THE TAX TREATIES MYTH

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Abstract

The prevailing view regarding tax treaties emphasizes their role as the indispensable mechanism for alleviating double taxation of international transactions. Policymakers assume that tax treaties benefit everyone involved. By reducing the burden of double taxation, the treaties facilitate the free movement of capital, goods and services, and help achieve allocational efficiencies.

In this Article, I show that these ubiquitous treaties are not necessary for preventing double taxation. Rather, they serve much less heroic goals, such as easing bureaucratic hassles and coordinating tax terms between the contracting countries, and may have much more cynical consequences, particularly redistributing tax revenues from the poorer to the richer signatory countries.

Using game theory, I examine the interactions between the unilateral policies of different types of countries and demonstrate how these interactions reduce tax levels to as great an extent as treaties do. Without offering any significantly greater degree of stability, treaties often just replicate the mechanism that countries unilaterally use to alleviate double taxation.

One substantial difference, however, does distinguish the unilateral solution from the treaty mechanism. While equilibria of the interaction between unilateral strategies tend to allow "host" countries to benefit from collecting tax revenues, tax treaties usually allocate the revenues more to the benefit of "residence" countries. The revenue disparity is probably insignificant in cases involving two developed countries. But in treaties between developing and developed countries, usually host and residence countries, respectively, reallocating tax revenues means regressive redistribution—to the benefit of the developed countries at the expense of the developing ones.

THE TAX TREATIES MYTH

TSILLY DAGAN*

I. INTRODUCTION

What is the objective of double taxation treaties? This question seems circular. One might say that the point is to prevent, or at least relieve, double taxation. But this objective is a myth. In this Article, I show that these ubiquitous treaties are not necessary for preventing double taxation. Rather, they serve much less heroic goals, such as easing bureaucratic hassles and coordinating tax terms between the contracting countries, and much more cynical goals, particularly redistributing tax revenues from the poorer to the richer signatory countries.

The prevailing view regarding tax treaties emphasizes their role as *the* indispensable mechanism for alleviating double taxation of international transactions. Policymakers assume that tax treaties benefit everyone involved. By reducing the burden of double taxation, the treaties facilitate the free movement of capital, goods, and services and help achieve allocational efficiencies. Although countries are required to forego potential tax revenues and although treaty negotiations are often quite cumbersome, tax treaties are perceived to be well worth the effort, because they allegedly provide significant benefits for all once they are implemented. Additionally, treaties are thought to be a helpful step on the path to a coherent and uniform regime of international taxation, which may lead to a multilateral tax agreement, an elusive grail of tax policy.

Assuming without question the "benefits for all" position, scholars have explored many collateral issues: how we can improve the categories of income set forth in the OECD model;¹ whether internal legislation

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^{1.} See, e.g., Charles I. Kingson, *Taxing the Future*, 51 Tax L. Rev. 641 (1997) (David R. Tillinghast Lecture) (positing that the treaty could not cope with matters of intangible property); see generally John F. Avery Jones, *Are Tax Treaties Necessary?*, 53 Tax L. Rev. 1 (1999) (David R. Tillinghast Lecture).

should be allowed to override treaties;² and how we can advance towards a multilateral treaty.³ Such scholarship, however, has overlooked a more fundamental question: are tax treaties indeed required for preventing double taxation? If not—if unilateral mechanisms can prevent double taxation in an efficient and stable fashion⁴—could it be that the treaties serve primarily to redistribute tax revenues? And if tax treaties are redistributive, who are the winners, and who are the losers?

This Article shows that the prevailing view of tax treaties is misguided. The benefits countries reap from easing the double taxation burden on their residents investing abroad are sufficient to induce them to alleviate double taxation on a unilateral basis. Treaties are not the only workable solution. Using game theory, I examine the interactions between the unilateral policies of different types of countries and demonstrate how these interactions reduce tax levels to as great an extent as treaties do. Without offering any significantly greater degree of stability, treaties often just replicate the mechanism that countries unilaterally use to alleviate double taxation.

One substantial difference, however, does distinguish the unilateral solution from the treaty mechanism. While unilateral solutions tend to allow "host" countries to benefit from collecting tax revenues, tax treaties

^{2.} See, e.g., Richard L. Doernberg, Overriding Tax Treaties: The U.S. Perspective, 9 EMORY INT'L L. Rev. 71 (1995).

^{3.} See, e.g., Jones, supra note 1, at 11. In his lecture, John F. Avery Jones concludes:

[[]W]hile trade treaty negotiators continue to defer to tax treaties, tax authorities are not likely to make any progress away from more and more tax treaties and toward globalization. Surely the next logical step is for the OECD, having become the representative organization on tax for all states, not just its members, to take charge of international tax on a world basis in a way that would lead to treaties becoming obsolete. That would be building upon, not destroying, its (and its predecessors') excellent work of the last 70 years in harmonizing tax treaties because, without them, no progress would have been possible. I wonder whether the Multilateral Agreement on Investment will be the first step on that road.

Id. See also Lee Burns, Commentary, 53 Tax L. Rev. 39, 43-48 (1999) (discussing ways to use bilateral treaties, multilateral treaties, and model income tax laws to achieve greater coordination between the tax laws of different countries).

^{4.} This question can be phrased in several different but related ways: Do tax treaties serve to reduce double taxation to levels lower than the unilateral levels? Do treaties create an equilibrium that could not have been stabilized unilaterally? Do they create a focal point that, though more efficient, would be difficult for countries to reach without treaties?

usually allocate the revenues more to the benefit of "residence" countries.⁵ The revenue disparity is probably insignificant between two developed countries. But in treaties between developing and developed countries, usually host and residence countries respectively, reallocating tax revenues means regressive redistribution—to the benefit of the developed countries at the expense of the developing ones.

Part II tells the conventional story of why tax treaties exist. Part III explores how cross-border investment would be taxed in a world without tax treaties. It deals separately with host and residence countries, analyzing their interests, their unilateral policies, and the equilibrium reached when these policies interact. Part IV compares the unilateral solution to the treaty mechanism and analyzes the gains and losses entailed by the treaty mechanism.

This Article shows that double taxation treaties are not an essential tool for alleviating double taxation; indeed, this is a myth. They are no more than a means for alleviating administrative costs and for residence countries to extract tax concessions from host countries.

II. THE CONVENTIONAL STORY

The conventional account of treaties for the prevention of double taxation highlights their critical role in preventing double taxation. This account assumes that in the absence of tax treaties, double taxation would inevitably occur. It stresses the indispensability of *mutual* cooperation in preventing the harms of double taxation.

Double taxation is considered to be one of the most acute problems in international taxation. It occurs when more than one country taxes the same income. The classic case of double taxation arises when a resident of one country produces income in another country and is subject to tax on that income by both her country of residence as well as the country in which her income is earned (the host country). Double taxation is often

^{5.} The "host" country refers to the country where the investment is made, while the "residence" country refers to the country where the investor resides.

^{6.} The use of the term double taxation may imply that there is something inherently wrong with this phenomenon and something inherently correct about having only one of the involved countries impose its taxes. I prefer to view international taxation on a continuum of the combined levels of taxation imposed by residence and host countries. Such a continuum begins at no taxation whatsoever, through different mechanisms of alleviating double taxation in the host and residence countries, and ends at both countries imposing their taxes without any alleviation whatsoever. None of the different points along this continuum is "right" or "normal" in any greater sense than the other points. The definition of a "good" level

cited as a major obstacle to unfettered economic progress. Historically, countries have used two approaches to alleviate double taxation: a unilateral approach and a bilateral approach. The *unilateral approach* offers a range of policies a country may adopt to affirmatively reduce (or altogether eliminate) the double taxation burden placed on its own residents, irrespective of the host country's policy and independent of any bilateral treaty provisions. The *bilateral approach*, on the other hand, advocates implementation of tax treaties formulated by signatory countries that are aimed at alleviating double taxation on the investments of the residents of the one signatory state in the other signatory state.

It has long been the prevailing assumption that if countries are left to their own unilateral devices, double taxation will result. Tax treaties, under this conventional wisdom, are critical for alleviating this double taxation. Treaties are usually thought to be effective tools (indeed, the *most* effective tools) for preventing double taxation. This viewpoint is commonly articulated in the comments of U.S. and international government agencies and regulatory bodies, as well as by some academic panels.⁷

of taxation and a "bad" level depends, I believe, on what we would like to achieve.

7. See, e.g., STAFF OF SENATE COMM. ON FOREIGN RELATIONS, 105TH CONG., EXPLANATION OF PROPOSED PROTOCOL TO THE INCOME TAX TREATY BETWEEN THE UNITED STATES AND CANADA 4 (Comm. Print 1997) ("The traditional objectives of U.S. tax treaties have been the avoidance of international double taxation and the prevention of tax avoidance and evasion."); COMM. ON FISCAL AFFAIRS, ORG. FOR ECON. CO-OPERATION & DEV., MODEL TAX CONVENTION ON INCOME AND ON CAPITAL, at I-1 (1997) (declaring that eliminating the "harmful effects" of double taxation is the main purpose of the OECD Model Tax Convention) [hereinafter OECD Model Tax Convention]; U.N. Dep't of Int'l ECONOMIC & SOCIAL AFFAIRS, MANUAL FOR THE NEGOTIATION OF BILATERAL TAX TREATIES BETWEEN DEVELOPED AND DEVELOPING COUNTRIES at 12, U.N. Doc. ST/ESA/94, U.N. Sales No. E.79.XVI.3 (1979) (emphasizing the role model tax conventions play in eliminating double taxation and coordinating international tax policies and practices); United Nations Model Double Taxation Convention Between Developed and Developing Countries 1 (1980) [hereinafter United Nations Model Double Taxation Convention]; Rev. Proc. 91-23, 1991-1 C.B. 534 (stating that "avoiding the double taxation of income, property or property transfers" is a main function of tax treaties); Doernberg, supra note 2, at 71 ("A central purpose of an income tax treaty is to facilitate international trade by minimizing tax barriers in the exchange of goods and services across national boundaries An income tax treaty strikes a compromise by relaxing the domestic rules of both the residence and source states in order to promote international activities."); H. David Rosenbloom, Tax Treaty Abuse: Policies and Issues, 15 LAW & Pol'Y INT'L Bus. 763, 768 (1983) ("The fundamental goal of tax treaties is removal of the negative effects of double taxation on the international movement of goods, services, capital, and people "); H. David Rosenbloom, Current Consider, for example, the comments of the American Law Institute (ALI), which starts its report on U.S. income tax treaties by stating that "[t]he principal function of income tax treaties is to facilitate international trade and investment by removing—or preventing the erection of—tax barriers to the free international exchange of goods and services and the free international movement of capital and persons." Similarly, the Organization for Economic Co-operation and Development (OECD) has noted that "[t]he purpose of double taxation conventions is to promote, by eliminating international double taxation, exchanges of goods and services, and the movement of capital and persons" and that

the phenomenon of international juridical double taxation . . . [and its] harmful effect on the exchange of goods and services and movement of capital, technology, and persons are so well known that it is scarcely necessary to stress the importance of removing the obstacles that double taxation presents to the development of economic relations between countries. ¹⁰

The traditional story tells us that instead of each country collecting its taxes at its regular level of taxation without any alleviation, a treaty

Developments in Regard to Tax Treaties, 40th N.Y.U. INST. ON FED. TAX'N, pt. 2, § 31.03[1], 24 (1982) ("At minimum, a tax treaty is intended to 'avoid double taxation.""); CHARLES H. GUSTAFSON & RICHARD CRAWFORD PUGH, TAXATION OF INTERNATIONAL TRANSACTIONS 1991-1993 451 (1991); H. David Rosenbloom & Stanley I. Langbein, *United States Treaty Policy: An Overview*, 19 COLUM. J. TRANSNAT'L L. 359, 365-366 (1981). According to Rosenbloom and Langbein:

The first question—what tax treaties are intended to achieve—was considered in the first report of the economists: double taxation represents an unfair burden on existing investment and an arbitrary barrier to the free flow of international capital, goods and persons. Nations should therefore seek to eliminate—or at least alleviate—these undesirable consequences of double taxation. The second question concerned the choice of bilateral approaches to eliminating double taxation. The early work of the league revealed the justification for bilateral approaches. Multilateral agreement is difficult when countries are in different legal or economic circumstances; unilateral measures, on the other hand are almost inevitably ineffectual

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^{8.} AMERICAN LAW INSTITUTE, FEDERAL INCOME TAX PROJECT: INTERNATIONAL ASPECTS OF UNITED STATES INCOME TAXATION II, PROPOSALS ON UNITED STATES INCOME TAX TREATIES 5 (1992) [hereinafter A.L.I., TAX TREATIES]. The reporters further state that "[p]erhaps the most important policy which income tax treaties are designed to implement is to avoid the double taxation of income which can arise when two (or more) countries seek to levy a tax on the same income base" Id.

^{9.} OECD Model Tax Convention, *supra* note 7, at C(1)-2.

^{10.} Id. at I-1.

makes each signatory country relinquish something in order to avoid double taxation. The residence country is usually willing to grant its residents a credit for the taxes paid to the host country (although an exemption is also feasible), provided that the latter either reduces the taxes it collects on investments from the residence country¹¹ or grants a reciprocal credit.¹² The residence and host countries' losses of tax revenues are, so they are often presented, the price of enjoying the benefits of higher levels of cross-border investment (with the resulting benefits of greater exports, higher wages, and increased standard of living).¹³

At first blush, this story makes a lot of sense. Since both countries can gain *more* from free trade than from the tax revenues they may collect by limiting free trade, it seems reasonable to forego tax revenues in exchange for capturing the benefits of cross-border investment.

