of the value generated in the transaction as occurring in the country of source. But by also permitting the residence country to tax, the tax law also perceives some value in the transaction as occurring in the country of residence. The deal would not have occurred had there not been a market for wine in the United States, which requires consumers with disposable income and a network of distribution and sales. Assuming a rational consumer, the deal also would not have been done under the same terms for wine not produced in France (perhaps the consumer pays a premium for French wine, or dislikes U.S. wine, or some other reason). The French wine could not have been produced absent French vineyard land, infrastructure for growing grapes and transporting wine, and centuries of expertise in producing specific types of wine.

Given that the tax law already concedes that both countries are necessary to the transaction, what is a "fair" transfer price for the sale of wine? In other words, where was the value created? Was the bulk of the value created in growing the grapes and fermenting the wine, or in marketing and sales in the United States? Is it seventy percent U.S. and thirty percent French, or is it forty percent U.S. and sixty percent French?

Of course, the entire exercise is artificial.⁷⁰ Identifying the U.S. share of a transaction that could not happen absent both countries has no economic meaning at all. Anyone who claims there is a single percentage of such income that is clearly allocable to the United States, therefore, must be making some type of underlying normative assumption regarding the proper allocation of tax base among countries when both have a legitimate claim to taxing a particular item of income or taxpayer.

Although the literature tends not to explicitly state a normative criteria upon which to make this claim, one can be attributed based on the proposals being held up as preferable to the existing rules. In particular, proponents of formulary apportionment claim that it more properly reflects real economic activity.⁷¹ Some of the strongest proponents of formulary apportionment contend that sales represents the true economic activity, and thus the country of sale should be entitled to tax the income generated from such sales.⁷² Implicitly, this

^{70.} *Cf.* Grubert, *supra* note 7, at 188 ("[T]he current distinction in the U.S. source rules between a sale of a good, a royalty, and a service is highly artificial and serves no policy objective.").

^{71.} See Benshalom, supra note 9, at 627-29.

^{72.} See, e.g., Avi-Yonah et al., supra note 2, at 510-15.

requires a normative prior that jurisdictions with well-developed consumer markets, well-developed currencies, consumer-based infrastructure such as ports for shipping containers, freight trains and heavy rail lines and highways for trucks, and well-developed consumer credit, are entitled to a greater share of tax base than countries that do not.⁷³

This may or may not be correct, but the fact that it has rarely been explicitly stated or directly addressed is troubling.⁷⁴ To do so, a clear underlying normative consideration must be articulated. For purposes of this Article, that normative goal is maximizing the economic efficiency of the international tax regime by balancing neutrality and public goods provision.

The problem is that the vast majority of international tax literature has failed to incorporate both of these considerations explicitly into the analysis. Rather, efficiency tends to drive the decision as to which baseline international tax rule a country should adopt, and then is abandoned when turning to "abuse" issues such as transfer pricing or other similar considerations.

Perhaps this is the case because transfer pricing itself has no impact on the core focus of most international tax efficiency considerations—that of neutrality towards capital.⁷⁵ In other words, if the tax law is neutral as to where capital actually invests, transfer pricing must merely be a way to push paper around to save taxes without changing the actual investment of capital around the world. Consequently, the issue comes down to which country would generate the greatest economic return from the revenue, not a tradeoff between tax rates and capital flows between the countries.⁷⁶ Stated differently, the issue is one of relative productive use of the revenue by the countries involved and not distortions to the actual underlying capital allocation.

This Article will assume that tax revenue generated as a result of any division of tax base must be used for something, specifically productive (or industrial) public goods. These public goods, in turn, im-

^{73.} This is because apportionment of income based on a factor is roughly equivalent to taxing the factor itself; further, this in itself could be distortionary because firms could face an incentive to change the location of their sales, if sales was the factor, or acquire low-profit, high-labor businesses in low-tax jurisdictions if number of employees was the factor. See Hines, supra note 8.

^{74.} See Avi-Yonah, supra note 68.

^{75.} See, e.g., John JA Burke, *Re-Thinking First Principles of Transfer Pricing Rules*, 30 VA. TAX REV. 613, 627 (2011).

^{76.} See, e.g., Agnès Bénassy-Quéré et al., Tax Competition and Public Input 18 (Eur. Network of Econ. Policy Research Inst., Working Paper No. 40, 2005), available at http://www.enepri.org/files/Publications/WP040.pdf.

pact the return on capital in a particular country, thereby impacting the efficient allocation of capital around the world. In other words, the efficient provision of public goods among all the countries of the world benefits all countries in the world by removing existing inefficiencies, which increases worldwide economic growth.⁷⁷ So the question must be: What is the efficient level and distribution of public goods in the world, and is the international tax regime satisfying this? If the answer is no, even if the tax laws are neutral as to capital, the international tax regime will not necessarily be efficient from an overall worldwide standpoint.⁷⁸

Once it is established that having more than one country in the world is efficient, it cannot be an efficient response to perceived transfer pricing or other tax base allocation problems to insist that all countries adopt a single, harmonized worldwide tax system, since this would effectively be the same as a single world government with a single tax system. Rather, for the worldwide regime to be efficient, each country must supply its own efficient level of public goods and, consequently, must be able to set its own tax rules sufficient to supply these public goods. Put differently, international tax rules should not, and need not, focus on objectively "right" economic indicators to allocate income, but rather should instrumentally focus on maximizing the optimal mix of neutrality and public good provision.

It is for this reason that calls for formulary apportionment as a panacea to international tax are incorrect. Formulary apportionment attempts to apply some independent factor, such as sales or employees, and use it to allocate income among countries. This is seen as superior to other methods, such as transfer pricing, in that it is difficult to manipulate. But there is a deeper normative consideration as well. Proponents of formulary apportionment assume that using some independent factor related to economic factors to allocate tax revenue is economically efficient. This need not necessarily be the case, however. Apportioning worldwide income based on objective factors is substantially equivalent to taxing the factors themselves. Thus, if the factors are mobile, firms would have the incentive to inef-

^{77.} See Zissimos & Wooders, *supra* note 7, at 1105 ("As the variation in firms' requirements for public goods is increased, the intensity of tax competition is reduced relative to the benchmark case; the level of public good provision becomes inefficiently low and the difference between the level of taxes across countries increases.")

^{78.} See Dhillon et al., supra note 13, at 419; Hasen, supra note 6, at 81-83; see also Mitchell A. Kane, Bootstraps and Poverty Traps: Tax Treaties as Novel Tools for Development Finance, 29 YALE J. ON REG. 255, 297 (2012) (proposing the use of tax treaties as a means to finance development in developing countries that could increase overall worldwide efficiency).

ficiently relocate their factors (or inefficiently transfer ownership of the factors) in response to formulary apportionment.⁷⁹

Assuming, for the sake of argument, that it was possible to identify relatively inelastic factors, however, this efficiency concern could be minimized. Implicit in a number of proposals for formulary apportionment is such a contention, perhaps under a theory that sales in a country represent rents generated in that country and thus are relatively immobile. Even this efficiency analysis is only true, however, if returns on tax revenue (and hence public goods) are forever increasing in scale. If, however, there is a declining marginal utility to providing public goods (meaning that the returns to tax revenue are positive but decreasing), there must be a limit to the efficiency benefits of providing public goods in any one country.⁸⁰

In other words, allocating tax revenue based on factors correlated with public goods serves to increase the economic base in countries with higher amounts of public goods in the first place, leading to the development of even more public goods in those countries at the expense of others. But if there are decreasing marginal returns to public goods, this assumption no longer holds.⁸¹ In such a case, using formulary apportionment based on factors that correlate with public goods will, at some point, prove inefficient.⁸²

As a simplified example, assume two countries: Country A and Country B. Country A is large and capital-wealthy and Country B is small and capital-poor. Country A is able to impose taxes on rents to capital to provide public goods while Country B is not. Thus, the returns to capital increase in Country A and do not increase in Country B (this is a variant of the agglomeration theory).⁸³ Consequently, Country A can increase taxes even higher, raising even more revenue and providing more public goods, while Country B has low taxes and few public goods. Regardless of Country A's absolute advantage in all economic activity, it remains efficient for Country A to specialize in its comparative advantage and trade with Country B. Thus, Country A specializes in technology and Country B specializes in agriculture, and they trade. Taxpayers in both countries contend that thirty percent of the income arising from trade is attributable to Country B based on the cost of growing the crops plus a small profit. Country A disagrees, contending that income should be allocated between Coun-

^{79.} See Hines, supra note 8, at 110.