The problem with the conventional story, however, is that it is premised upon the false assumption that double taxation would occur in the absence of tax treaties. The truth of the matter is that, even in the absence of tax treaties, countries have incentives to alleviate double taxation unilaterally, even without the cooperation of other countries. If each country were to implement a unilateral policy to prevent double taxation, the interaction between the unilateral policies of the residence and host countries would—as I show below—result in a stable equilibrium in which double taxation is, in fact, alleviated. That is to say, there is no reason why cross-border investment should be lower in a world without tax treaties than in one with them. If this is correct, there must be another explanation for the existence of tax treaties.

Not all the commentators subscribe to the conventional story. Some have downplayed the role that treaties play in actually alleviating double taxation. Elisabeth Owens expressed an especially skeptical view when she argued in 1963 that "U.S. income tax treaties play a very marginal

^{11.} This is usually the case of passive income. *See, e.g., id.* arts. 10 (Taxation of Dividends), 11 (Taxation of Interest), 12 (Taxation of Royalties).

^{12.} This would usually be the case with business income or personal services. *See, e.g., id.* arts. 7, 15; United Nations Model Double Taxation Convention, *supra* note 7, arts. 7, 15; United States Department of Treasury, Treasury Department's Proposed New Model Income Tax Treaty of June 16, 1981, arts. 7, 15, 1 Tax Treaties (CCH) ¶¶ 211.07, 211.15 [hereinafter U.S. Model Income Tax Treaty].

^{13.} See, e.g., A.L.I., Tax Treaties, supra note 8, at 2 ("The loss (or potential loss) of revenue which this entails is accepted as the price of obtaining the perceived benefit to the participating countries of assuring tax-payers of neutral tax treatment with respect to their international activities, thus promoting international commerce and contributing to the optimal allocation of world resources.").

role in relieving double taxation . . . [since] the U.S. has unilaterally provided for the avoidance of double taxation for its own citizens, corporations, and residents through the foreign tax credit provisions of the Internal Revenue Code;" 14 moreover, "for most taxpayers the amount of relief is minimal compared with that provided under United States internal law" Owens's article did not have much of an impact in the literature, perhaps because it concentrated solely on the United States and did not show that the phenomenon was almost universal. Furthermore, Owens did not consider the need for tax treaties from a more principled and abstract standpoint because she refrained from questioning whether the United States's unilateral mechanism reflected a general and predictable unilateral mechanism or whether it was merely contingent and coincidental. More recently, some commentators have mentioned the relatively marginal role tax treaties play, but without any reflection as to the magnitude of the phenomenon or its theoretical explication. In any case,

14. Elizabeth A. Owens, *United States Income Tax Treaties: Their Role in Relieving Double Taxation*, 17 Rutgers L. Rev. 428, 430 (1963).

16. See Joseph Isenbergh, International Taxation: U.S. Taxation of Foreign Persons and Foreign Income 55:2 (2d ed. 1996) ("[I]ncome tax treaties can easily be taken at first inspection as measures designed to confer tax relief on certain individuals or enterprises. In fact, that is rarely their function. Tax treaties are principally concerned with the apportionment of tax revenues between the treasuries of the treaty countries "); see also Paul R. McDaniel & Hugh J. Ault, Introduction to United States International Taxation 151 (1977) (noting that many countries alleviate double taxation with unilateral measures and use treaties to "refine and adapt" these measures "to the specifics of the tax relationships between the two countries involved"); Julie A. Roin, Rethinking Tax Treaties in a Strategic World with Disparate Tax Systems, 81 Va. L. Rev. 1753, 1767 (1995) (arguing that the use of unilateral measures for avoiding double taxation has "blunted U.S. taxpayers' incentives to use treaty provisions"). Julie Roin states:

[T]hese bilateral agreements typically provide for reciprocal reductions in each treaty partner's source taxation of income earned by residents of the other treaty partner. Though some of these source tax reductions are intended to benefit investors through the elimination of 'excessive taxation,' many are intended to effect a roughly neutral exchange of tax revenues between the source and residence countries.

Id. at 1763 (footnotes omitted); Pierre Gravelle, Tax Treaties: Concepts, Objectives and Types, 42 Bull. For Int'l Fiscal Documentation 522, 523 (1988) ("While the elimination of double taxation is an objective which is usually stated in its title, in reality a treaty is more correctly described as an instrument which refines and improves existing provisions in the domestic legislation which are designed to accomplish that end").

17. One commentator who did broach these topics is Koichi Hamada,

^{15.} Id. at 446.

the occasional implied support for Owens's views by such commentators has not had any substantial effect on policy-makers. The ALI, for example, still describes a state of consensus: "There is remarkably broad and well-established consensus among governments of various political and economic persuasions that it is in their interest to enter into income tax treaties "18 This consensus, unfortunately, is misguided, as the systematic analysis offered below demonstrates. Treaties do not offer a "benefit for all" solution under any and all circumstances. Treaties can offer some benefits for some countries while entailing substantial costs for others. The signatory countries should be careful when assessing the costs and benefits of treaties. As shown below, this is especially true for developing countries.

III. INTERACTION OF NATIONAL POLICIES

In order to understand fully the role tax treaties play, we first need to imagine a world without them. Accordingly, I begin by exploring each country's possible interests and the unilateral policy that would serve

Strategic Aspects of Taxation on Foreign Investment Income, 80 Q. J. Econ. 361 (1966). Hamada, however, presented a model built on two large countries that can each affect world prices of capital and assumed that the only available mechanism for double taxation alleviation is a deduction. In this framework, he showed that the uncoordinated unilateral actions of the two countries create a prisoner's dilemma, whereas a binding agreement between them would produce the optimal outcome. The situation I discuss, however, is different. In this Article, I assume that countries cannot affect world prices of capital (which is a much more realistic assumption for the majority of countries) and that the unilateral interests of countries make it profitable for them to alleviate double taxation unilaterally by using not only a deduction but also credits and exemptions. These assumptions influence their preferences and create an equilibrium different from the one described by Hamada.

18. A.L.I., TAX TREATIES, *supra* note 8, at 12. It is interesting to consider that the ALI assesses the extent to which treaties are necessary for achieving the goal of preventing double taxation and notes the fact that "many of the goals . . . could be achieved in whole or major part through the legislative process, without the need to conclude treaties." *Id.* The ALI, however, reaches the conclusion that "income tax treaties will remain an important part of United States law." *Id.* at 14. The most important reason for this, in the eyes of the reporters, "is the fact that a country may be prepared to modify its domestic law rules only when satisfied that it is (and its taxpayers are) deriving appropriate reciprocal concessions from the foreign country concerned." *Id.* at 13. This Article shows that treaties do not provide any benefit that could not be achieved by the interaction of unilateral policies—excluding, of course, more favorable allocation of tax revenues from the perspective of developed countries.

those interests. I first examine these policies from a strictly national perspective—taking all other countries' policies, particularly those of potential counterparts in negotiations, as a given. Discussing optimal policies in isolation—that is, discussing a country's optimal policies detached from the policies of other countries—is admittedly oversimplified since it is more plausible to assume that countries do not operate in isolation but rather continually refine their own policies in response to actions taken by other countries.¹⁹ Because the outcomes of their policies are interdependent, both the host country and the residence country take each other's policies into consideration; each formulates its international tax policy in a strategic manner. Therefore, using game theory tools, I will expand the analysis to include the possible interactions between the national interests of the negotiating countries. After a brief presentation of the game theory methodology in Section A, I will proceed with an examination of the residence country and host country interests from a strictly national perspective. Section B will analyze the typical host country (that is, a small country that cannot affect world capital prices). Section C will then discuss the three most common types of residence countries²⁰ and the inter-

19. Most important for the purposes of this paper, countries interested in attracting investors must realize that the incentive for cross-border investment is created by the taxes of the host country and residence country combined. The table below describes some possible interactions.

Residence country	Host country	Level of incentive for cross-border invest- ment	Who collects?
Exemption	No tax	High incentive	None
Credit	No tax	Moderate	Residence
Deduction	No tax	Moderate	Residence
Exemption	Tax	Moderate	Host
Credit	Tax	Moderate	Host
Deduction	Tax	Low incentive	Both (re- duced)
No alleviation	Tax	Lowest incentive	Both

The first row, for example, shows that, in order to create a high level of incentive for cross-border investment, it is not enough for the host country to exempt its foreign investors; rather, their country of residence should exempt them as well. If, however, the investors' country of residence does not exempt them, but instead grants them a credit (as in the second row) or a deduction (as in the third row), only a moderate incentive for cross-border investment will be created despite the fact that the host country offers an exemption.

20. To be sure, these different types of countries represent different points along the spectrum of possibilities from (1) no taxes and a high level of outbound investment and (2) some taxes and a moderate level of action between the different policies of each with a host country's policy. Within Section C, Subsection 1 will discuss the interaction between a "deduction" residence country and a host country; Subsection 2 will discuss the interaction between a "credit" residence country and a host country; and Subsection 3 will discuss the interaction between an "exemption" residence country and a host country.

As I will conclude, the interaction between the policy of the host country and the different unilateral policies of each type of residence country gives rise to a stable²¹ equilibrium that prevents double taxation.

A. The International Tax Game

The world of international taxation may be understood in game theory terms. International tax policies are not crafted in a vacuum. Residence and host countries make strategic policy choices that result in an outcome affected by the interaction of those policies with the chosen strategies of other countries. In other words, one country's policies affect the outcome of another country's policies and vice versa. Therefore, policy planners must be aware of actions taken by other countries with tax policies that may influence domestic economic behavior and must devise their country's policy in a way that would best serve the country's interests.²²

outbound investment to (3) more taxes with a low level of outbound investment.

^{21.} In comparison, it is interesting to note the fear of the instability of the tax treaty net, as expressed recently by Doernberg, *supra* note 2, at 72 ("The balances represented in the network all too easily could be upset by any single participant's short sighted unilateral action. The success of the network is only as strong as the good faith of its participants.").

^{22.} One simple example of this interdependence of countries' policies is the foreign tax credit and its limitation as employed by the United States. The United States grants a credit for foreign taxes imposed on its residents' activities abroad. This creates an incentive for foreign countries to raise their taxes, even if, in the absence of such a credit, they would prefer not to tax foreign investors. Note the incentives created for foreign governments. A U.S. investor will not incur any real tax liability by investing in the foreign country, whatever the tax rate may be. The foreign country could therefore generate sizable tax revenues without deterring investment from U.S. nationals. As taxes paid by U.S. investors to foreign governments increase, credits offered by the U.S. government necessarily increase as well. (In effect, this would be a wealth transfer from the U.S. to the foreign countries.) The credit limitation, however, reduces the incentive of the host country to raise its taxes to a level higher than the allowed credit. Some have argued that the policy behind the limitation was an attempt to limit the abuse of the credit while preserving neutrality.

Game theory analysis can help us hypothesize about a world in which countries, acting on political, economic, and social self-interest, resort solely to unilateral mechanisms to contend with double taxation problems. We can imagine a game in which each country chooses international tax policies that maximize these interests. Since a country's national interests are affected not only by its own policies but also by those of other countries, we should try to imagine the optimal policy for each country while considering the possible responses of other countries to such policy. The policies chosen unilaterally by the different countries interact to create an international taxation landscape devoid of any treaties. The scenery of this landscape will, therefore, depend not only on the impact of existing unilateral policies, but also on the potential interplay between the policies of different countries with their varying national interests.

This analysis assumes that each country seeks to promote its own economic and social welfare.²³ For the purposes of this Article, I will assume that each country furthers its economic and social welfare by devising mechanisms towards achieving a desired level of cross-border investment. The various levels of outbound investments (each level promoting a different set of policy goals) are "preferences" in game theory terms; that is to say, they represent the order in which each country ranks the possible outcomes of the game. The ranking of these preferences frequently varies between residence countries as well as between residence and host countries. Residence countries may differ in their desire to promote outbound investments. A higher level of outbound investments best serves some countries' interests, while other countries' interests are best

See, e.g., Julie A. Roin, *The Grand Illusion: A Neutral System for the Taxation of International Transactions*, 75 Va. L. Rev. 919, 930 (1989); Michael J. Graetz & Michael M. O'Hear, *The "Original Intent" of U.S. International Taxation*, 46 Duke L.J. 1021 (1997). For a critique of the limitation as a "defensive neutrality" policy, *see* Tsilly Dagan, *National Interests in the International Tax Game*, 18 Va. Tax Rev. 363, 395 (1998).

^{23.} Viewing the State as a body with one uniform interest is obviously an oversimplification. In order to fully understand what the "interests of the country" would be, we need to understand the interests and the power relations of the different actors and groups within each country. *See* Eyal Benvenisti, *Exit and Voice in the Age of Globalization*, 98 MICH. L. REV. 167 (1999) (arguing that many of the pervasive conflicts of interest between nation-states are in fact more internal than external and stem from the heterogeneity within states; further suggesting that many domestic interest groups cooperate with *foreign* interest groups, across national boundaries, in order to impose their externalities on their respective rival *domestic* groups). In this Article, however, I have taken the safe route, choosing to ignore the power relations within a country and concentrating on the (assumed) optimal national policy.

served by limiting the level of outbound investments.²⁴ Residence countries and host countries may differ not only in the extent to which they seek to encourage different levels of cross-border investment,²⁵ but also in the proportional share of tax revenues they seek to reap from cross-border investment. In what follows, I will consider different assumptions voiced with regard to the preferences of host and residence countries.