^{80.} See Dhillon et al., supra note 13, at 392-93.

^{81.} See, e.g., Mutsumi Matsumoto, Redistribution and Regional Development Under Tax Competition, 64 J. URB. ECON. 480 (2008), at 485-86.

^{82.} See Zissimos & Wooders, supra note 7, at 1106.

^{83.} See Baldwin & Krugman, supra note 18, at 22.

try A and Country B based on the proportion of public goods in each country. Country A's allocation results in ninety percent of worldwide income being allocated to Country A. If Country A's approach is correct, the result is that Country A raises even more revenue, thus providing even more public goods. This, in turn, results in an even higher amount of income, say ninety-five percent, being allocated to Country A in period two and so on. As this becomes clear, it also means that Country B can provide increasingly fewer public goods over time as well.

Is this a good answer? It depends on the return to public goods in Country A as compared to Country B. Crucially, it has been assumed already that it is efficient for Country A and Country B to exist as separate states and to provide their own public goods (correspondingly, it follows that trade is efficient as well). So the question is: at some point would it be more efficient to build the first modern irrigation system in Country B rather than the twentieth, fiftieth, or tenthousandth port in Country A?⁸⁴ If so, this division of tax base must fail from an efficiency standpoint.⁸⁵

In many ways, the primary critiques of income shifting only support this analysis. The main idea behind much of this literature is that income can be shifted artificially to countries in which no "real" economic activity is occurring.⁸⁶ If this is truly the case, however, then there is no concern over real distortions to allocations of capital worldwide.⁸⁷ In fact, the more tax-driven an allocation of income is, the less concern there should be over deadweight loss. This is reflected in most of the criticism of purported income shifting as well, in that the claim seems to be that such taxpayers improperly deny their home country much needed revenue without changing the taxpayer's business model.⁸⁸ In such a case, revenue and not distortions to capital (and thus for purposes of this Article, financing for public goods) only grows in importance as a normative criterion upon which to make allocation decisions.⁸⁹ Put differently, the more distortions on one margin-taxpayer behavior-can be reduced, the more important the other margin—public goods provision—becomes to worldwide efficiency, which would benefit every country in the world.

^{84.} See, e.g., Wilson & Wildasin, supra note 11, at 1069-70.

^{85.} See Zissimos & Wooders, supra note 7, at 1105.

^{86.} See Kleinbard, supra note 30, at 701-02.

^{87.} This holds only to the extent the factors themselves are not mobile. See Hines, supra note 8.

^{88.} See, e.g., Edward D. Kleinbard, Through a Latte, Darkly: Starbucks's Stateless Income Planning, 139 TAX NOTES 1515, 1516 (2013).

^{89.} See Baldwin & Krugman, supra note 18, at 2.

IV. RE-ENVISIONING AN INTERNATIONAL TAX REGIME

A. In Partial Defense of Transfer Pricing

Assuming the foregoing analysis is correct, what lessons can be drawn from it? The primary lessons are that the arguments in favor or opposed to transfer pricing or formulary apportionment, which have dominated recent debates over international taxation, are misplaced. For example, demonstrating that countries are claiming much higher shares of corporate income than their share of worldwide sales does nothing to indicate that this is a good or bad thing, only that they are different. In many cases, however, the undesirability of such a result is often pointed to as obvious on its face; correspondingly, those who disagree with this conclusion may be accused by some of buying off the bad guys or other similar misplaced analogies rather than engaging with the underlying analysis.⁹⁰

It is difficult to understand why this argument seems so ingrained within at least a portion of the literature. One possibility is a flawed assumption about the returns to cross-border activities. In some ways, this could be thought of as a modern variation of the mistaken assumption underlying the Malthusian analysis of economic returns to population. In addition to creating the field of political economy and introducing the concept of economic rents, Malthus is perhaps most famously remembered for staunchly opposing the so-called "poor laws" in England.⁹¹ Malthus did so under a theory of fixed resources compared to growing populations. His analysis, very generally stated, was that the population at some point would outgrow the ability of land to support the population. The conclusion he drew was that providing incentives to poorer people to continue to grow the population and drain resources was unsustainable in the long-run, leading to a collapse in the population due to starvation or disease. He considered this a worse result than failing to assist the current poor and thus opposed the poor laws.⁹²

The mistake in this Malthusian line of thinking was the assumption of fixed resources (in the case of Malthus, the fixed resource was land) in the face of growing population.⁹³ Malthus's contemporary,

^{90.} See Calvin H. Johnson, Taxing GE and Other Masters of the Universe, 132 TAX NOTES 175, 180 n.47 (2011).

^{91.} See, e.g., William P. Quigley, Five Hundred Years of English Poor Laws, 1349-1834: Regulating the Working and Nonworking Poor, 30 AKRON L. REV. 73, 119 (1996).

^{92.} See Amartya Sen, Fertility and Coercion, 63 U. CHI. L. REV. 1035, 1046 (1996).

^{93.} More specifically, Malthus assumed a labor theory of value with fixed land resources. See, e.g., Kyle C. Johnson, Letting the Free Market Distribute Environmental Resources, 17 WM. & MARY J. ENVTL. L. 79, 88 n.39 (1992) (citing TERRY L. ANDERSON & DONALD R. LEAL, FREE MARKET ENVIRONMENTALISM 2 (1991)).

Ricardo, proved that additional productivity could be extracted from the same fixed resources by more efficiently allocating those resources. For example, Ricardo's theory of comparative advantage demonstrated that England was not limited only to the food that it could grow on its own land, but that England could specialize in its own comparative advantage and trade for food with other countries.⁹⁴ In this way, England would have access to worldwide food resources, and other countries would have access to England's industrial resources. In other words, everyone would be better off by maximizing the efficiency of the worldwide regime.⁹⁵

The modern debate, at least the way it has come to be described in parts of the literature, seems to suffer from a version of this Malthusian error in reasoning.⁹⁶ If international tax is truly a zero-sum regime in which a dollar of tax revenue for Luxembourg means a lost dollar for the United States, it makes sense that the United States would put up as many barriers as possible to losing that dollar (even if it was solely the fortuity of natural resources under the ground that generated the dollar). Conversely, any proposal making it easier for that dollar to leave the United States for Luxembourg would be undesirable on its face. This appears to be the basis of much of the international tax debate as currently situated. But interestingly, this is analytically similar to Malthus's opposition to the poor laws; if so, it would makes sense, therefore, that the response would be similar as well-what if a dollar of tax revenue for Luxembourg increased worldwide efficiency of capital, making both Luxembourg and the United States better off? In that case, making it easier for the dollar to go to Luxembourg would be desirable.

The literature appears (for the most part) to assume constant returns to scale from tax revenue. If the converse is true, however that is, that countries have a declining marginal return on tax reve-

^{94.} See, e.g., Douglas A. Kysar, Sustainable Development and Private Global Governance, 83 TEX. L. REV. 2109, 2136-37 (2005) (discussing a hypothetical comparative advantage in the production of goods from Portugal and England).

^{95.} See id.