The different possible assumptions give rise to a series of possible games. The various games developed below in some detail demonstrate that the interaction between unilateral strategies under each of the different assumptions produces a stable equilibrium under which double taxation is prevented. Unilateral alleviation of double taxation emerges not only as the common practice among nations, but also as a stable condition (or a "stable equilibrium" in game theory terms). In essence, unilateral alleviation of double taxation is a stable mechanism that could be a successful technique for preventing double taxation.

And finally, we must note one last technical remark. In bilateral treaties, each country is assigned two different roles—that of the investor's country of residence and that of a host country (where the investment, or the economic activity, takes place). The countries have reciprocal rights and duties, since each country is both a residence country to its resident-investors and a host to the other country's residents. But one could also conceive of a treaty as an agreement between a residence country and a host country in which the former provides some alleviation from double taxation in return for some reduction by the host country in its tax rates for investors who are residents of the residence country. For methodological reasons I will address this conception of a bilateral tax treaty first and analyze the respective interests of a residence country and a host country in the context of the international tax interaction between them. Section C in Part IV below returns to the former approach—where a treaty is regarded as a conglomeration of reciprocal rights and duties between the signatories—and discusses what part, if any, such duality plays in the outcome of the negotiations between the two countries.

B. The National Interests of Host Countries

This section explains that the optimal policy for a small host country would be to eliminate, even unilaterally, all taxes²⁶ imposed on foreign

^{24.} For an analysis of this question, see generally Dagan, supra note 22.

^{25.} While the host country probably prefers the highest level of crossborder investment created by an exemption, the residence country may prefer a lower level of outbound investment.

²⁶ Other than benefit taxes (i.e. taxes paid for specific benfits in goods

investors. Only in cases where eliminating taxes altogether is not possible would such a country be interested, as a second best option, in collecting the largest possible piece of the tax revenue pie.

One of the tenets of international economics is that cross-border investment, just like cross-border trade, is beneficial to both residence and host countries.²⁷ In order to maximize the benefits from cross-border investment and avoid the welfare-reducing effects of taxes, a small open economy should not tax foreign investments.²⁸ The rationale behind this is that, if the international capital market is competitive, a small country (whose market power can have no effect on the worldwide rate of return) seeking to attract foreign investment must compete with investment opportunities offered in other countries. In other words, if a host country decides to tax capital investment, investors will prefer other countries. As a result, the increased tax revenues that the host country reaps will not compensate for the loss of greater foreign investment; that is, such a tax increase would be economically inefficient.²⁹ Therefore, in order to

and services).

^{27.} See, e.g., Paul R. Krugman & Maurice Obstfeld, International Economics, Theory and Policy 113 (2d ed. 1991). But see Joel Slemrod, Tax Principles in an International Economy, in World Tax Reform: Case Studies of Developed and Developing Countries 11, 13 (Michael J. Boskin & Charles E. McLure, Jr. eds., 1990) ("[O]penness is a mixed blessing when the taxing authority has limited ability to tax cross-border movements of factors and goods. A discussion of tax principles in an international economy must come to terms with the real world, where the implementation of certain tax systems, which may be desirable in theory, is extremely difficult.").

^{28.} See, e.g., Slemrod, supra note 26, at 13;

Capital imports should occur as long as their contribution to the domestic economy, the marginal product of capital, exceeds the cost to the economy. A small country must compete with investment opportunities elsewhere, so it must offer the foreign investor the going after-tax rate of return. This level of capital imports will be achieved if such imports are completely exempt from taxation by the importing nation, because in this case foreign investors will, in their own interest, invest until the domestic marginal product equals their opportunity cost, the after tax world rate of return. Any attempt to tax capital imports will cause the country to forgo domestic investment whose contribution to national income exceeds the cost to the nation.

^{29.} For a thorough discussion of the "tax wedge" and welfare effects of a capital income tax in a small open economy, see A. Lans Bovenberg et al., Tax Incentives and International Capital Flows: The Case of the United States and Japan, in Taxation in the Global Economy 283, 291-92 (Assaf Razin & Joel Slemrod eds., 1990).

In economic terms, the income tax "crowds out" foreign investment, resulting in a loss in national welfare, which may be measured by a "tax

maximize benefits from foreign investments, the host country has a genuine interest in reducing the tax wedge, since it will thus attract foreign investors by enabling them to pay as little tax as possible.

It is important to note that the tax wedge—namely, the efficiency loss due to the imposition of taxes—comprises all the taxes imposed by the host and the residence countries combined.³⁰ Minimizing the tax wedge therefore means reducing the combined taxes of the host and residence countries. Hence, the host country should take the residence country's policies into consideration when determining which policy is optimal.

If the residence country *exempts* its residents' foreign investments, the host country's best policy would be not to tax such investors, since any tax will create a tax wedge.³¹

If, however, the residence country taxes its residents on their foreign investment activities, then the host country will not be able to completely eliminate the tax wedge unilaterally. It can, on the other hand, capture tax revenues from foreign investment without increasing the tax wedge if the residence country provides a *credit* for foreign taxes paid by its own residents. The residence country would, in effect, be reimbursing its resi-

wedge." This "crowding out" effect arises because the tax makes some investments not profitable. Without the host country's tax, investors would be willing to invest in the host country so long as the before-tax return they receive on their host-country investment is at least as high as the market interest rate determined in world capital markets (the "opportunity cost" of investing in the host country). If the host country taxes such investments, these investors require a higher before-tax return to continue investing in the host country because of the increased cost from the tax. However, not every investment opportunity in the host country can generate the higher before-tax return since some investment projects are more profitable than others. Foreign investors will still invest in those high-return projects in the host country. However, foreign investors will no longer invest in projects that attracted foreign investment before the host country tax was imposed. That is to say, the host country tax "crowds out" foreign investment that would otherwise flow into the host country in the absence of such a tax. The amount of investment that is "crowded out" is measured by assessing the difference between the new, before-tax required return and the rate of return on world capital markets (i.e., the old, before-tax required rate of return) on the amount of investment that is lost as a result of the tax. See id. at 290-92. This amount is referred to as a "tax wedge" so that it can be graphically depicted as a triangle on familiar supply-demand graphs.

^{30.} See Bovenberg et al, supra note 28, at 288-94.

^{31.} A subsidy would also not be desired as it would create a tax wedge of its own. *See* Mark Gersovitz, *The Effect of Domestic Taxes on Foreign Private Investment, in* The Theory of Taxation for Developing Countries 615, 619-22 (David Newbery & Nicholas Stern eds. 1987).

dents for the taxes they pay to foreign governments. A host country would then benefit most from this credit granted by the residence country if it were to impose the highest possible tax rate on foreign investment that the residence country is willing to credit. 32 (Levying taxes that are creditable against a foreign investor's domestic tax liability would not discourage foreign investors, but would instead raise tax revenues for the host country.) Under a limited credit mechanism (i.e., a credit limited to foreign taxes at or below the residence country's tax rates, as is the case in the United States), this would mean taxing foreign investors at rates equal to those set by the residence country.

Finally, if a residence country allows a *deduction* for foreign taxes, then the host country would be better off not taxing foreign investors from that residence country. Deductions do not fully offset the amount of foreign taxes paid.³⁴ Therefore, any tax imposed by the host country increases the tax wedge and does not advance the host country's goals.³⁵

In sum, if a host country's primary policy goal is to eliminate the tax wedge, it must sacrifice tax revenues to increase foreign investment. However, if completely eliminating the tax wedge is an impossibility because the residence country does not exempt its residents' foreign-source income from taxation, then the host country should try to collect as large a portion of the tax imposed as possible. Under a limited credit mechanism, this would mean taxing foreign investors at rates similar to those of the residence country, whereas an exemption or deduction mechanism would entail not imposing any tax whatsoever on foreign investment in the host country.

^{32.} See Slemrod, supra note 27, at 14 (noting that "raising the tax on capital imports toward the tax rate of the capital exporting country does not reduce the after-tax return to the investor (because the tax payments are offset by credits against their own domestic tax liability), and does not deter capital imports.").

^{33.} In fact, under these circumstances, the best policy for the host country would be to tax the foreign investment but then provide the foreign investors with a subsidy that would reimburse them for the taxes they paid. Thus, the host country would effectively be able (residence country's laws permitting) to eliminate the tax wedge even when the residence country is taxing its own residents. *See* Gersovitz, *supra* note 30, at 619-23.

^{34.} While a credit reduces the taxes that should be paid to the residence country by the sum paid to the host country, deductions only reduce the taxable income by that sum.

^{35.} Unlike in the case of an exemption, an increase in the host country's taxes would affect the tax wedge only partially since the host country's tax is deductible; but it would still mean that the wedge would increase and therefore the host country would be better off without such a tax.

Based on this analysis we can conclude that the host country's order of preferences (the order in which it would rate its policy choices) would be as follows:

- 1. To prefer most that no taxes be levied by either country (exemption in the residence country/no tax in the host country), thereby preventing any tax wedge from forming.
- 2. To prefer less that a moderate level of cross-border investment take place and that the host country gets to collect tax revenues. This would be the case if the residence country were to provide a credit and the host country to tax foreign investments at rates equal to the residence country's rates (credit/tax).
- 3. To prefer even less that a moderate level of cross-border investment take place, *but* the host country does not get to collect any tax revenues. This would occur when the residence country employs either a credit or a deduction mechanism and when the host country does not tax foreign investment (deduction or credit/no tax).
- 4. To prefer least that a low level of cross-border investment take place, which would be the case if the residence country opts for a deduction mechanism and the host country taxes foreign investment (deduction/tax).

C. The National Interests of the Residence Country

Determining the optimal policy is more complex for a residence country than for a host country. There is widespread agreement that a residence country should alleviate double taxation unilaterally rather than let its residents bear the burden of double taxation (which would limit the level of outbound investment). There is much less consensus, however, as to which unilateral mechanism for alleviating double taxation best serves the interests of a residence country. This section discusses the three policy options most commonly advocated for residence countries,

^{36.} There are those (mostly in the business community) who support exemption as it would improve the competitiveness of the residence country's investors abroad with a corresponding improvement in national welfare. Others emphasize that exempting foreign investment would create an incentive for residents to invest abroad, thus creating a misallocation of resources, efficiency damage, and possibly damage to immobile resources (labor in particular). Still others support a deduction policy and weigh government revenues alongside the benefits to the residents of the country involved. For a general description of this debate, see Daniel J. Frisch, *The Economics of International Tax Policy: Some Old and New Approaches*, 47 Tax Notes 581, 581-85 (1990) and Dagan, *supra* note 22, at

demonstrating how each policy will avoid double taxation because of the interaction between the policies of the residence and host countries.

The debate as to the optimal policy for a residence country centers on three common unilateral mechanisms for alleviating double taxation: exemptions, credits, and deductions. An *exemption* allows residents investing in foreign countries to exclude foreign income earned when calculating their income subject to residence country taxes.³⁷ A *credit* system allows taxes paid in a foreign host country to be credited against residence country taxes that are assessed on aggregate income earned in the residence country and in the host country.³⁸ Finally, under a *deduction* system, a resident may deduct the taxes paid to a host country as deductions in calculating his taxable income in his residence country.³⁹

The traditional debate between proponents of the different mechanisms has revolved around the different concepts of neutrality associated with the three mechanisms: National Neutrality (deduction); Capital Export Neutrality (credit); and Capital Import Neutrality (exemption).⁴⁰ For the purposes of this Article, it suffices to point out the two major aspects

^{37.} For example, consider an investor, a resident of Country A (whose regular tax rates are 40%), who earns \$100 of income in Country B. An exemption means that this investor will not pay any taxes to Country A for the income produced in Country B. Assuming that Country B collects \$20 in taxes from that income, the investor would have a net income of \$80.

^{38.} In the example in *supra* note 37, the taxpayer will tentatively owe \$40 in taxes to Country A, but will be allowed to credit the \$20 he paid to Country B against his \$40 tax liability in Country A. Thus, he would have to pay only \$20 in taxes to Country A in addition to the \$20 he's already paid to Country B, leaving him with a net income of \$60. Most countries granting a credit limit it to the amount of taxes owed on foreign source income.

^{39.} In the example in *supra* note 37, the resident-investor's taxable income in Country A under a deduction mechanism would be only \$80 since the \$20 paid in Country B's taxes are deducted from his \$100 taxable income. Thus, he will have to pay an additional \$32 in residence country taxation (40% of \$80), leaving him with total tax payments of \$52 and a net income of \$48.

^{40.} See, e.g., Frisch, supra note 36, at 582. I discuss (and criticize) elsewhere the debate between supporters of the three types of neutrality, and it is not necessary to reexamine this issue here. See, e.g., Dagan, supra note 22, at 374-77. In that Article, I describe the motivations for the different kinds of "neutrality" and argue that "neutrality" of any kind is not mandated as the principle guiding the international tax policy of a single country. Instead, each country should look at the different mechanisms (deduction, credit, and exemption) as part of the means that are available for it to promote its optimal level of outbound investment. Efficiency considerations, broader policy arguments, as well as strategic considerations can and should be merged for tax policy purposes in forming this optimal level of outbound investment.

that distinguish the different mechanisms (and their associated concepts of neutrality) from one another. The *first aspect* is the level of outbound investment encouraged by the mechanism assuming that the host country taxes foreign investments. Generally speaking, ⁴¹ an exemption provides the highest incentive for outbound investment; a credit encourages an intermediate level of outbound investment; and a deduction provides the smallest incentive, thus encouraging the lowest level of outbound investment. The *second aspect* of the distinction is what proportion of tax revenues, if any, is collected by the host country and the residence country.

In the following discussion, I will describe in detail the interests of three prototypes of residence countries: those that prefer a *high* level of outbound investment, even at the cost of collecting tax revenues;⁴² those that prefer a *moderate* level of outbound investment—that is, are willing to sacrifice tax revenues for more investment, but are unwilling to create an incentive for their residents to invest abroad instead of at home;⁴³ and those that prefer a *low* level of outbound investment (namely, countries that are interested in the combined benefits of outbound investment and tax revenues).⁴⁴

For convenience purposes only, I will name each of these prototypes after the mechanism that would best serve its purposes when the host country taxes foreign residents. Thus, an "exemption country" is a country that is willing to give up its tax revenues in order to achieve a high level of outbound investment; a "credit country" is willing to give up its tax revenues for more outbound investment, but is not willing to create an incentive for its residents to invest abroad rather than at home; and a "deduction country" is a country that is unwilling to give up its tax revenues for more outbound investment. The terms "exemption," "deduction," and "credit" will serve merely as "code names" for the various policies of residence countries, intended to simplify the reading of the rest of this Article. They are not meant to imply that the residence country would prefer those mechanisms no matter what policy the host country adopts, but rather, what the optimal mechanism would be based on the assumption that the host country taxes foreign investments.

I will first consider the third prototype—a residence country that is best served by a combination of lower outbound investment and some tax revenues (a "deduction country"). I then move on to a residence country that is best served by a moderate level of outbound investments (a "credit

^{41.} This assumes lower tax rates in the host country.

^{42.} Such a country will unilaterally provide its residents with an exemption.

^{43.} Such a country will unilaterally provide a credit.

^{44.} Such countries would opt for a deduction mechanism.

country") and conclude with a residence country interested in the highest level of outbound investments (an "exemption country"). I will examine how the policies of each country interact with the policies of host countries, in order to show the results of such interaction.

1. Deduction

In assuming that the optimal policy of a residence country would be to provide a low incentive for outbound investments and collect more tax revenues per investment, we find, at first glance, a forceful explanation for the need for tax treaties. It seems logical to assume that both the host country and the residence country would benefit by reducing, through agreement, the combined level of taxation in order to achieve a higher level of cross-border investment flowing from the residence country to the host country. Cross-border investments entail benefits to both the host and the residence countries. While the cost in tax revenues could be too high if borne by one country alone, it should be a reasonable price if paid by both countries.

However, the closer look taken below reveals that even under this assumption, unilateral policies could create an equilibrium free from double taxation. Moreover, prevailing international tax policies do not support deduction as a way of serving a residence country's national interests.

a. Why Might a Deduction Policy Be Preferred?

If only tax revenues and investors' income are taken into account by a residence country in determining its optimal policy, a small open economy would encourage outbound investments as long as the return on those investments (excluding the tax paid to foreign governments) exceeds the return on domestic investments (including any tax paid to the residence country's government). Essentially, under these circumstances, any taxes paid to a foreign government would not be part of the national benefits from outbound investment. The residence country could encourage investment under these terms by applying a personal taxation system (i.e., taxing residents/citizens on their worldwide income) and allowing taxpayers to deduct foreign taxes from their taxable income. The deduction would be a unilateral mechanism for maximizing the revenues both of the investors residing in such a country and of the residence country itself.

^{45.} See Slemrod, supra note 27, at 13.

Such a policy, often labeled "National Neutrality," has been greatly criticized in the literature as shortsighted since it ignores the interaction between the policies of different countries. Some have criticized it as a "beggar-thy-neighbor policy" in the sense that it is a non-cooperative policy that is bound to fail since it seeks to benefit the residence country at the expense of other countries.

It is not clear whether the "other countries" allegedly injured by this policy are other residence countries that compete with the non-cooperative country, or host countries that would enjoy less foreign investments due to the higher total level of taxation. Competing residence countries could only benefit from a "National Neutrality" policy, since it might give their own investors a competitive advantage over the investors residing in such a beggaring country. Host countries, on the other hand, would most likely be harmed by such a policy. The latter, however, would probably not be able to retaliate against such a policy, since host countries do not necessarily have reciprocal investments in residence countries.

In any case, implied in this criticism is the belief that cooperative behavior—a mutual effort on the part of both the host and the residence countries to lower the level of taxation on cross-border investment—would be to the benefit of both countries. A typical example of such a cooperative effort would be signing a treaty. If, indeed, the combined level of taxation in the host and residence countries when there is no treaty between them is high (meaning that a relatively low level of cross-border investment is occurring), then a treaty can help by reducing the total level of taxation and splitting the tax revenues between the host and the residence countries.

There is, however, something inherently wrong with this picture: namely, the assumption that the host country taxes foreign investments. Conventional wisdom tends to think of a deduction mechanism as limiting cross-border investment and, thus, non-cooperative, because it assumes that the host country taxes foreign investment. If the host country does, indeed, tax foreign investments and the residence country allows only a deduction for this tax, then a relatively high level of taxation (and a low incentive for cross-border investment) will be created. He but if the host country does not tax foreign investments, then the total level of taxation of both countries combined for the investor will be moderate (as will the incentive for cross-border investment), whether the residence country adopts the deduction mechanism or the credit mechanism. In both cases,

^{46.} See, e.g., Frisch, supra note 36, at 583.

^{47.} Compare the example in *supra* note 39 to the examples in *supra* notes 37 and 38.

the combined level of taxation will be equal to the residence country's taxes

The following subsection explains why this would, in all probability, turn out to be the case. It will show why it may be plausible to assume that when the residence country provides a deduction, the host country does *not* tax foreign investors.

b. The Host-Residence Interaction Under the Deduction Assumption

A closer look at the interests of the residence and host countries will reveal that the outcome of their unilateral policies is not double taxation, but rather a single level of taxation. In order to analyze the interaction between the policies of the two countries, I will first describe each country's order of preferences.

A residence country that chooses the deduction mechanism over a credit indicates that it prefers to collect tax revenues even though the level of outbound investment would drop. The rationale underlying such a preference is that tax revenues are part of the national welfare pie. There is no doubt, however, that the residence country would prefer to avoid foregoing outbound investment if it can maintain its tax revenue levels. 48 This outcome is theoretically possible if, for example, the host country does not tax income earned by foreign residents. In such a case, only the residence country would collect tax revenues from the investments of its residents in the host country. Thus, cross-border investments between the two countries would be subject to a single level of taxation (that of the residence country), and the level of cross-border investment would increase. The residence country's tax revenues would not suffer either. On the contrary, a higher level of outbound investment means more income for the residence country's investors, which means a higher level of tax revenues alongside the higher benefits to the investors.

The choice of a deduction over an exemption, on the other hand, implies that the residence country is not interested, under any circumstances (i.e., whether the host taxes or not), in exempting its residents from taxes. ⁴⁹ Indeed, if it preferred to exempt its residents, it would simply do

^{48.} Those who support a deduction policy as serving the sectarian interests of a certain interest group aimed at restricting the level of outbound investment might still object to such a result. Such a position is often taken by labor unions, despite the fact that there is no evidence that limiting outbound investments can actually help labor. *See, e.g.,* Dagan, *supra* note 22, at 384-85.

^{49.} Such an assumption could be reasonable, for example, with regard to a country that wishes to equally distribute the burden of income tax between capital owners and the immobile factors of production such as labor and land. The assumption may also be reasonable in cases where the bu-

so.

Thus, we can infer that a "deduction country" has the following order of preferences:

- 1. The residence country would most prefer a moderate level of outbound investment provided that it (and not the host country) collects the taxes imposed. This policy would be implemented by either a deduction or a credit mechanism in the residence country, but only where the host country does not tax the foreign investment.⁵⁰
- 2. The second preference of the residence country would be a low level of outbound investment, provided that its national welfare (i.e., the profits to its residents investing in the host country as well as its tax revenues) is maximized, as under a deduction mechanism in the residence country and taxation in the host country.
- 3. The residence country would prefer least a moderate level of outbound investment if the host country collects all the tax revenues, as is the case when the residence country implements a credit system.

This order of preferences is quite different from the host country's order of preferences described in Section B above.

c. The Game

Table 1⁵¹ summarizes the interaction between the preferences of the

reaucracy has an independent interest in preserving a high level of tax revenues or where a specific interest group has enough political power to pursue its interests in spite of the entailed national welfare loss.

50. In the example in *supra* note 37, when a residence country employs either a deduction system or a credit system and when the host country does not tax foreign investment, the investor will pay only residence country taxes. Under a credit mechanism, she pays her residence country taxes and is not entitled to any credit since she paid no foreign taxes; under a deduction system, her taxable income is \$100, and she in fact pays tax to the residence country on the full amount of her foreign income.

51. The numbers in this Table indicate the ranking of options in the order of preference, with 1 representing the most preferred option for each country and 4 the least preferred. In each pair of numbers, the left number represents the preferences of the residence country and the right number represents the preferences of the host. The numbers indicated by the asterisk represent the equilibrium point at which neither country has an incentive to defect. *See* discussion *infra* III.C.1.d.

This format should actually include another option: when the residence country allows an exemption. However, since this situation can result in the worst outcome possible for the residence country (either no taxation whatsoever, which would create a high incentive for outbound investment, or else taxes imposed by the host country, which is the third best option for the host) and since the option to allow an exemption is to-

residence country and the host country respectively:

Action	Host taxes	Host does not tax
Residence grants deduction	2;4	1;3*
Residence grants credit	3;2	1;3

TABLE 1

In this stylized game, the host country can choose between not taxing foreign investors and taxing them at a rate equal to that of the residence country. The residence country taxes its residents on their worldwide income and can choose between allowing its residents to deduct the foreign tax or granting a credit for such foreign investments.

If the host country does not tax foreign investors (as in the right hand column), the necessary result will be that the taxpayers are taxed in full by (and only by) the residence country, regardless of whether the residence country grants a credit or deduction. The result is a moderate level of taxation and thus a moderate incentive for cross-border investment. Under this scenario, the residence country collects the taxes. As indicated in the Table 1, this is the most preferred option for the residence country and the third best for the host, since the residence country collects all possible taxes while the host country collects none, and foreign investment hovers at a moderate level.

If the host country does tax foreign investments, however, the results of this game then depend upon the residence country's policy. If the residence country allows a deduction, there will be a low level of incentive for cross-border investment, while both countries will collect tax reve-

tally up to the residence country, I assume that a residence country whose most preferred policy is a deduction would not consider granting an exemption.

Action	Host taxes	Host does not tax
Residence grants deduc- tion	2;4	1;3*
Residence grants credit	3;2	1;3
Residence grants exemp- tion	3;2	4;1

If the residence country prefers no taxation whatsoever out of all of these options, it would prefer an exemption policy (see my analysis in *in-fra* Part III.C.3). However, implied in the assumption of a deduction as the preferred policy of the residence country is a need to collect some taxes from its residents investing abroad. This could be a legitimate assumption considering the residence country's need to tax its residents investing at home and the equity and incentive effects that could be created by taxing local investments and not taxing foreign investments at all.

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nues. As shown in Table 1, this is the second best option for the residence country and the least preferred for the host. However, if the residence country grants a credit, the host country collects all the tax revenues, and the level of foreign investment will be moderate. This is the least preferred option for the residence country and the second best option for the host country, since it collects the tax revenues and the incentive for outbound investment from the residence country is moderate.

d. An Equilibrium

Table 1 indicates that the residence country's "dominant" strategy under these assumptions is to allow a deduction. No matter what the host country decides to do, a deduction will always provide better (or at least not worse) results for the residence country. Should the host decide to tax foreign investments, the residence country would prefer a deduction to a credit, since in seeking a combination of benefits from investments and tax revenues, it would prefer a lower level of outbound investments as long as it collects some of the tax revenues. Should the host country decide not to tax the foreign investment, however, the residence country would be indifferent to the choice between a deduction and a credit. Therefore, a deduction is preferred.

The best possible outcome for the host country, according to Table 1, would result if it were to tax foreign investments while the residence country grants its residents a credit. However, if the residence country allows only a deduction, then the host country will be better off if it does not tax foreign investors residing in that country. Since the host will be responsive to the residence country's policy preferences, it would understand that the residence country would implement the deduction, its dominant strategy. Therefore, the host country in effect has only one choice: not to tax foreign investors. Assuming that the residence country allows only a deduction, it would do better with lower tax revenues but increased investment from abroad.

This result, where the residence country allows a deduction and the host does not tax foreign investments, would form a stable equilibrium, since neither country has an incentive to defect from it as long as that the other country does not do so.

Two points are worth mentioning at this juncture. The first point is that double taxation would be prevented by the interaction of these unilateral tax policies, thus obviating the need for tax treaties designed for that purpose. Second, the above-mentioned result (i.e., a deduction in the residence country and no tax in the host) does not conform with the reality of which mechanisms residence countries tend to prefer in practice. Residence countries tend to grant credits, exemptions, or a combination

thereof (as in deferral⁵²) as opposed to deductions.⁵³ The above game shows that these policies would actually produce a non-stable equilibrium. If the residence country's national interests are best served by a deduction, then the residence country's best strategy would be to change its mechanism from a credit to a deduction when faced with a host country that taxes foreign investors.