^{96.} But see May Elsayyad & Kai A. Konrad, Fighting Multiple Tax Havens, 86 J. INT'L ECON. 295, 296 (2012) ("The OECD and other supranational entities engaged in the fight against tax havens may not have the option of an all-in-one approach. But for this case our analysis reveals a hidden cost of the sequential process that is not obvious from the outset."); Keen & Wildasin, supra note 15, at 259 ("The absence of systematic analyses of Pareto-efficient international taxation is especially striking").

nue—the theory may no longer hold.⁹⁷ Just because the former seems more intuitively appealing is not a reason to base policy upon it.⁹⁸

Instead, looking at the issue from a first-principles standpoint, the issue is not whether transfer pricing or formulary apportionment is more correct but, rather, which tool more optimally divides tax base so as to satisfy the dual conditions of minimizing distortions to capital worldwide and maximizing the efficiency of the provision of public goods.⁹⁹ It is this second consideration that has received insufficient attention in the international tax literature. If minimizing distortions was the only consideration, a single worldwide taxing authority would be optimal. But if having multiple states is optimal, the issue comes down to balancing two considerations: minimizing distortions to capital and maximizing public good provision.¹⁰⁰

From this perspective, a first-best result would require cooperation among all of the countries of the world, with complete disclosure as to levels of returns to capital and public goods needs and consensus on the efficient allocation of worldwide tax base.¹⁰¹ This "pure apportionment" would perfectly allocate the tax base so as to maximize the returns to public goods but would also have all the benefits of any apportionment system in that all countries would use worldwide income, meaning no taxpayer would have an incentive to shift income to any one country for tax purposes. Thus, pure apportionment maximizes both neutrality as to capital and public goods provision.

This Article will make the non-controversial assumption that such an approach is not possible in the real world.¹⁰² Thus, any analysis proves second-best. This Article will not attempt to prove a single best second-best. Two important points can be made, however. First, any second-best criticisms of the public goods approach apply with equal force to the neutrality-only approach. Second, either approach requires a separate analysis into the resulting incentives towards tax competition arising from any neutrality-based approach.¹⁰³ Since

^{97.} For example, recent public finance literature has demonstrated that a declining marginal return on public goods could result in an inefficient allocation of tax revenue under tax competition. *See* Dhillon et al., *supra* note 13, at 2.

^{98.} See id.

^{99.} More precisely, it requires dividing tax base to take into account both neutrality as to an initial allocation of capital and the feedback effect of public goods provision on the returns to capital across borders. See Hasen, supra note 6, at 122-23.

^{100.} See id.

^{101.} See George Mundstock, The Borders of E.U. Tax Policy and U.S. Competitiveness, 66 U. MIAMI L. REV. 737 (2012).

^{102.} See, e.g., Roin, supra note 23, at 169-70.

^{103.} See Zissimos & Wooders, supra note 7, at 1105-06.

these issues are common to both, there is no inherent reason for these considerations to favor one approach over another.

Under this approach, therefore, there is no reason to believe that either transfer pricing or formulary apportionment should inherently be superior to the other. Rather, each is merely a tool to be used instrumentally to achieve an optimal balance between competing policy goals. Thus, there is nothing wrong with transfer pricing as a conceptual matter. What is needed is to develop a regime in which transfer pricing can be used in the optimal manner. The remainder of this Part will discuss at least one possible way to do so.

B. Constructing a Hybrid Transfer Pricing/ Apportionment Regime

The first step in any international tax analysis under this approach must be to determine to what extent "income" is national as opposed to international. Stated differently, only income arising due to gains from trade theoretically should be divided among states in the world, while income arising purely from domestic transactions should not. For these purposes, "national" income could be thought of as rents accrued to a country based on either its allocation of capital (natural resources, etc.) or its public goods or both, without the need to interact with the capital or public goods of other countries. As noted above, even in a world of Ricardian comparative advantage, some purely domestic productive capacity would be consumed purely domestically, independent of trade.

Returning to the example above, assume Country A produces \$100 million worth of technology and Country A consumes \$70 million and trades \$30 million with Country B for food. At first glance it would appear that the profits attributable to \$70 million of sales should be taxed entirely in Country A. As is often the case, however, first glances would not necessarily be correct. The amount consumed in Country A is not the benchmark. Rather, the benchmark should be how much could have been consumed in Country A had Country A been forced to produce both its own technology and food. Based on comparative advantage theory, the amount of technology consumed would have been something less than \$70 million since some portion of that productive capacity would have been spent on producing food.¹⁰⁴ This is why using simple sales as a factor in formulary apportionment does not and cannot reflect any true measure of a country's purely domestic income in a multinational world.

^{104.} See PAUL KRUGMAN & ROBIN WELLS, MACROECONOMICS 33-34 (2d ed. 2009).

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The difficulty in the real world is creating the appropriate counter-factual to capture some meaningful measure of domestic income in a multinational world. Crucially, however, *any* attempt to do so will require making both normative and descriptive assumptions. It is important to make this point as explicit as possible, precisely because it has been implicit in most of the international tax literature for far too long.¹⁰⁵

For instance, almost all "anti-abuse" provisions in international tax assume a counter-factual against which to compare. For example, take the so-called "thin cap" rules.¹⁰⁶ As a general matter, these rules apply a limit to the ability of a corporation to use debt to shift income from one jurisdiction to another.¹⁰⁷ Debt works this way because it is typically deductible in the country of payment and income in the country of receipt. For instance, absent thin-cap rules a Cayman Islands company could form a U.S. corporation funded entirely with debt such that all of the income of the U.S. corporation would be paid out to the Caymans. This proves troubling for a tax system because it involves a fundamental conflict of two policies: (1) interest on debt should be deductible and (2) U.S. taxpavers should not be able to "artificially" shift income to low-tax countries. The solution is to adopt a somewhat arbitrary debt/equity limit for purposes of interest deductibility. In the United States it is a 1.5:1 limit; interest paid on debt to low-tax jurisdictions above this threshold is non-deductible. Thus, for every dollar of equity contributed by a Cayman parent, three dollars of debt can be used to perfectly legitimately strip income out of the United States, but no more.

Thin-cap rules, such as the one in the United States, are a perfect example of the counter-factual problem.¹⁰⁸ If income would be most efficiently allocated to the United States, there is no reason to allow any of it to be shifted to the Caymans, and while if a company should efficiently be capitalized with more than 3:1 debt, there is no reason

^{105.} See, e.g., Kleinbard, supra note 33, at 124 ("[A]ssume that a multinational firm (but not a local domestic one) can arbitrarily move income from high-tax jurisdictions (including the multinational's home country) to low-tax ones, while retaining ownership of the income stream."). Granted, the quotation is only intended to serve as a simplified example and not a comprehensive theory, it reflects a number of the implicit assumptions built into the counter-factuals used throughout international tax literature, to wit: (1) income generated by a multinational is comparable to income generated by a purely domestic business, (2) the home country has some priority claim to tax the income of a multinational, and (3) income shifted from a high-tax to low-tax jurisdiction is inherently suspect.

^{106.} I.R.C. § 163(j) (2012).

^{107.} See Stuart Webber, Thin Capitalization and Interest Deduction Rules: A Worldwide Survey, 60 TAX NOTES INT'L 683, 685 (2010).

^{108.} See, e.g., Mary C. Bennett, The David R. Tillinghast Lecture, Nondiscrimination in International Tax Law: A Concept in Search of a Principle, 59 TAX L. REV. 439, 453 (2006).

to deny an interest deduction for the debt in excess of that ratio. Yet, by assuming 1.5:1 is acceptable, the law implies that anything in excess of 1.5:1 is done for tax planning and not true business reasons. There is no reason to think this should be the case, however. Some businesses, such as bio-technology start-ups, often have debt-toequity rations far in excess of 1.5:1. While others, such as mature software companies, rarely have debt-to-equity ratios approaching anywhere close to 1.5:1. This tells us nothing about whether such companies are engaged in inappropriate tax evasion.

By constructing a counter-factual for isolating gains from trade out from domestic income, in a simple two-country, two-goods model it would be relatively easy to calculate the relative gains from trade, subtract these out from domestic consumption, and then determine pure domestic income.¹⁰⁹ In the real world with multiple countries and items of trade, this proves much more complicated, however; depending on one's assumptions, the model can prove nearly impossible.¹¹⁰ One reasonable proxy could be to start with the baseline productive resources of a state and allocate a value to those plus some assumed amount for profit (for example, by using an assumed demand curve, perhaps based on historic demand, setting marginal price at marginal cost, and integrating).¹¹¹ This may not approximate true domestic productive capacity, but it should represent at least a minimum amount of domestic productive capacity.

Interestingly, this looks remarkably similar to the existing "costplus" transfer pricing method,¹¹² with the biggest exception being that the transfer price would turn on country-specific attributes rather than company-specific attributes. This serves two benefits. First, it better reflects the goal of the transfer price portion of the hybrid regime. In particular, the goal is to replicate a country's domestic productive capacity and not individual taxpayer profitability or rent generation. In this way, the factor used to apportion income would not be manipulable by any one firm (assuming no one firm is large enough to impact a country's overall returns on capital or labor),

^{109.} See ROBERT H. FRANK & BEN S. BERNANKE, PRINCIPLES OF MICROECONOMICS 44 (3d ed. 2007).

^{110.} Cf. Ronald W. Jones, Trade Theory and Factor Intensities: An Interpretive Essay, 10 REV. INT'L ECON. 581 (2002) (describing the complexities that arise when analyzing traditional trade models with the additional issue of factor intensity).

^{111.} This is a simplified variation of the Hecksher-Olin/Samuelson model of trade. See Grubert, supra note 7, at 177 & n.76.

^{112. 26} C.F.R. § 1.482-3(d) (2011). See generally Elizabeth Chorvat, Forcing Multinationals to Play Fair: Proposals for a Rigorous Transfer Pricing Theory, 54 ALA. L. REV. 1251 (2003) (discussing allocation of taxable income under different taxation models, including the cost-plus model).

thereby reducing the efficiency concerns over distortions to taxpayer behavior.¹¹³

Second, it avoids factual fights with taxpayers over their proprietary business methods and internal profit estimators. Instead, each country could use average returns for companies doing business there, for example, based on public findings. Even when there is little information, the decision shifts from one where countries must engage in a "battle of the experts" with the taxpayer to one where countries can make policy driven allocations. This alone would significantly reduce a number of the concerns about the present transfer pricing system.

For example, assume a multinational corporation develops the software for a mobile device in Israel, builds the device in Thailand, and sells the device in Germany. Rather than ask the corporation what it would charge a third party for the software in an arm'slength transaction, Israel could calculate that the software development business in Israel on average generates a ten percent return. It could then take an objective factor, such as company-specific deductible expenses incurred in Israel,¹¹⁴ and apply the ten percent profit percentage to this amount. This amount would be the amount of worldwide profits of the company over which Israel could claim unilateral jurisdiction to tax. In this manner, transfer pricing methodologies could be used to set a minimum floor that a "home" country could tax irrespective of claims by other countries (in other words, income that it can unilaterally allocate to itself).¹¹⁵ As a consequence, multinational companies would no longer be able to avoid paying any home country tax solely through international tax planning. Once the two countries each apply their minimal transfer pricing base, the remaining tax base—intended to roughly correspond to the gains from trade—would be divided between the countries in some other manner.

That leaves open the question of how to divide the remainder, which this Article will refer to as the "common tax base" in that it would not exist absent specialization and trade among more than one country. Again, the best solution would be for countries to agree both as to the amount of the common tax base and as to the relative allocation of the common tax base. Absent both, not only is there potential for an inefficient allocation for public goods provision, but also the possibility of both double taxation (to the extent two countries

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^{113.} See Hines, supra note 8, at 109.

^{114.} *Cf.* Grubert, *supra* note 7, at 184 (linking the proper country to tax with the country in which development expenses were deducted).

^{115.} See, e.g., Eduardo Baistrocchi, *The Transfer Pricing Problem: A Global Proposal for Simplification*, 59 TAX LAW. 941, 949-51 (2006) (explaining how transfer pricing rules can be used to protect the tax base of countries).

both claim some common tax base) and double non-taxation (to the extent taxpayers structure such that neither country claims some common tax base).

The only question, then, is how best to allocate the common tax base in a second-best manner. The key error in traditional approaches to dividing common tax base has been to use the same principles applied to the common tax base as those used to the domestic tax base. But since these tax bases differ fundamentally not only in their source but also in their efficient allocation, there is no reason to think the same methodology would be efficient for both. Theoretically, there are two potential ways to apportion: (1) by tying to some objective criteria and (2) by affirmatively allocating for some policy reason.

The former has been the basis of the modern calls for formulary apportionment. The first claimed benefit of such an approach is that it uses non-manipulable objective criteria, thus solving the transfer pricing problem. This is correct insofar as it goes. The second claimed benefit of such an approach is that it more accurately reflects a country's fair share of taxes. The primary thesis of this Article is that this claim is incorrect and, in fact, deeply flawed.

This does not mean, however, that some objective metric used in formulary apportionment could not satisfy the normative criteria set forth in this Article. Rather, the metric must take into account the relative returns to public goods, assuming there is some diminishing marginal return to public goods and that tax revenue correlates with gross domestic product (GDP) to some extent. Any metric directly correlating with GDP and thus public goods—whether sales, employees, capital, or other—will necessarily fail this standard, at least at some point. So what are some other options? One alternative could be GDP per capita; that is, apportion tax base between the relevant states based on their relative GDP per capita. This also is not a perfect solution, because it is possible for countries to have high GDP per capita and high needs to fund public goods (e.g., the Cayman Islands), or low GDP per capita but also lower needs to fund industrial public goods (e.g., China).

Perhaps a better alternative would be to use the inverse of relative foreign direct investment (FDI). Under this approach, it would be assumed that FDI is correlated with public goods in that capital seeks out the highest risk-adjusted return taking into account both the demand for capital and the infrastructure to provide the return.¹¹⁶ In other words, even though poorer countries have higher

^{116.} See, e.g., Avi Nov, The "Bidding War" to Attract Foreign Direct Investment: The Need for a Global Solution, 25 VA. TAX REV. 835, 837-42 (2006) (describing how countries compete over foreign direct investment so as to fund public goods).

demand for capital than wealthier ones, investors significantly discount the return on capital for countries with low public goods, whether that be lack of physical infrastructure, lack of stable money or banking, or lack of stable property laws and judicial systems.¹¹⁷ While there is not direct empirical evidence for this, there is empirical evidence that capital flows significantly less to poorer countries than would be expected under neo-classical demand models,¹¹⁸ indirectly supporting this concept. Under such an approach, the common tax base would be divided among the relevant countries based on the inverse of their relative FDI inflows (for example, by using data from the most recent prior year).

Combined with allocating the initial tax base determined by a transfer pricing methodology, this approach balances both the capital neutrality and public goods benefits of tax base division. Countries with higher returns to capital, allocations of resources, and public goods, would always be allocated a higher share of the transfer pricing portion, while countries with lower such attributes would receive a higher share of the common tax base. In this manner, a balance between neutrality and public goods could be struck, all while addressing the manipulability (or abuse, depending on one's point of view) of the current transfer pricing system.

C. Applying the Hybrid Regime: An Example

Even if a hybrid transfer pricing/apportionment regime might be preferable to either in isolation as a theoretical matter, would it be implementable and administrable? A simple example can demonstrate that the answer is yes.

As a starting point, perhaps the greatest strength of the hybrid methodology is that it can be implemented independently from the treatment of corporate tax base, that is, unitary versus separate entity accounting or the need for country-by-country reporting.¹¹⁹ For example, the United States could choose to continue to adopt a separate company regime of accounting while other countries—Brazil, for example—could choose to adopt a unitary method of accounting. Under such a methodology, the United States would apply the relevant apportionment factor to the cost basis investment of the U.S. taxpayer,

^{117.} Cf. Nuno Garoupa & Carlos Gómez Ligüerre, The Efficiency of the Common Law: The Puzzle of Mixed Legal Families, 29 WIS. INT'L L.J. 671 (2012) (explaining how countries that sacrificed short-term benefits to establish stable legal regimes experience higher growth than countries that do not do so).

^{118.} See, e.g., Hasen, supra note 6, at 104-06; see also Adam H. Rosenzweig, Why Are There Tax Havens?, 52 WM. & MARY L. REV. 923, 944-45 (2010).

^{119.} OECD BEPS REPORT, supra note 1.

while the apportionment factor would be based on an independent metric not reliant on reporting from the taxpayer while the cost basis of the stock in the subsidiary would be easy to calculate. Of course, this would not reflect real worldwide economic income, but of course, neither does any separate company accounting.

In this manner, the apportionment methodology is no better or worse than any other form using separate company accounting. The difference is that no U.S. based company would unilaterally be able to avoid all U.S. tax solely by separately incorporating. The United States could choose not to impose tax on this base, to tax it more lightly than U.S. sourced income, or to tax it subject to a foreign tax credit. But, at a minimum, the United States would have the option to tax such income.