Hence, the fact that real life policies deviate from theoretical analysis suggests that residence countries, for whatever reason, do not believe deductions best serve their national interests. In the following section, I will discuss other possibilities that residence countries may consider as best serving these interests.

2. Credit

Under a credit mechanism, residents of one country investing in another country can credit the foreign taxes they pay in the host country against their residence country taxes. ⁵⁴ The credit granted is often limited to the level of the residence country taxes. Thus, residents of a credit-granting country pay tax at the higher of two rates—the host country's tax rate or the residence country's tax rate. If the host country taxes foreign investments and the residence country provides a credit, the host country collects all the tax revenues and (assuming equal tax rates in both countries) the residence country collects none. The credit mechanism creates a moderate incentive for outbound investment.

a. Why Credit May Be the Optimal Mechanism for (Some) Residence Countries

International economic theory associates the credit mechanism with a policy of Capital Export Neutrality. Capital Export Neutrality sets out

^{52.} Deferral occurs when the residence country exempts foreign entities owned by their residents. Such an exemption allows the resident-owners to defer the realization of their income. Only when the foreign entity distributes its profits or when the resident-owners dispose of their investments will their income be taxed.

^{53.} Greece, Iceland, Italy, Japan, New Zealand, Spain, Turkey, the United Kingdom, and the United States all grant credits for foreign business income. Austria, Belgium, France, Finland, Luxembourg, the Netherlands, and Switzerland all exempt foreign business income unilaterally. From the states surveyed by the Committee of Independent Experts, only Ireland, Portugal, and Switzerland allow only a deduction for non-business income. See Report of the Committee of Independent Experts on Company Taxation 267 (1992) [hereinafter Report on Company Taxation].

^{54.} The credit mechanism is illustrated by the example in *supra* note 38.

the neutral allocation of a residence country's investment as a major policy goal.55

A wide variety of arguments have been raised in support of residence countries adopting the credit mechanism. It is argued, for example, that a credit mechanism would promote an efficient allocation of worldwide investments; that it would promote horizontal equity;⁵⁶ and even that it would have a positive effect on national savings.⁵⁷.

Another reason that might be given in support of a credit mechanism is that a credit is a cooperative strategy that is aimed at promoting global welfare. The rationale behind this can be presented this way: although a deduction policy best serves national interests, global welfare would actually be reduced due to the restrictions such a policy imposes on the free flow of capital if all countries were to adhere to it.58 Therefore, it can be contended that residence countries should adopt policies that are more cooperative in nature—policies that will reduce tax barriers and thus increase global welfare.

I have a few quarrels with this last rationale. First, I do not think double taxation would necessarily occur if residence countries were to adopt the deduction mechanism. Under the analysis in Section 1 above, if a deduction were indeed the best mechanism for a residence country—and all residence countries then would adopt it—the reaction of host countries would probably be not to tax foreign investors. The result would thus not be double taxation but a moderate level of taxation with residence countries collecting tax revenues. Second, if Capital Export Neutrality provides better results when employed by all countries due to its elimination of tax barriers and inducement of larger capital flows, it is probably better

^{55.} The idea behind Capital Export Neutrality is that residents would allocate their worldwide investments without having the level of taxation in the countries in which they invest affect their decisions.

^{56.} Another kind of consideration that may induce a residence country to adopt a credit mechanism is political in nature; the relative benefits for different interest groups within the nation may be dramatically different or at least perceived as such by those groups. For example, it is often suggested (although never proved) that a deduction policy (which would limit the level of outbound investment) would benefit labor since the lower the level of outbound investment, the higher the domestic demand for labor. A credit, on the other hand, is strongly supported by the business community, which views the credit as the least the government can do to support the community.

^{57.} See Staff of Joint Comm. on Taxation, 102d Cong., Factors Affecting THE INTERNATIONAL COMPETITIVENESS OF THE UNITED STATES 239, 240 (Comm. Print 1991).

^{58.} See, e.g., Frisch, supra note 36, at 583, 584.

for each country to employ such a policy even unilaterally. ⁵⁹ *Third*, I do not believe that cooperative Capital Export Neutrality would have ever evolved if National Neutrality had provided better results for a specific nation acting unilaterally. If a deduction served national interests better than a credit, then each country would have incentive to defect from any cooperation aimed at enforcing a credit. Such cooperation requires not only perfect coordination, but also very sensitive mechanisms for detecting a player's defection. It also requires willingness on the part of all participants to submit to and observe the set sanction for defection, irrespective of political coalitions or other "irrelevant" factors.

Therefore, a country should not adopt a credit mechanism in order to cooperate towards global neutrality. On the other hand, adopting a credit mechanism makes perfect sense for a country that aspires to achieve a moderate level of outbound investment and is willing to do that even at the expense of tax revenues.

b. The Residence-Host Interaction Under the Credit Assumption

In adopting a credit mechanism, the residence country indicates that it is willing to give up all of its tax revenues in order to achieve a moderate level of outbound investment. Presumably, a residence country that grants a credit does so because the benefits generated from the moderate level of investment outweigh what it loses in tax revenues by granting the credit.

Again, in order to present the interaction in a game format, we should first specify the order of preferences of the countries involved. Assuming the residence country prefers a credit to a deduction implies the following order of preferences:⁶⁰

1. The residence country would most prefer a moderate level of incentive for cross-border investment (the case under a credit system) and that it (rather than the host country) collect all the tax revenues. Under a credit mechanism, the residence country would be willing to forego its revenues unilaterally in order to achieve a moderate level of outbound investment. Thus, it can safely be assumed that it would prefer to achieve

^{59.} There is no reason to believe that the fact that other residence countries provide a credit to their residents actually benefits another residence country. It is true, indeed, that a reduction in the taxes in host countries would help residence countries, but how would a "cooperative strategy" of a credit achieve this?

^{60.} The preferences are described in a highly general manner. Certainly different mixtures of such possibilities may exist. For example, there is the possibility (ranked between the options 1 and 2 above) that the total amount of taxes paid would be the same as would be collected by the residence country on the income but both countries share in the revenue.

the same moderate level of outbound investment and still be able to collect taxes.

- 2. The second-most preferred option would be that the level of incentive for outbound investment remains moderate, but the host country collects all taxes. This option is obviously less desirable for the residence country than option 1 above, but it is still preferable to reducing the level of outbound investments as described in option 3 below. If the residence country were to prefer a lower level of outbound investment, it would opt for a deduction over a credit mechanism.
- 3. The residence country would least prefer one of the following options: either that no taxes are collected from its residents (meaning a high incentive for cross-border investment) or that a low level of incentive for foreign investment is created (by imposing a high level of taxation). If no taxes are collected, a high level of outbound investment will necessarily result, which may be higher than what the residence country considers optimal. As explained above, the option of a high level of taxation, which reduces the incentive to invest abroad, is worse than option 2 above, since we are dealing here with a country willing to forego its tax revenues in order to achieve the optimal incentive for outbound investment. ⁶²

It should be noted that the host country's preferences, presented in Section III.B. above, were in almost the exact opposite order. ⁶³

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^{61.} As noted, I operate under the assumption that the residence country would rather forego its own taxes than subject its residents to double taxation since the national gain from facilitating more investments is greater than the possible revenues from taxing it.

^{62.} If this is not the case, then we are dealing with a country that prefers a deduction, a case that was discussed in *supra* Section III.C.1.

^{63.} The host country's order of preferences was:

^{1.} To prefer most that no taxes be levied by either country (exemption in the residence country/no tax in the host country) thereby preventing any tax wedge from forming.

^{2.} To prefer less that a moderate level of cross-border investment take place and that the host country collects tax revenues. This would be the situation if the residence country were to provide a credit and the host country to tax foreign investments at rates equal to the residence country's rates (credit/tax).

^{3.} To prefer even less that a moderate level of cross-border investment take place, *but* the host country does not get to collect any tax revenues. This would occur when the residence country employs either a credit or a deduction mechanism and when the host country does not tax foreign investment (deduction or credit/no tax).

^{4.} To prefer least that a low level of cross-border investment take place, which would be the case if the residence country opts for a deduction mechanism and the host country taxes foreign investment (deduction/tax).

A residence country can unilaterally avoid the third (and worst, from its perspective) result; it can unilaterally avoid both double taxation as well as no taxation. In order to ensure that its residents are taxed at all times, it can simply tax them itself on their worldwide incomes;⁶⁴ on the other hand, it can alleviate double taxation unilaterally.

The question that remains, therefore, is which mechanism should the residence country apply in order to prevent double taxation: a credit or a deduction? This question may be puzzling given my initial assumption that a credit produces the optimal level of outbound investment. But the credit preference is, in this regard, merely the code name for a country with a preference for a moderate level of outbound investment, even if at the cost of lower tax revenues. It might still be that a country that prefers a moderate level of outbound investment would select a deduction mechanism as a strategic move (if, for example, it believes that the combination of its unilateral policy with that of a given host country would yield better results if it allows only a deduction).

Played simultaneously, this game can be described by the following table ⁶⁶ (with the numbers representing the preferences):

^{66.} As in Table 1, the numbers represent the ranking of options in the order of preference, with 1 representing the most preferred option for the residence country, and 4 the least preferred. The numbers indicated by the asterisk represent the equilibrium point at which neither country has an incentive to defect. *See* discussion *infra* III.C.2.d. A more complete table would be:

Action	Host taxes	Host does not tax
Residence grants exemption	2;2	3;1
Residence grants deduction	3;4	1;3
Residence grants credit	2;2	1;3
Residence grants no alleviation	4;4	1;2

However, Rows 1 and 4 can be eliminated since Row 2 dominates Row 4 (thereby eliminating Row 4) and Row 3 dominates Row 1 (thereby eliminating Row 1).

^{64.} Of course there is the question of how enforceable such a tax would be, but this Article is not the appropriate forum for discussing this issue.

^{65.} An exemption would not serve the residence country's interests under these assumptions since the optimal response of the host country would be to exempt the foreign investment, resulting in no taxation whatsoever on cross-border investment.

Action	Host taxes	Host does not tax
Residence grants deduction	3;4	1;3*
Residence grants credit	2;2*	1;3

TABLE 2

If the residence country allows a deduction and the host country taxes, there would be a disincentive for outbound investment, which, under the current assumption, is the worst option for both countries. In all the other options described in Table 2 above, the same moderate level of outbound investment is encouraged, since the taxes imposed are equal to the residence country's tax rate. The only difference relates to who collects the tax revenues: the host country or the residence country. If the host country does not tax the foreign investment, the residence country would collect all tax revenues on that investment regardless of whether the residence country allows a credit or a deduction. If the host country does impose taxes and the residence country grants a credit, all tax revenues go to the host.⁶⁷

c. An Equilibrium

Granting a credit is the dominant strategy for a residence country under Table 2. No matter what the host country does, the residence country would be better off (or at least not worse off) granting its residents a credit as opposed to a deduction. If the host country does not tax foreign income, both a credit and a deduction would have the same result: a mod-

^{67.} If the host country taxes and the residence country grants a credit (assuming that the rates of taxes in both countries are equal), the investor will pay taxes to the host country and not to the residence country. For example, if both countries impose a 40% tax, an income of \$100 will be subject to \$40 of tax in the host country. The residence country would theoretically tax it at \$40 but would allow a credit for the \$40 paid in taxes to the host country. Thus, no taxes would be paid to the residence country, and the investor's net income would be \$60. If the host does not tax the foreign investor, then she will pay tax only to the residence country under both the deduction and exemption mechanisms. In the above example, the investor will pay \$0 in taxes to the host country. Under a deduction mechanism, her taxable income would still be \$100 (\$100-\$0), and she would pay \$40 in residence country taxes. Her net income, then, would be \$60. Under a credit mechanism, the analysis would be different but the results the same. An income of \$100 produced in the host country would be tentatively taxed in the residence country (tentative liability of \$40). A credit should be allowed for taxes paid to the host country, but since no such taxes were paid, the investor would still have to pay a tax of \$40 to the residence country. The net income, again, would be \$60.

erate level of tax revenue collected in its entirety by the residence country. And if the host country does tax foreign investments, then the residence country would be better off granting a credit as opposed to allowing only a deduction. Under this scenario, a credit would allow the residence country to achieve a high level of outbound investment, though it must forego tax revenues.⁶⁸

Since host countries realize that the credit mechanism is the dominant strategy for such residence countries, they would elect to tax the foreign investor. The reason for this is that if the residence country grants a credit, the best option for the host country is to enjoy the credit and collect the tax revenues.

The credit/tax solution is a stable equilibrium, since once this equilibrium is achieved, neither country has an incentive to adopt a different policy given the other country's policy. Thus, if the host country taxes foreign investors, the residence country is better off granting a credit. Moreover, provided that the residence country grants a credit, the host country is better off taxing the foreign investors.

Another Equilibrium

Interestingly enough, this game has another equilibrium, under which the host country does not tax foreign investment and the residence country grants a deduction for foreign income. This equilibrium is stable as well, since once it is achieved, neither country has incentive to deviate from its chosen strategy. If the residence country allows a deduction, then the host country is better off not taxing the foreign investment and, if the host country does not tax foreign investment, the residence country has incentive only to allow a deduction.