Relatedly, U.S. taxpayers would face one of two incentives. First, if the apportioned income is less than what would be allocated to the United States based on worldwide income of the group, it could simply accept the U.S. apportionment. Second, if the apportioned income is more than would be allocated to the United States on the worldwide income of the group it would have an incentive to report the worldwide income to the United States. Either way, the United States would no longer have to waste resources examining and challenging each individual transfer price of every U.S. based multinational corporation.¹²⁰ Rather, the United States could rely as a default on collecting tax on a base of income calculated on net investment in foreign corporate subsidiaries or alternatively rely on the corporation voluntarily disclosing actual worldwide income.

Other countries, on the other hand, may use worldwide income of the corporate group as its base and a transfer pricing cost-plus factor based on independent national criteria. To the extent the United States and other countries both claim taxing authority over a specific item of income as a result, the corporate taxpayer would have an incentive to report this fact to both taxing authorities. In response, the United States could grant a foreign tax credit for this income or could exempt it from U.S. tax or impose a lower level of double tax.¹²¹ But, at a minimum, the United States would have the opportunity to make a complete and informed policy choice over such income.

^{120.} See Kleinbard, supra note 88, at 2 ("It is inappropriate to expect source country tax authorities to engage in elaborate games of 20 Tax Questions, requiring detailed knowledge of the tax laws and financial accounting rules of many other jurisdictions, to evaluate the probative value of a taxpayer's claim that its intragroup dealings necessarily are at arm's-length" by virtue of alleged symmetries in tax treatment for expense and income across the group's affiliates.)

^{121.} See SHAVIRO, supra note 3, at 4-7.

Turning to a specific example, assume a corporation is legally formed in Bermuda and is in the business of issuing casualty insurance in the United States. Under the approach of this Article, Bermuda would not be permitted to tax the entire tax base of the company legally formed in Bermuda but primarily insuring risk in the United States and, crucially, neither would the United States. Rather, the United States would apply its transfer price to insuring U.S. risk to allocate a portion of the base solely to the United States. Assume the company earns \$4 million per year in premiums on \$50 million of insurance risk. If U.S. insurance companies earn on average a five percent profit on insured risk and the Bermudian company insured \$50 million of risk in the United States, the United States could claim \$2.5 million of the \$4 million tax base for itself. If the United States used a foreign tax credit system, this would mean the tax on \$2.5 million base would not be eligible to be reduced by the foreign tax credit,¹²² while if the United States used a territorial system the \$2.5 million would not be exempt from U.S. tax as foreign source income.

The remaining \$1.5 million common tax base (assuming there is no purely domestic Bermuda tax base) would then be divided primarily in favor of Bermuda based upon some objective factor correlating with the relative needs for public goods. For simplicity, using the inverse of relative GDP of the United States and Bermuda, the ratio would be roughly \$14 trillion for the United States and \$6 billion for resulting in Bermuda's share being Bermuda, equal to \$14/\$14.6 = 95.8%. Thus, \$1.437 million, or 95.8% of the common tax base of \$1.5 million, would be allocated to Bermuda, and an additional \$63,000 would be allocated to the United States. The total U.S. source income from the transaction would be \$2,563,000.

There are multiple benefits to such an approach. First, it would be relatively easy for the United States to administer, since presumably the total amount of insured risk issued by the Bermuda company should be relatively easy to ascertain as would the total amount of deductible expenses. Second, the transfer price would be established by the Internal Revenue Service based on independent objective factors, rather than by the taxpayer based on company specific factors as under current law, obviating the need for complex transfer pricing reports and audits of the transfer pricing reports. Third, the taxpayer would now face a choice. If paying U.S. tax on \$2,563,000 of profit was preferable it could do so and be in complete compliance with U.S. law. If, however, the taxpayer had specific information demonstrating that it in fact earned lower profit on its insurance than the U.S.

^{122.} I.R.C. § 904 (2012).

average or that it insured risk outside the United States, it would have an incentive to provide this information to the United States to lower its tax bill.

As a result, the United States would no longer be in the position of playing "Twenty Tax Questions" with taxpayers holding private tax information.¹²³ Rather, the United States would either tax a minimum amount of income based on objective factors or have greater access to worldwide tax information of the taxpayer. Thus, unlike under current law, a foreign insurer of U.S. risk would no longer be able to claim the ability to completely avoid U.S. tax solely by establishing an entity in Bermuda.¹²⁴

The taxpayer may try to avoid or minimize this result by shifting some of the U.S. allocated income to another tax haven such as the Jersey Islands. But at this point the corporate taxpaver and the Jersey Islands would face a much different choice. If the Jersey Islands agrees to respect the transfer pricing methodology adopted by the United States and Bermuda, it would be able to allocate a share of the common tax base to itself at no risk of challenge or punishment from the United States (or institutions such as the OECD). Thus, the Jersey Islands would have an incentive to agree with the allocations of the United States and Bermuda as they would provide lower-risk access to tax base than direct tax competition. In effect, by agreeing to permit an allocation of part of the common tax base to the Jersey Islands, the United States would effectively enlist the cooperation of the Jersey Islands to collect tax on its domestic tax base. In other words, this would result, in effect, in an implicit worldwide agreement to apportion part of the worldwide tax base of a company to the United States—precisely the goal of most proponents of formulary apportionment.

While this may not be as good from a purely U.S. standpoint as a solution in which it could tax all of the worldwide income of the corporate taxpayer, it better reflects the dueling efficiency concerns embedded in international tax and thus may be more efficient from an overall worldwide perspective than either the current international regime or the preferred U.S. allocation.¹²⁵

Assuming this is true, the remaining question is: why should the Jersey Islands get anything at all? What role did it play in generat-

^{123.} See Kleinbard, supra note 88, at 1515.

^{124.} See, e.g., Lee A. Sheppard, News Analysis: Money Talks: Hedge Fund Reinsurance Companies, 138 TAX NOTES 1279 (2013).

^{125.} Correspondingly, any allocation that maximizes the total return for all countries involved also increases the incentives towards cooperation rather than competition over that base. See Adam H. Rosenzweig, *Thinking Outside the (Tax) Treaty*, 2012 WIS. L. REV. 717, 742-43.

ing the income of the corporate taxpayer? And if the Jersey Islands is entitled to some tax base, why not the Isle of Man or Gibraltar? The next Section will address that question.

V. COMBATING ABUSIVE TAX HAVENS UNDER THE NEW TAXONOMY

The methodology described above is ambivalent as to which countries should properly be included in dividing a particular item of income. Ultimately, however, that question must be confronted to address the so-called abusive tax haven problem. For example, there is no reason to believe that, say Belize, should be entitled to claim a share of the common tax base generated from the sale of wine from the purely French winemaker to the purely U.S. consumer. Any international tax regime would need some way to deny Belize the ability to claim a share of such income. The problem is that it is relatively simple to make it appear as if Belize was involved in the transaction, for example simply by setting up a foreign base sales company in Belize.¹²⁶

One nice aspect of the proposal in this Article is that there will always be a domestic tax base of every international transaction that cannot be siphoned out to tax havens. This itself minimizes, but does not eliminate, the incentive for such countries to engage in tax competition. In fact, so long as there are multiple countries with some unmet minimal revenue need there will always be an incentive of countries to engage in tax competition absent some other means to satisfy the minimum revenue need.¹²⁷

Rather, what matters is adopting a regime that minimizes the incentives of countries to engage in harmful tax competition while separately increasing the incentives towards cooperation. The hybrid proposal could potentially achieve both of these goals. First, any approach that helps countries develop their own infrastructure will increase their own development, thereby increasing their internal tax base and reducing the need to engage in tax competition.¹²⁸ Under the theory of this Article, increased tax base will lead to increased public goods which themselves will feedback into returns on capital and thus increase growth and development of these countries. Increasing the efficiency of the worldwide tax regime in this manner not only helps countries from a development policy standpoint but theoretically adds to total worldwide growth and trade thereby help-

^{126.} This was the premise for including Foreign Base Sales Company income in Subpart F for U.S. tax purposes. *See* I.R.C. § 954 (2012).