However, since under this game analysis the credit mechanism has emerged as the dominant strategy for a residence country and, since in practice the credit mechanism is currently the prevailing strategy, there is no reason to assume that the deduction policy would be adopted.⁶⁹ Residence and host countries compete with other peer countries. Competition between residence countries makes it hard for any one of them to take a

^{68.} We should recall that we are now focusing on a country that prefers this option to higher tax revenues but lower outbound investment created by a deduction.

^{69.} If this were not a simultaneous game but rather a seguential game in which the residence country got to be the first one to move, the host country would select "deduction." This would force the residence country into not taxing. Therefore, I suspect that if residence countries were not competing with each other, or if one residence country had been strong enough to become a leader on this matter, there might have been a movement towards the deduction/no tax equilibrium.

leadership position and unilaterally adopt a deduction policy. If one residence country decides to change its policy and grant only a deduction, it may suffer serious costs in lost foreign investments to other residence countries. Rather than exempting investments from such a residence country, host countries may simply favor investments from residence countries that grant their residents a credit rather than a deduction.

Just as we saw under the deduction assumption, the bottom line is that, under the credit assumption, the unilateral measures create a stable equilibrium. Under this equilibrium, residence countries provide a credit, thereby allowing host countries to tax foreign investments. The alternative equilibrium—the no tax/deduction equilibrium—is unlikely to evolve due to competition between residence countries. Therefore, under the credit assumption, unilateral measures also effectively prevent double taxation.

3. Exemption

The third and final unilateral mechanism that may serve to alleviate double taxation is an exemption granted by the residence country for any foreign source income. Under this mechanism, someone who invests in a foreign country is subject only to host country taxation on his foreign source income.

a. Why an Exemption May Be the Optimal Mechanism for (Some) Host Countries

When a residence country adopts an exemption policy, it indicates that it believes it would gain more from a larger level of outbound investment than from the revenues from taxes levied on outbound investment and the higher incentive to invest domestically as created by a credit or deduction mechanism.

A policy of exempting foreign source income is associated in the scholarship with Capital Import Neutrality (CIN). Proponents of CIN advocate a policy that would make investments in a given host country subject to the same overall level of taxation irrespective of the nationality of the investor. Residence countries that would adhere to such a policy by exempting their residents from taxes on outbound investments would enjoy a competitive advantage over residence countries that do not adopt such a policy. Some countries view this competitive advantage as good reason for exempting their residents from taxation on their foreign-source income. ⁷⁰

^{70.} While it is true that the residence country might lose some domestic

b. The Host-Residence Interaction Under an Exemption

If a residence country prefers the high level of incentive provided by the exemption mechanism at the cost of losing tax revenues and domestic investment, then there is no real conflict between the interests of the residence and host countries.⁷¹ The order of preferences of both the residence country and the host country would be as follows:

- 1. Neither country imposes taxes. This would maximize the benefits from cross-border investments.
- 2. A moderate level of taxation is imposed, but each residence or host country would condition this on it being the one collecting the revenues.
- 3. A moderate level of taxation is imposed, but the other country collects it.
- 4. A low level of outbound investment is created, and each country collects some portion of the total tax revenues.

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Table 4	describ	es these	results.

Action	Host taxes	Host does not tax
Residence grants exemption	3;2	1;1*
Residence grants credit	3;2	2;3
Residence grants deduction	4;4	2;3

Table 3

investment that would be made abroad because of the lower taxes, there is great debate over whether, on the whole, the residence country's economy (including jobs) would benefit or be harmed by such outbound movement of investments. For the purposes of our current analysis, it is not important to settle this debate. The analysis in this section assumes that the interests of the residence country would benefit from eliminating the tax wedge. If this is not the case—and the residence country's best interests are better served by creating a lower incentive for outbound investments—then we return to the analysis in *supra* Part III.C.2, where the country's best interests are served by a credit.

71. If the host country does not tax foreign investment as well, then the national revenues from outbound investment would probably be maximized if the residence country were to avoid levying any taxes. The reason is that completely eliminating all taxation on foreign income would correspondingly remove the tax wedge, thus enabling the capital consumers in the host country and the capital suppliers in the residence country to maximize the benefits from cross-border investment. The problem with this option, from the residence country's perspective, is that it might dramatically impair the ability of the residence country to impose any income tax on mobile factors of production—even on income produced within its borders.

From Table 3 we can see that the mutual interests of the two countries lead to a clear equilibrium in which neither country taxes cross-border investments.

If the host country imposes tax, the residence country cannot avoid the moderate to low level of incentive nor, obviously, does it collect the entire amount of tax revenue levied. All it can do is either allow a moderate level of outbound investment while collecting no tax revenues or allow a low level of outbound investment while collecting some taxes.

If, however, the host country does not tax the foreign investment, the choice is in the hands of the residence country either to tax (and limit the level of outbound investments) or not to tax (and maximize the level of outbound investment). Since my assumption in this section is that the residence country prefers the latter option, its dominant strategy would be to use an exemption to maximize the level of outbound investment.

The host country, aware that an exemption is the residence country's dominant strategy, would prefer not to tax (thereby achieving its best possible outcome) over levying a tax (which would achieve its third best option). We should recall that it is in the host country's best interest to eliminate the tax wedge, since the benefit from uninterrupted investment is greater than the potential benefit from tax revenues.

Ultimately, both the residence country and the host country will choose not to tax the income earned in the host country, thereby realizing the optimal outcome for both. As in the case under the deduction and credit mechanisms, this result produces a stable equilibrium under these assumptions, since no other strategy will be more favorable for the host country. That is to say, taxing foreign investors would lower the level of foreign investments and thus yield a worse outcome for the host country. Moreover, the residence country would prefer (according to the assumptions of this subsection) to exempt the foreign income of its residents, assuming that the host country exempts foreign investors on their income earned within its borders.

In sum, under the assumption of an exemption in the residence country, we find, once again, that the unilateral interaction of the national interests of the residence and host countries yields an equilibrium under which double taxation is prevented. The interaction between the unilateral policies engenders total exemption for cross-border investments by both the host country and the residence country, thereby completely alleviating double taxation.

4. Summary

To conclude, each of the three assumptions I have made leads me to the same conclusion: the interplay between sovereign countries in pursuit of particular national interests is such that it prevents double taxation and, therefore, obviates the need for double taxation treaties. As demonstrated in this section, this conclusion emerges regardless of whether we assume that a residence country's interests are best served by the low level of outbound investment achieved by a deduction, by the moderate level of outbound investment associated with a credit mechanism, or by the high level of outbound investment realized by an exemption.

IV. UNILATERAL VERSUS BILATERAL SOLUTIONS

This Part compares the unilateral results described in Part III to the results achieved by tax treaties, demonstrating that the unilateral solution, no less viable and effective a solution, has more favorable results for host countries than the treaty mechanism. Section A summarizes the results of the unilateral interaction: prevention of double taxation and creation of a higher incentive for cross-border investments, while allocating the tax revenues to the host country. Section B examines the similarities and differences between the unilateral results and the tax treaty solution: they both prevent double taxation and create a similar incentive for crossborder investment, but diverge in the allocation of tax revenues between the host country and residence country. The section concludes by analyzing other benefits a tax treaty might offer as compared to the unilateral solution. Finally, Section C discusses the winners and losers in a move from a unilateral to a bilateral regime, examining how residence countries gain (and host countries lose) tax revenues by entering into a treaty. This disparity becomes apparent in the discussion on the difference between "symmetrical" treaties (between two developing or two developed cosignatories) and "asymmetrical" treaties (between a developing country and developed country).

A. The Equilibria of Unilateral Strategies

We have seen that the interaction between unilateral policies yields an equilibrium under which double taxation is prevented and host countries collect all the tax revenues if any revenues are collected. Existing international tax practices support this theoretical prediction.

We also have seen that, under each one of the given assumptions outlined above, the interaction between the unilateral policies of residence and host countries yields a stable equilibrium devoid of double taxation. Under the *deduction* assumption, the stable equilibrium is produced when the host country does not tax foreign investment and the residence country grants a deduction. Thus, double taxation is prevented, and the residence country gets to collect tax revenues. The *credit* assumption, under which

the residence country grants a credit for taxes paid by its residents to the host country, generates a stable equilibrium with a moderate level of foreign investment and devoid of double taxation. However, under this assumption, the host country collects the tax revenues. Under the third assumption, where the residence country exempts all foreign income, a stable equilibrium is reached when the host country does not tax foreign investment and the residence country allows an exemption. In this case, neither country collects any taxes on cross-border investments.

Whatever assumption we adopt as to the optimal policy for a residence country, the result in terms of double taxation is the same: when countries operate unilaterally to promote their national interests vis-a-vis outbound investment and tax revenues, a stable equilibrium emerges under which double taxation is prevented.

This hypothesis is not merely theoretical. An examination of the existing international tax rules of host countries indicates—contrary to conventional wisdom—that treaties are not necessary for alleviating the burden of double taxation on cross-border investments. The reason for this is that most countries apply unilateral mechanisms to prevent double taxation in conjunction with tax treaties. Most of the major developed countries (which are usually residence countries for investors) alleviate double taxation by granting a credit for foreign taxes paid by residents⁷² or by exempting altogether income produced abroad. 73 Only a handful of residence countries grant their residents only a deduction⁷⁴ for their foreign taxes. The majority of these countries have included in their tax treaties the same (or roughly the same) mechanism as the one they already were using unilaterally.⁷⁵ Thus, even without tax treaties, double taxation is

^{72.} As mentioned above, Greece, Iceland, Italy, Japan, New Zealand, Spain, Turkey, the United Kingdom, and the United States all grant a credit for foreign business income. See REPORT ON COMPANY TAXATION, supra note 53, at 267.

^{73.} Austria, Belgium, France, Finland, Luxembourg, the Netherlands, and Switzerland all exempt foreign business income unilaterally. See id.

^{74.} Only Ireland, Portugal, and Switzerland allow simply a deduction for non-business income. Switzerland exempts foreign business income. See id.

^{75.} See id. Belgium, Greece, Spain, France, Luxembourg, the Netherlands, the United Kingdom, Austria, Japan, and the United States all treat dividend and interest income in the same way, whether it has been produced in a treaty country or in a non-treaty country; Denmark, Germany, Italy, Canada, and Sweden all treat interest income in the same manner and grant a credit for dividend income. Only Ireland, Portugal, and Switzerland adhere to the traditional story and provide a deduction when a treaty does not exist and a credit when a treaty is signed. As for business income produced by a foreign permanent establishment, most of the re-

not the dreaded beast it is often made out to be; unilateral measures are already effectively preventing double taxation.

The prevailing international tax regime therefore supports the theoretical prediction that double taxation can be alleviated unilaterally. The international regime verifies (what the theoretical analysis could not have done) that most developed countries prefer a credit or an exemption mechanism to a deduction.

R The Tax Treaties Solution

The structure of tax treaties indicates that they are supposed to prevent double taxation. Subsection 1, infra, describes how treaties allocate the jurisdiction to tax between the contracting countries, and, in cases where they provide both countries with the power to tax, what mechanism for the prevention of double taxation would apply. Subsection 2 demonstrates how residence countries get more tax revenues through tax treaties than under the unilateral solution described above, while preserving the same total level of taxation (and the same incentive for cross-country investment). Subsection 3 reviews other advantages of tax treaties that may explain their existence. These advantages, however, have very little to do with the heroic "preventing double taxation."

1. Preventing Double Taxation by Tax Treaties

In a typical treaty, the two signatory countries agree on how to allocate between them the right to tax various types of income. 76 Typically, the host country may either tax the foreign income without limitation, it may tax up to a maximum, or it may not tax at all.⁷⁷ Thus, for example, income from business activity can be taxed by the host country without

ported countries allow their residents to credit their foreign taxes, while some exempt it altogether. See id. at 267.

^{76.} See H.L. Goldberg, Conventions for the Elimination of International Double Taxation: Toward a Developing Country Model, 15 Law & Pol'y INT'L Bus. 833 (1983) (classifying treaties on a spectrum between "relative source country bias" treaties that grant the source country an unequivocal right to tax and "relative residence country bias" treaties that grant the total tax jurisdiction to the residence country. In between these two peripheries of the spectrum are treaties in which the residence country provides alleviation (moving closer to the "source-biased" extreme) and treaties in which source countries give up tax revenues (moving closer to the "residence-biased" regime). Goldberg concentrates her analysis on tax revenues.

^{77.} See Philip Baker, Double Taxation Conventions and International Tax Law 18 (1994).

limitation provided that the business income is attributable to the activities of a "permanent establishment." If, on the other hand, no permanent establishment exists, the host will usually cede taxing jurisdiction to the residence country. Income from personal services, to take another example, is typically taxed by the host country without limitation except in special cases specified in the treaty, such as situations involving, *interalia*, students and trainees, and diplomatic staff. Passive income, which usually consists of income from interest or dividend payments, is ordinarily taxed by the country in which the payment originates, the "source" country, but the rate of taxation by the source country is limited.