^{127.} See Rosenzweig, supra note 118, at 932-34.

^{128.} Id. at 932-34.

ing wealthier countries, such as the United States, as well. In fact, such feedback growth and trade benefits were pointed to as the policy reason for adopting the foreign tax credit—which unilaterally sacrificed tax revenue from the United States to other countries—in the United States in the first place.¹²⁹

Contrast this to proposals that punish or otherwise reduce the domestic tax base of countries engaged in tax competition. Such countries may, if faced with some minimal revenue needs, be forced to engage in even more intense competition thereby undermining the initial goal of the policy in the first place.¹³⁰

Additionally, using tax base rather than other metrics to alleviate the pressure to compete over revenues also proves superior to other ways to improve public goods development in poorer countries in that it relies on market forces to allocate the tax base. More specifically, U.S. tax policy would merely permit countries in which U.S. multinational corporations do business to exercise taxing power over some of the corporation's worldwide tax base. This provides U.S. corporations the choice of country in which to do so. Thus, countries with more stable political and legal systems, less chance of violence or other crime, and less likelihood of corruption would attract significantly more investment and, under the proposal, would also attract more tax revenue than other more unstable or corrupt countries.¹³¹ In fact, there is evidence that this already occurs under current law.¹³² In this manner, using tax base rather than direct or indirect fiscal transfers can actually harness the benefits of Tiebout competition, as opposed to the current system which could theoretically reduce, or even potentially undermine, the benefits of Tiebout competition.

This then leads to a second consideration: allocating tax base to affirmatively fulfill policy preferences such as satisfying poorer countries minimum revenue needs. Doing so requires letting go of the oftheld goal of a single, unified, international tax system. As one example, a country such as the United States could unilaterally choose to allocate a portion of tax base that cannot be captured unilaterally by the United States towards developing countries and away from developed countries as a matter of international redistribution and de-

^{129.} See Graetz & O'Hear, supra note 52, passim.

^{130.} See Rosenzweig, supra note 118, at 934.

^{131.} See Rosenzweig, supra note 118, at 960-61.

^{132.} See Dhammika Dharmapala & James R. Hines Jr., Which Countries Become Tax Havens?, 93 J. PUB. ECON. 1058, 1058 (2009) ("Evidence from US firms suggests that low tax rates offer much more powerful inducements to foreign investment in well-governed countries than do low tax rates elsewhere. This may explain why poorly-governed countries do not generally attempt to become tax havens.").

velopment policy.¹³³ Assuming there was no way to unilaterally capture this base and that cooperation was not possible due to conflicting incentives, there is little to no cost to the United States to affirmatively harness this lost base and allocate it to higher end users of public goods.¹³⁴

Similarly, it may be reasonable for a country, such as the United States, to permit greater use of tax benefits in certain non-cooperative countries. The use of tax benefits would have to be conditioned on such countries conforming with U.S. sourcing rules on which countries may legitimately claim taxing authority over a particular item of income. In this manner, the United States would be able to replicate some of the benefits it currently enjoys with tax treaty partners to currently non-cooperative states at little to no cost.¹³⁵

The ultimate lesson, then, is that nothing in an efficiency analysis of international tax prevents states from adopting a hybrid system, one that employs different methodologies for dividing tax base among relatively symmetric countries, on the one hand, and relatively asymmetric countries, on the other.¹³⁶ The intuition behind this is that the reciprocal gains from trade are so great among relatively symmetric countries that such countries are more than willing to bargain tax based allocation in exchange for increased trade (or reduced barriers to trade).¹³⁷

One proxy for such symmetry could be the presence of a tax treaty. In effect, tax treaties could be thought of as a form of second-best division of tax base among relatively symmetric countries. Put differently, the presence of a tax treaty could be seen as a signal that the signatory countries are relatively symmetric in terms of trade, capital flows, or some other metric, or they would not have entered into a treaty predicated on reciprocity in the first place.¹³⁸

One problem with this analysis is that, at least under one theory, small countries could face a prisoner's dilemma when it comes to entering into tax treaties and thus might enter into treaties with

^{133.} This concept of affirmatively allocating otherwise domestic revenue that has been lost, referred to as "international vertical equity," can be distinguished from more traditional notions of "internation equity" which focus on the fair way to divide common tax base. See Rosenzweig, supra note 51, at 603-05.

^{134.} The primary example of this would be lost tax base due to so-called international tax arbitrage. See Rosenzweig, supra note 51, at 565.

^{135.} See Rosenzweig, supra note 125, at 717.

^{136.} See Avi-Yonah & Benshalom, supra note 22, at 12 ("[Arm's-length] and formulary methods are not mutually exclusive. Instead, each of these two methods has its own set of strengths and weaknesses—which could be combined and reconciled into an integrated regime."); Benshalom, supra note 9, at 622.

^{137.} See Rosenzweig, supra note 125, at 764, 772.

^{138.} See, e.g., Kane, supra note 78.

wealthier countries even if it is not in their interest to do so. Even if this is true, there must be some limit to this reasoning as there are clearly small states in the world that have not entered into treaties with wealthy ones such as the United States. Although it might be possible that countries on the margin are entering into tax treaties when they should not, it still might be possible for the presence of a tax treaty to serve as a second-best form of sorting mechanism, at least as compared to the alternatives.¹³⁹ Conversely, there is no reason to think that the United States would have any interest in entering into a tax treaty with an asymmetrical country since it would have little reason to expect any trade benefits to flow but would give up lower withholding tax rates. Thus, even if smaller countries have an incentive to ask for tax treaties, such treaties would not emerge because of the incentives of wealthier countries such as the United States. This could help explain why certain developing countries, such as China, have entered into tax treaties with the United States while others, such as Haiti, have not.

Assuming this is true, it is possible to conclude that countries that have entered into a tax treaty with a country such as the United States benefit from sufficiently reciprocal gains such that they would not be the highest use producers of public goods, at least as a secondbest sorting mechanism. Put differently, such countries likely have sufficient infrastructure or other public goods necessary to support an economy large enough to justify entering into a tax treaty with the United States. With respect to such countries, minimizing distortions to capital allocations (i.e., neutrality) should properly be the primary policy focus, as it has been. The consequence would be that with respect to countries that have entered into a tax treaty with each other, little to nothing would need to change under the existing treaty relationship, at least as a second-best solution.

It follows that those countries that have not entered into tax treaties with the United States are more likely to be higher use producers of public goods than the United States. Put differently, such countries likely have do not have the infrastructure or other public goods necessary to support an economy large enough to justify entering into a tax treaty with the United States. This could mean that, at some point, such countries should receive a larger share of common tax base than under either current law or most proposed reforms if the goal is to maximize the overall efficiency of the international tax regime.¹⁴⁰

^{139.} Rosenzweig, supra note 118, at 987.

^{140.} Taken to a logical extreme, this theory could actually support a policy of affirmatively transferring tax revenue to such countries—the precise opposite of the anti-tax competition movement of approximately the last fifteen years. See Elsayyad & Konrad, supra note 96, at 295; Keen & Wildasin, supra note 15, at 265.

One way this could be achieved would be to allocate higher amounts of common tax base to non-treaty member countries in exchange for some treaty-type base protections, such as common definition of income, common sourcing rules, or tiebreaker rules for common claims to income, effectively creating a quasi-treaty type regime with previously uncooperative countries.¹⁴¹ Alternatively, it could be possible to create special development treaties geared towards developing countries to assist in the provision of local public goods.¹⁴² Building a revenue transfer into the regime, whether through a dispute resolution mechanism or negotiated treaties or otherwise, would not only increase cooperation, but could also increase the efficiency of the entire system.¹⁴³

This is not to say that direct fiscal transfers are always preferable to the current system or that a negotiated formulary apportionment could not be superior to non-negotiated transfer pricing based regime. There is no doubt that fiscal transfers could go to some use other than providing public goods, such as corruption, on the one hand, or redistribution, on the other, which would not necessarily further the efficiency of the system as a whole. Simply because implementation might face second-best concerns such as these does not change the analysis with respect to the efficiency of the international tax regime as a whole, however. In fact, similar concerns plague the current focus on neutrality, even taken by itself. Different countries value different types of neutrality, different countries adopt different systems (such as worldwide taxation versus territorial taxation), and corruption taints any tax and transfer system whether it be through direct bribes, the political economy of targeted tax holidays, or other targeted tax benefits to foreign investors.