In cases where tax treaties grant both countries the right to tax the income (with or without a limitation on the rates of taxation at source), they often provide a mechanism for alleviating double taxation. The model treaties suggest either a credit for taxes paid in the source country (the mechanism more commonly opted for by treaty signatories) or an exemption for income that is taxed by the source country. 84

Some treaties offer some host countries (typically developing countries) a "tax sparing mechanism." Under a tax sparing mechanism, the host countries' incentive programs (designed to attract foreign investors) are ignored by residence countries. Instead, residence countries provide their residents credits for taxes they would have paid to the host country if not for the specially targeted concessions. Such mechanisms serve to reduce the total level of taxation on foreign investments subject to the treaty, thereby increasing the level of cross-border investment and the benefits derived therefrom by the host country. It is important to note that

^{78.} See, e.g., OECD Model Tax Convention, supra note 7, art. 7; United Nations Model Double Taxation Convention, supra note 7, art. 7; U.S. Model Income Tax Treaty, supra note 12, art. 7.

^{79.} See, e.g., OECD MODEL TAX CONVENTION, supra note 7, art. 5 (defining "permanent establishment").

^{80.} See id. art. 15.

^{81.} See, e.g., OECD Model Tax Convention, supra note 7, art. 20; United Nations Model Double Taxation Convention, supra note 7, art. 20; U.S. Model Income Tax Treaty, supra note 12, art. 20, 1 Tax Treaties at 1421.

^{82.} See, e.g., OECD MODEL TAX CONVENTION, supra note 7, art. 19; United Nations Model Double Taxation Convention, supra note 7, art. 19; U.S. Model Income Tax Treaty, supra note 12, art. 19.

^{83.} The typical withholding rates run between 0% to 15%. See, e.g., U.S. TAX TREATIES 95 (Richard L. Dorenberg and Kees Van Raad eds., 1991).

^{84.} See, e.g., OECD Model Tax Convention, supra note 7, arts. 23A, 23B; United Nations Model Double Taxation Convention, supra note 7, arts. 23A, 23B.

the residence country not only foregoes the tax revenues it would have collected absent the credit, but also allows a higher level of outbound investment into the host country than it would ordinarily prefer. Under the assumption that the unilateral position taken by a residence country generally promotes its national interests, the tax sparing mechanism indicates that the residence country is willing to forego some of the domestic, social, and economic benefits that might otherwise derive from a lower level of outbound investment.⁸⁵

2. The Distributive Consequences of Tax Treaties

There are important similarities, but no less significant differences, between the equilibrium achieved by tax treaties and the alternative unilateral equilibria described above. Although treaties are as capable of preventing double taxation and achieving the same moderate level of taxation as a credit mechanism (or, when the treaty assigns jurisdiction to the host country, the same level of taxation as under an exemption mechanism), the equilibrium reached under treaties differs from both the credit/tax equilibrium and the exemption/no tax equilibrium. The main difference is in the way in which the tax revenues are distributed.

Treaties provide residence countries with a larger slice of the revenue pie than do the unilateral mechanisms described above. Due to the reduction in the host country's tax rates (to a certain extent)⁸⁶ and in light of the fact that jurisdiction to tax in certain tax categories is granted solely to the residence country, the host country collects a smaller portion of the revenues. Although at times, treaties effect the same allocation of revenues as would be achieved by unilateral mechanisms, in many cases they do not. As described above, treaties tend to limit the tax rate a host country can impose on passive income. When a treaty adopts a credit mechanism, limiting the tax rates on passive income means that the treaty reduces the host country's share in the tax revenues. Except in cases where tax sparing is granted, such a reduction in host country taxation does not translate into a larger volume of foreign investment, but rather amounts to no more than a revenue shift. Therefore, under the credit mechanism, the residence country collects taxes that the host country has foregone.⁸⁷

^{85.} For a brief review of the various factors affected by the level of outbound investment, see Dagan, *supra* note 22, at 384-387.

^{86.} See, e.g., Roin, supra note 16, at 1763.

^{87.} See, id at 1765 ("Reductions below a 'reasonable' level of tax, by contrast, have generally been perceived as benefiting a foreign taxpayer's country of residence rather then the taxpayer when that residence country, like the U.S., uses a tax-credit system to ameliorate duplicative taxation." (footnotes omitted)). There may, of course, be a reciprocal revenue

The difference between the treaty solution and the unilateral solution is also manifested in cases where treaties limit the jurisdiction of host countries to tax certain kinds of income, such as business income in its pre-permanent establishment phase and certain types of income from personal services. In such cases, the treaty would prevent the host country from imposing any taxes whatsoever, which would mean that the residence country would collect all of the tax revenues.

Therefore, although treaties and unilateral solutions achieve approximately the same reduction, they allocate tax revenues between the contracting states differently. Essentially, in reducing host countries' taxation, tax treaties allow residence countries to take a larger bite of the tax-revenue pie.

3. Other Consequences of Tax Treaties

In addition to their distributive consequences, tax treaties may provide the signatory countries with a number of supplementary advantages, including: improved compatibility between the tax rules of the signatory countries, assistance in tax enforcement, reinforcement of investor certainty, and strengthened general cooperation in tax enforcement among nations.

As noted, treaties can improve the compatibility between the tax rules of the co-signatories.⁸⁸ By addressing specific conflicts between the tax laws of signatory nations, treaties can improve the operation of existing unilateral mechanisms.⁸⁹ For example, a treaty can design a set of uniform source rules for the two countries⁹⁰ and can set specific tests of

shift when the host country is operating in its capacity as a residence country; see discussion infra Part IV.C.1.

^{88.} See, e.g., A.L.I., Tax Treaties, supra note 8, at 6 (identifying three types of problems of coordination between the tax rules of the two countries: residency—residency conflicts; residency—source conflict; and source—source conflicts).

^{89.} See Owens, supra note 14, at 436.

^{90.} See Rosenbloom, Current Developments in Regard to Tax Treaties, supra note 7, at 28-30 (suggesting that the discrepancies in source rules are some of the most important problems treaties are supposed to solve); Pamela B. Gann, The Concept of an Independent Treaty Foreign Tax Credit, Tax L. Rev., 1982, at 20-22 (describing how recent treaties signed by the United States often have specific source rules); Stanley Surrey, International Tax Conventions: How They Operate What They Accomplish, J. Taxation 364, Dec. 1965, at 364 ("Tax treaties deal with these problems by reaching mutually acceptable rules regarding the source of income and allocations of income."); Owens, supra note 14, at 438-41, on the other hand, demonstrates that in most cases, the source rules in the treaties are very similar to unilateral source rules.

residency for tax purposes. Moreover, a treaty can set forth the rules that determine the legal status of entities; and it can codify agreements with regard to which taxes are to be considered creditable. These are issues that are extremely difficult to settle on a unilateral basis.

Treaties can also increase the ability of countries to collect tax revenues. Countries may encounter practical difficulties in collecting taxes from foreign residents whose only nexus to the source country is the fact that they earned income within its territorial borders. Tax treaties allow host countries to trade the tax revenues they find difficult to collect (i.e., taxes owed by foreign investors) for tax revenues that are easier to collect (i.e., taxes owed by their own residents on their foreign activities). Such a trade-off also makes it easier for the residence country to employ a truly progressive tax system based on its residents' worldwide income. Of course, learning about the existence of such income is always going to be very problematic, but inter-nation cooperation can help in this matter as well.

An important function of tax treaties is to marshal international cooperation against tax avoidance and evasion. To this end, some treaties 92 contain rules on mutual assistance in collection of information and on mutual assistance in enforcing substantive tax rules. Most treaties include sections that concern mutual sharing of information 93 in order to help residence countries collect taxes from foreign residents and activities abroad. 94 Mutual assistance in collecting information is essential for carrying out an effective war against tax avoidance and, therefore, is consid-

^{91.} In order to tax on a truly progressive basis, the residence country should tax the entire faculty of its residents. *See* Paul D. Reese, *United States Tax Treaty Policy Toward Developing Countries: The China Example*, 35 UCLA L. Rev. 369, 373 (1987);

While the source state generally is granted the primary taxation rights, most industrialized nations, including the U.S, stress relatively greater residence-state jurisdiction, and strive to limit the taxation of income in the source state. This scheme theoretically is justified by concerns of administrative feasibility: the taxpayer's residence state, it is argued, is better able to tax accurately on a progressive basis by virtue of its easier (and less burdensome) access to the taxpayer's worldwide expense and income data.

Id. See also Roin, supra note 16, at 1761 ("Residence-country taxation is thought to be preferable because it enables greater inter-taxpayer equity.").

^{92.} See A.L.I., Tax Treaties, supra note 8, at 9-14.

^{93.} See, e.g., U.S. Model Income Tax Treaty, supra note 12, art. 26; United Nations Model Double Taxation Convention, supra note 7, art. 26; OECD Model Tax Convention, supra note 7, art. 26.

^{94.} See, e.g., A.L.I., Tax Treaties, supra note 8, at 11; Gustafson & Pugh, supra note 7, at 477.

ered one of the important achievements of tax treaties. Rules to this effect, however, are very hard to enforce. While each country has a clear incentive to enforce its own tax rules, it generally has no incentive to enforce collection of another country's taxes. On the contrary, foreign investors who avoid residence country taxation bypass the tax wedge, thus helping the host country to encourage more foreign investment. Countries have little interest in providing other countries with information if they have no real expectation that the latter will reciprocate in turn. Moreover, as hard as it is to ensure that another country will actually reciprocate and provide the information it has collected, it is even harder to ensure that such information will be actively collected. In contrast to the written norm of mutual assistance in collecting information routinely included in treaties, countries often, in reality, refuse to provide help in enforcing foreign taxes. On the enforcement front, it is openly stated that countries are concerned with the possibility of defection by the other side.

In addition, treaties often serve as a vehicle for establishing harmonious international relations. ⁹⁹ Treaties serve as proof of good faith and signal a certain respectability of the contracting country in the eyes of the other contracting country (and thus in the eyes of other countries). The United States, for example, used to sign tax treaties with countries as first step towards establishing wider diplomatic relations. ¹⁰⁰

^{95.} See, e.g., BAKER, supra note 77, at 12 ("The avoidance of fiscal evasion has become increasingly important as a purpose of treaties. Provisions for the exchange of information are only necessary, however, if the furnishing of such information to revenue authorities of other states would not otherwise be permitted (under domestic confidentiality obligations, usually)."); Surrey, supra note 90, at 366.

^{96.} See Rosenbloom, Current Developments in Regard to Tax Treaties, supra note 7, at 31-45.

 $^{97.\} See,\ e.g.,\ DICEY\ \&\ MORRIS\ ON\ THE\ CONFLICT\ OF\ LAWS\ 105\ (Lawrence\ Collins\ ed.,\ 13th\ ed.\ 2000).$

^{98.} A good example would be the United Kingdom's reluctance to enter into such an agreement with the United States out of the fear that it would force it into similar agreements with other countries it trusts less. *See* BAKER, *supra* note 77, at 40 ("Although both reciprocal enforcement and mutual assistance might be justifiable between the US and the UK, they would not be desirable with other countries with which the traffic would be mostly one-way.").

^{99.} See generally Rosenbloom, Current Developments in Regard to Tax Treaties, supra note 7, at 31-52 and examples brought there.

^{100.} See, e.g., Reese, supra note 91, at 380. Reese attributes the benefits to China in its treaty with the United States to China's geo-political importance, noting that

It is only rarely that a tax treaty negotiation will occur on the heels of the opening of diplomatic relations, a time when the po-

And finally, treaties increase the certainty with which an individual investor can measure his tax liability in a foreign country. Treaties may help clarify existing tax rules, set limits on certain host country tax rates (as in the case of passive activities), and lower (though not eliminate) the risk of future changes to existing tax laws. Treaties also provide some administrative help for taxpayers who sometimes are able to turn to their domestic tax authorities to work their way through the foreign system. The dispute resolution mechanism¹⁰¹ provided for in most treaties tends to reassure investors that they may turn to their official representatives to negotiate a reasonable solution with the tax authorities of the other signatory country.¹⁰²

Surely all of these aspects of tax treaties represent a significant advantage to this mechanism and produce major incentives for countries to sign treaties. Not one of these benefits, however, is as heroic a purpose as the prevention of double taxation.

C. Winners and Losers

Since, generally speaking, tax treaties tend to allocate tax revenues more generously to residence countries than the unilateral alternative does, ¹⁰³ it is clear why those countries would be interested in entering into such treaties. Limiting the level of taxation a host country can impose allows the residence country to collect more tax revenues without changing the overall level of taxation (and, with it, the level of outbound investments). This, along with the collateral benefits treaties can offer in terms of certainty, administrative convenience, and enforcement, quite possibly motivates residence countries to enter into treaties.

But why should host countries be interested in the same arrangement? Treaty arrangements do not reduce the tax barriers to foreign investment from residence countries (since the total level of taxation remains the same). Rather, treaties only reduce the host country's tax revenues. Is this trade-off worthwhile for the host country? The answer may depend upon the type of treaty involved; while this may be a deal worth making in a "symmetrical treaty," it does not seem as advantageous

litical utility of such agreement is magnified. Thus, not every developing country negotiation partner should expect to obtain as favorable a bargain as China was able to strike.

Id. at 391.

^{101.} See Rosenbloom, Current Developments in Regard to Tax Treaties, supra note 7, at 31-43.

^{102.} See Surrey, supra note 90, at 366.

^{103.} At any rate, they do not harm residence countries in any aspect, as compared to their unilateral mechanisms.

in the asymmetrical case. In other words, countries that are predominantly host countries—such as developing countries—tend to lose revenues by entering into a treaty without increasing the incentive for cross-country investments.