In other words, the exact same limitations that create a secondbest problem under a public goods taxonomy create one under a neutrality-only taxonomy. There is no reason to think that the neutrality theory is necessarily superior simply because it came first. Once the presence of multiple states is deemed efficient, any division of the worldwide tax base other than harmonization or pure apportionment will necessarily be second-best, requiring a careful analysis of all the moving parts.

Ultimately, however, this does not obviate the most difficult issue to address in dividing the worldwide tax base—that of which coun-

^{141.} This could be possible, for example, by establishing a mechanism to exchange tax revenue for increased information cooperation. See Rosenzweig, supra note 125, at 77.

^{142.} See, e.g., Allison D. Christians, Tax Treaties for Investment and Aid to Sub-Saharan Africa, 71 BROOK. L. REV. 639, 705-13 (2005); Hasen, supra note 6, at 119.

^{143.} See Rosenzweig, supra note 125, at 738.

tries should be entitled to participate. For example, assume a multinational corporation produces a widget in India and sells it to Korea, but to do so it forms a legal entity in Mauritius in which the proceeds are deposited. Further assume that the sole reason the company does so is that it hopes to allocate some of the income from the sale away from India and Korea, which have relatively high tax rates, to Mauritius, which has a zero corporate income tax.¹⁴⁴

Proponents of formulary apportionment claim that one of the greatest benefits of an apportionment method linked to objective economic criteria such as sales or employees rather than geography is that tax-planning like this no longer works.¹⁴⁵ Even if the taxpayer forms the entity in Mauritius and books the transaction through Mauritius, the theory goes, no income would be allocated there since the employees were in India and the sale was in Korea. Thus, formulary apportionment should be adopted as it prevents artificial tax avoidance of this manner.

While this argument may be correct insofar as it goes, it does not by itself prove anything. It suffers from the same implicit normative assumptions as the other arguments made in favor of formulary apportionment. It is true that formulary apportionment, based on economic criteria such as sales and employees, by definition prevents allocation of tax base to countries without sales or employees. If the efficient allocation of tax base were tied at all times to sales or employees, this would make sense. But if not, as Part II demonstrates, the argument falls under the weight of its own reasoning.

The argument suffers from such a problem precisely because it assumes away the crucial normative question; by assuming the income properly belongs to India and Korea, allocations away from these jurisdictions are considered per se inappropriate. But there is no reason that this assumption is necessarily correct. If the sale is efficient and would not have occurred absent a headquarters in Mauritius, there is no way to construct a counter-factual in which a sale or the associated profit occurred solely between India and Korea.¹⁴⁶ Put differently—no sale, no tax revenue for anyone. The assumption—that the income properly belongs to Korea and India—assumes away this analysis by labeling the allocations to Mauritius as abusive.

^{144.} This is effectively a simplified version of the Apple tax planning mechanisms. See Permanent Subcomm. on Investigations Memorandum, *supra* note 12.

^{145.} See Avi-Yonah et al., supra note 2, at 498; cf. Kleinbard, supra note 88, at 1535 ("The Achilles' heel of all territorial tax systems is that they rely entirely on underdeveloped ideas of the geographic source of income to apportion tax liability.").

^{146.} See, e.g., John Douglas Wilson, Welfare-Improving Competition for Mobile Capital, 57 J. URB. ECON. 1, 1 (2005).

This argument, rather than being one about tax havens, is really an example of a larger debate about what is legitimately "inside" and what is "outside" a country's sovereign taxing power. Every country must face this question, and there is no reason to believe that the analysis should differ between countries, whether it be the United States or Costa Rica. For instance, there is no doubt that a French citizen, with no connection to the United States, who lived in France, grew grapes in France, sold them to a French winemaker in Euros, and used the Euros solely for French consumption that the United States would have no legitimate claim to exercise taxing power over that income.¹⁴⁷ Under international law, at least as interpreted by the U.S. Supreme Court, the United States does have the sovereign power to tax such income if the exact same person holds U.S. citizenship, however, even if they have never resided or worked in the United States.¹⁴⁸ Similarly, the United States claims jurisdiction to tax the worldwide income of any corporation formed under the laws of the United States or any state thereof, regardless of the source of income, the primary place of management of the corporation, or the source of the underlying economic activity.¹⁴⁹

At a minimum, therefore, it is not beyond reason for any country to claim under international law the taxing jurisdiction over a company solely due to the legal formation of a corporation in that country. An argument to the contrary would require some theory that the citizenship or corporate law of one sovereign jurisdiction is somehow less deserving of deference than that of another,¹⁵⁰ which as a general matter the formulary apportionment literature has not put forth.

Opponents of tax havens could contend that this is inapt, since the sole purpose of forming a legal entity in a tax haven is to avoid home country taxes, while the purpose of forming a corporation in a country such as the United States is legal, economic, or business driven (ironically in part because of the adverse tax consequences).¹⁵¹ They then point to the lack of economic activity in the tax haven as evidence that the intent was to avoid tax in the home country.¹⁵²

^{147.} See Michael S. Kirsch, *Taxing Citizens in a Global Economy*, 82 N.Y.U. L. REV. 443, 448-49 (2007) (summarizing some of the justifications used to impose tax on citizens living abroad).

^{148.} See Cook v. Tait, 265 U.S. 47, 56 (1924).

^{149.} See, e.g., Daniel Shaviro, *The David R. Tillinghast Lecture, The Rising Tax-Electivity of U.S. Corporate Residence*, 64 TAX L. REV. 377, 377 (2011). Whether the United States chooses not to tax such income or to grant an offsetting credit for foreign taxes is a separate question.

^{150.} See, e.g., Diane M. Ring, What's at Stake in the Sovereignty Debate?: International Tax and the Nation-State, 49 VA. J. INT'L L. 155, 232 (2008).

^{151.} See, e.g., Permanent Subcomm. on Investigations Memorandum, supra note 12, at 11.
152. See, e.g., id.

This argument proves circular, however. The proof of tax abuse in forming an entity in a jurisdiction is the lack of business activity in that jurisdiction, which occurs precisely in those jurisdictions which lack sufficient public goods necessary for the business activity to exist. Under this theory, the use of a legal entity in, for instance, Bermuda, to reduce U.S. taxes would be per se abusive while the use of a U.S. entity to reduce U.K. taxes would be per se appropriate business planning. Again, since "business activity" correlates with public goods, such an approach will always mean that an anti-tax haven law based on business activity will favor countries with greater public goods over those with lesser public goods. But if allocation of common tax base to Bermuda would be more efficient than allocation to the United States from a worldwide welfare standpoint, this would be the wrong answer.

For example, companies such as Apple and Starbucks have reportedly come under fire for using headquarters in Ireland and the Netherlands, respectively, to reduce their overall worldwide tax rate.¹⁵³ In part, the argument is made that Apple, Starbucks, and similar companies locate most of their sales in other European Union (EU) countries, but pay relatively low rates of tax due to their head-quarters being located in low-tax jurisdictions. In response, however, Apple points out that it is the second largest employer in Cook, Ireland.¹⁵⁴ So which is correct? Is Apple abusing the international tax system by using an Irish headquarters to lower its taxes, or is Apple a "real" resident of Ireland entitled to the benefits of lower tax rates because it is creating real jobs in what, until recently, was one of the poorest member states of the EU?

Similarly, over the last twenty years a number of insurance companies established headquarters in Bermuda, purportedly to minimize both U.S. and worldwide tax liability. Initially, the markets were skeptical of Bermudian insurance entities and thus discounted their stock price as compared to U.S. entities. Over time, however, as more companies relocated to Bermuda and as Bermuda began to build expertise in insurance regulation and corporate law, markets began lowering the legal risk discount to Bermudian entities until it was virtually removed. Now, Bermuda is affirmatively seen as a beneficial jurisdiction

^{153.} See Stephanie Soong Johnston, EU to Investigate Apple, Starbucks, and Fiat Tax Rulings, 143 TAX NOTES 1240 (2014).

^{154.} See James Kanter & Landon Thomas Jr., Tax Breaks for Apple and Starbucks Investigated by E.U., N.Y. TIMES (June 11, 2014), http://www.nytimes.com/2014/06/12/ business/international/eu-to-investigate-countries-business-tax-breaks.html.

in which to establish and operate an insurance company due to its well-established legal and regulatory infrastructure.¹⁵⁵

The Bermuda insurance example demonstrates how tax base (and market pressures) can help a jurisdiction develop public goods which themselves can generate positive market returns, thereby increasing foreign investment and further increasing tax base. If it works for insurance regulation, then it could work for other infrastructure as well.¹⁵⁶

But what if the British Virgin Islands (BVI) also claims a share of the common tax base? Or BVI and St. Kitts and Nevis? At some point, the United States could theoretically be diluted out of any meaningful share of the common tax base (but, importantly, not the domestic tax base) without any meaningful benefits accruing to Bermuda or any other developing country. Could the United States refuse to allocate common tax base to a jurisdiction that had absolutely no connection to the transaction? Of course, the answer must be yes. The problem is how to do so without returning to the exact same problems facing the existing international tax regime.

Perhaps the best that can be hoped for is reciprocity—the same standard underlying the existing modern tax treaty system.¹⁵⁷ Under reciprocity, if the United States imposes its taxing power over a corporation based on its legal place of incorporation, it could not object to Bermuda doing so as well. But, if the United States does not exercise taxing jurisdiction over a company formed in Bermuda without a "permanent establishment" in the United States, it could object to BVI doing so. Similarly, if the United Kingdom imposes its taxing power over a corporation based on its primary place of management, it cannot object to the Isle of Man doing so as well, but it could object to Bermuda doing so based solely on place of incorporation.

There are two main benefits to reciprocity. First, it simplifies and minimizes problems of international tax arbitrage. Second, it provides a clear base upon which to divide income as an initial matter, and if a particular country does not like the result, it can either change its own default rules or engage in negotiations with the other country.¹⁵⁸

^{155.} See, e.g., Craig M. Boise & Andrew P. Morriss, Change, Dependency, and Regime Plasticity in Offshore Financial Intermediation: The Saga of the Netherlands Antilles, 45 TEX. INT'L L.J. 377 (2009).

^{156.} See Kane, supra note 78, at 258-59.

^{157.} See, e.g., Hugh J. Ault, Corporate Integration, Tax Treaties and the Division of the International Tax Base: Principles and Practices, 47 TAX L. REV. 565, 576-77 (1992) (explaining the concept of reciprocity as applied to existing treaties).

^{158.} Internalizing the decision to conform domestic policy to foreign tax policy is a way to force countries to, at a minimum, disclose their policy preferences and thus expose true

In fact, this has been seen in recent years in the rise of information sharing.¹⁵⁹ Information sharing started as a multilateral claim for information from relatively wealthy OECD member countries against "abusive" countries,¹⁶⁰ led to the rise of bilateral Tax Information Exchange Agreements,¹⁶¹ then to unilateral attempts to force information disclosure such as the Foreign Account Tax Compliance Act (FATCA) in the United States,¹⁶² and ultimately to the emergence of agreed-upon standards for information sharing on a reciprocal basis but administered internally by each country separately through the rise of FATCA Intergovernmental Agreements.¹⁶³ Similarly, this premise has served as the basis of one of the primary proposals coming out of the OECD in its recent project directed at remedying tax base erosion.¹⁶⁴

Relatedly, as a theoretical matter, any dangers from misallocating income under this methodology could be addressed by limiting the effects of the proposal to sourcing rules only, in which case the residence and withholding tax regimes would still apply to impose tax on particular taxpayers. In this case, the source rules would be tied explicitly to real economics—in the case of domestic tax base, real economic returns in the sector and, in the case of common tax base, real return on public goods.¹⁶⁵ In this way, the transfer pricing rules, the sourcing rules, and the residency rules could work together to achieve what none of them could necessarily achieve separately.

One of the main difficulties facing such projects is the mere scope of the problem. While it may be relatively easy to shut down abusive transactions in a single tax haven, it becomes increasingly difficult to

policy disagreements as opposed to mere tax base competition. *See* Rosenzweig, *supra* note 51, at 582-83.

^{159.} See Michael Keen & Jenny E. Ligthart, Information Sharing and International Taxation: A Primer, 13 INT'L TAX & PUB. FIN. 81, 81 (2006).

^{160.} See Org. for Econ. Co-operation and Dev., Harmful Tax Competition: An Emerging Global Issue 30, 33 (1998), available at http://www.oecd.org/tax/transparency/44430243.pdf.

^{161.} See Beckett G. Cantley, The New Tax Information Exchange Agreement: A Potent Weapon Against U.S. Tax Fraud?, 4 Hous. Bus. & Tax L.J. 231, 231 (2004).

^{162.} See J. Richard (Dick) Harvey, Jr., Offshore Accounts: Insider's Summary of FATCA and Its Potential Future, 57 VILL. L. REV. 471, 476 (2012).

^{163.} See Allison Christians, What You Give and What You Get: Reciprocity Under a Model 1 Intergovernmental Agreement on FATCA, CAYMANIAN FIN. REV., Second Quarter 2013, at 24, available at http://www.compasscayman.com/cfr/2013/04/12/What-You-Give-and-What-You-Get--Reciprocity-under-a-Model-1/.

^{164.} See generally OECD BEPS REPORT, supra note 1 (recommending an action plan to address tax base erosion).

^{165.} Further, the United States could tie residency—or the power over foreign source income—to the amount of U.S. source income generated by a taxpayer. See Adam H. Rosenzweig, Source as a Solution to Residence, 17 FLA. TAX REV. (forthcoming 2015).

do so as the number of havens increases. Even worse, as the number of havens increases, the strategy of combatting them one at a time could actually prove counter-productive as well.¹⁶⁶ For this reason, adopting a regime that becomes attractive for a significant number of tax havens to join voluntarily can have an additional benefit of acting as a signal for abusive tax haven behavior. In other words, the countries that do not join a regime in which the common tax base would be allocated in their favor would be more likely to be engaging in more abusive tax haven behavior. In response, anti-tax haven efforts could be concentrated on this smaller group of countries, potentially making them more likely to succeed as well.¹⁶⁷

Regardless, this Article is not intended to solve all the problems of tax competition, which plague all proposals in international tax absent complete worldwide harmonization. Rather, this Article demonstrates that a world with multiple taxing jurisdictions and some tax competition can be, and likely is, more efficient than a world with a single taxing jurisdiction and no tax competition. Assuming this is true, complete mitigation of tax competition may not itself be a legitimate goal of the international tax regime.¹⁶⁸

VI. CONCLUSION

The international tax regime is facing a defining moment. As the world increasingly moves towards territorial regimes, the question of how to divide the international tax base among countries increasingly becomes the crucial focus. To date, however, this debate has tended to boil down to one over transfer pricing versus formulary apportionment. This Article attempts to demonstrate that the narrow focus solely on these two methods of dividing tax base focuses on the instruments of dividing the worldwide tax base rather than on first principles. This Article adopts the first principle of maximizing the efficiency of the worldwide tax regime, using two assumptions: (1) the presence of multiple states with different and potentially competing tax systems is efficient; and (2) there is a declining marginal utility to public goods. Under these relatively conservative assumptions, dividing the tax base efficiently requires balancing the goals of maximizing the neutrality of tax laws and the provision of public goods across all countries.

Based on this result, this Article demonstrates how the modern debate has inappropriately focused on how to capture tax base or prevent corporations from shifting income across jurisdictions, lead-

^{166.} See Elsayyad & Konrad, supra note 96, at 295-96.

^{167.} See Rosenzweig, supra note 125, at 721, 724-25.

^{168.} See Wilson, supra note 146, at 2-3.

ing to calls for formulary apportionment based on factors correlating with development, public goods, or both. This Article demonstrates how such an approach can be inefficient under the stated assumptions. Instead, this Article proposes a hybrid regime in which each country is entitled to tax a portion of worldwide tax base based on that country's amenities and then the remaining common tax base should be divided among countries so as to maximize the return to worldwide public goods.