1. Symmetrical Tax Treaties

One reason for the tradeoff being worthwhile is reciprocity. In a treaty, each signatory country serves simultaneously as a host country for foreign investment and as a residence country for its own residents. 104 Assuming an equal level of investment by residents of Country A in Country B and by Country B's residents in Country A, neither A nor B should be concerned with the taxes they collect from each individual transaction. The taxes they lose from lowering their taxes on foreign investments (in their capacity as host country) will be offset by the taxes they collect from their own residents (in their capacity as residence country). 105 If investment in both countries is, indeed symmetrical, the final outcome of the reduction in taxes for each of the countries is no more than a switch in the identity of the tax-collecting agent. 106 This result may, in-

104. *See* Joel B. Slemrod, *Projectionist Taxation*, TNI, 1994, *available in* LEXIS, Fedtax Library, TXNINT File. According to Slemrod:

Bilateral tax treaties generally feature a reciprocity clause, requiring equal withholding levies for capital flows in both directions; this is designed to maintain an equitable distribution of tax revenues in the presence of two-way capital flows. Whether it in fact achieves this goal depends also on the corporate tax rates and the details of the integration systems in place

105. This is true since lower taxes in the host country provide, under a credit mechanism, for higher taxes collected by the residence country. For years, while the United States was a net capital exporter it was very convenient for it to support the idea of reciprocity. The reduction of taxes at source meant for the United States a considerable addition in tax revenues and an insignificant reduction in the tax revenues it collected from foreign investors. When the U.S. position changed and it became a major capital importer, there were calls to change its treaty policy as well. See, e.g., H. David Rosenbloom, Toward a New Tax Treaty Policy for a New Decade, 9 Am. J. Tax Pol. 77, 83 (1991) ("We can no longer afford the luxury of assessing tax treaty policy from an unbalanced position—with the certainty that US investors abroad are so much more numerous than foreign investors in the United States that any reciprocal reduction of tax at source will surely redound to the benefit of the Treasury, U.S. t්aරිණියාණිස්ස්, Reoilboths/ව්pra note 16, at 1767 ("[T]hough treaties reducing source taxation below reasonable levels change the identity of each countries' taxpayers, in theory they need not, and are not supposed to, change either the total amount of tax paid by each taxpayer nor the amount of tax collected by each country.").

deed, be beneficial for both administrative and enforcement reasons. 107

Moreover, the other advantages of treaties—such as more compatible tax laws, improved collection of revenues, assistance in fighting tax avoidance, mutual supply of information, reduced bureaucratic burden for taxpayers, increased investor certainty, and improved foreign relations make a treaty arrangement beneficial to both sides even though none of these important advantages is as heroic as the prevention of double taxation.

2. Developing Countries and Tax Treaties

Breaking the Symmetry a.

Such reciprocity only exists where there is mutual investment (or the potential for such investment). However, the assumption of a symmetrical flow of investments does not hold in each case. 108 More specifically, it does not apply when one of the contracting countries is a developing country and the other a developed one. 109

When a developing country enters into a treaty with a developed country, the symmetry of the treaty breaks down as each of the countries takes a dominant role. Developing countries are, more often than not, capital importers. Their outbound investments are typically insignificant in comparison to the amounts of inbound investments they receive. Therefore, in tax treaties with developed countries, the developing country will typically play the role of a host country, while the developed country will predominantly be the residence country. Thus, when a treaty reduces the taxes that the host country can collect, it necessarily reduces tax revenues available for the developing country. 110 The treaty arrangement offers no compensation to the developing country in terms of either

^{107.} It is also contended that it is usually more efficient for residence countries to collect the taxes from its residents, which may indeed prove as an advantageous technique.

^{108.} See Roin, supra note 16, at 1758 (suggesting that the U.S. treaty policy should be changed since "the United States is no longer overwhelmingly a residence country; that is, the amount of foreign investment in the United States now approaches or exceeds the amount of U.S. owned investment in some foreign countries. In this light, the substitution of residence-country taxation for source-country taxation is no longer plainly a profitable exchange." (footnotes omitted)).

^{109.} See id. at 1767.

^{110.} See, e.g., Reese, supra note 91, at 379 ("[A] developing country might be expected to ignore revenue goals and accept substantial limitations on source-based taxation, at least insofar as such limitations could be expected to encourage investment.").

the level of investments (as the total level of taxation is not reduced) or the level of tax revenue on foreign income from its own residents (since the number of its residents investing abroad is insignificant).

Under these circumstances, the obvious outcome for a developing country that moves from a unilateral program to the treaty regime is that it is forced to give up tax revenues that it could have collected without attracting more investments.

Even benefits that are seemingly unrelated to whether a country is a net capital importer or exporter do not affect both countries symmetrically when the volume of cross-border investment is asymmetrical. Thus, for example, enforcement or even collection of information is much more significant for a residence country interested in taxing its residents investing abroad than for a host country. Since a host country is interested in lowering the tax burden on foreign investors, it has a strong incentive to assist foreign investors in avoiding their residence country taxes.

All this does not mean that tax treaties are not beneficial for developing countries. On the contrary, developing countries benefit from the other advantages treaties offer. Indeed, the administrative convenience, certainty, and international economic recognition the treaty regime provides may prove much more important for developing countries than for developed countries. In other words, unlike the benefits that accrue to developed countries, the main benefits for developing countries are increased legitimacy on the international level and, at times, a more robust foreign policy. However, developing countries, unlike developed countries (which receive symmetrical benefits), must make a sacrifice in the guise of tax revenues to win these benefits.

b. The History of Treaties with Developing Countries

Tax treaties have generally been constructed by and for developed countries with mutual interests and ideology. The OECD, for example, was primarily designed for developed countries.¹¹¹ In a certain sense, de-

The OECD and U.S. models are, as indicated, designed primarily for treaties between countries where the flows of income are roughly reciprocal. The limitations of source state taxation in those models produces a revenue cost for that state. However, when investment flows are more or less reciprocal, the revenue sacrifices more or less offset each other. In a treaty between a developed and a developing country the flows are largely in one direction: income flows from the developing country to the developed country. Thus, a model which is in form reciprocal in fact can impose a substantial revenue burden on a developing coun-

^{111.} See Rosenbloom & Langbein, supra note 7, at 392-93;

veloping countries stepped into a pre-existing game. At first, treaties were presented as a mechanism that would encourage investments into developing countries. If only developing countries would be willing to give up some tax revenues, double taxation would be eliminated and foreign investments would flow across their borders. 112 Although some developing countries signed treaties (especially with their colonial mother countries), 113 developing countries soon realized that the tax treaties implemented between developed countries are inherently biased against them¹¹⁴ and were reluctant to sign them.¹¹⁵

112. See A.H. Figueroa, Comprehensive Tax Treaties, in 15 DOUBLE TAXATION TREATIES BETWEEN INDUSTRIALIZED AND DEVELOPING COUNTRIES: OECD AND UN MODELS, A COMPARISON 9 (Proceedings of a seminar held in Stockholm in 1990 during the 44th Congress of the International Fiscal Association, Kluwer 1992) ("Historical development tells us that during the 60's, it was generally understood that treaties might constitute an adequate instrument to influence the flow of external investments to the poorest

countries.").
113. See Sol Picciotto, International Business Taxation: A Study in the INTERNATIONALIZATION OF BUSINESS REGULATION 57 (1992).

114. See, e.g., Figueroa, supra note 112, at 9, where it is noted that [D]espite the many agreements that were signed, mainly at the initiative of the industrialised countries, developing countries soon realized that the stipulations imposed on them in negotiations, equivalent to those being used in the industrial countries' agreements among themselves, did not sufficiently take regard to the legitimate fiscal interests of the developing countries.

Id. See also Goldberg, supra note 76, at 855;

The developed countries in the OECD Model opted for the residence jurisdiction bias, an option which would be expected to be unacceptable to the chronic source country in the unequal income flow situation. Thus it is not surprising that the OECD Model proved unsatisfactory to the developing countries in their negotiations with developed countries.

Id. See also Robert Hellawell, United States Income Taxation and Less Developed Countries: A Critical Appraisal, 66 Colum. L. Rev. 1393, 1419 (1966).

It is not entirely clear whether the tax treaty bias was merely the product of the history of tax treaties or whether developed countries were trying to maximize their self interests in a bargaining process. See, e.g., Rosenbloom & Langbein, supra note 7, at 364. The writers of the 1923 Report on Double Taxation, submitted to the League of Nations, stated that

Their preference was . . . exemption by the source state of nonresidents' income-both because it avoided theoretical complexities and because it accorded with what they viewed as economic reality: the source state should cede the right to tax when it sought investment from abroad. To the objection that this

try.

In order to examine the special problems of tax treaties between developed and developing countries, the U.N. set up an ad hoc group of experts that published guidelines for tax treaties between developed and developing countries as well as a model tax treaty. 116 However, the U.N. model and guidelines do not differ much from the OECD model. As Sol Picciotto noted:

[T]he UN Guidelines did not make any new departure in the approach to tax treaties. They took as their starting point the 1963 OECD draft, and merely noted the differing views expressed by experts . . . Neither the Guidelines, the Manual nor the Model Treaty could be said to challenge the basic principles of the OECD model. Although the report of the UN experts stressed the primacy of taxation at source, this was not expressed in any general principle 117

method would create an unbalanced treatment of "creditor" and "debtor" countries—the method would involve a substantial revenue sacrifice by the latter—the economists responded with a proposal to divide revenues based upon the relative magnitude of the different types of income deemed to have originated in each

Rosenbloom & Langbein, supra note 7, at 364, citing Report on Double Taxation Submitted to the Financial Committee by Professors Bruins, Einaudi, Seligman and Sir Josiah Stamp, Addendum, League of Nations Doc. E.F.S.73.F.19 (1923).

115. See, e.g., Surrey, supra note 90, at 366 ("Under these circumstances, less developed countries are reluctant to enter into the standard type of tax treaty, even though the rules are eminently reasonable and equitable, because those rules involve a revenue loss to them without an adequate offset."); Picciotto, supra note 113, at 55 ("Although some attempt was made by the developed countries (DCs) to extend the tax treaty network to these underdeveloped or less-developed countries (LDCs) . . . these efforts met with relatively little success The general inappropriateness of the tax treaty system for LDCs . . . was reflected in the paucity of treaties negotiated with them "); Roin, supra note 16, at 1767:

The United States has found it difficult, if not impossible, to enter into treaty agreements with countries where such apparent reciprocity is unavailable due to differences in investment and revenue flows. For example, lesser-developed countries . . . balk at relinquishing source tax jurisdiction because they are unlikely to be able to enjoy anything close to offsetting residence tax increases.

Id. (footnotes omitted).

116. See Picciotto, supra note 113, at 56.

117. Id.; See also, Figueroa, supra note 112, at 12 ("After twelve years, in 1979, the ad hoc group of experts approved a model that is known as the United Nations model (the yellow book). Notwithstanding the different color of its cover, this model shows definite and clear similarities with the

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The U.N. model, therefore, did not resolve the conflict. The model approved by the U.N. was considered unsatisfactory by developing countries. At the same time, "some industrialized countries consider the model imprecise and too generous." 118

Developed countries have tried to confront this reluctance by offering a more expanded source basis taxation, recognizing the "need of developing countries to conserve revenues." As we have seen, however, the need for tax revenues is not what really bothers developing countries. Developing countries are mainly interested in encouraging more inbound investments. Collecting more revenues is only a second best solution—a solution they opt for only absent the possibility of decreasing overall tax rates on foreign income. Since under a unilateral solution developing countries are able to collect more revenues, entering into a treaty that offers them less does not make sense.

Developing countries seek to encourage foreign investors by urging residence countries to exempt their residents investing in the developing country or by offering them "tax sparing" arrangements (i.e., providing their residents credits for taxes they would have paid if not for the special treatment provided by the host country under a special encouragement law). Some developed countries have consented to grant tax sparing credits in their treaties with developing countries. ¹²¹ The United States, however, has been persistent in its position against tax sparing. In fact, countries asking for tax sparing or exemptions in their treaties are often described as aggressive, ¹²² as asking the United States to subsidize in-

OECD model.").

118. Figueroa, supra note 112, at 12.

119. See Rosenbloom & Langbein, supra note 7, at 394; Rosenbloom & Langbein note:

The United States has also been prepared to accept relatively low thresholds for taxation of services income at source. And we have accepted relatively high source taxation on passive income in developing country treaties, focusing more on the practical need to avoid excess foreign tax credits than on the theoretical preference for residence basis taxation of such income.

Id. at 394

120. See id. at 393 ("The UN guidelines of 1974, which contain a more expanded source basis of taxation, recognize the need of developing countries to conserve revenues. The shift is, however, tempered by the often conflicting need of developing countries to attract capital") (footnotes omitted).

121. See PICCIOTTO, supra note 113, at 57 ("At the same time, some developed countries became willing to make concessions to agree treaties with them. Thus, the tax-sparing credit has been accepted by many OECD countries, other than the US.").

122. See, e.g., Reese, supra note 91, at 379 ("[T]hird world nations take

vestments within their borders¹²³ and favor them over other countries.¹²⁴ But if we see the tax sparing arrangement in light of its alternative—the unilateral solution—could we not conclude that the requirement of developing countries for more investments is merely a quid pro quo for their willingness to lower their taxes?

3. What Should Developing Countries Do?

It is my claim that the reluctance of developing countries to enter tax treaties is justified. Developing countries do not resist a "benefit for all" solution out of some non-cooperative whim. Rather, they refuse to enter into an arrangement that may harm them in terms of the tax revenues they can collect, without improving the level of foreign investment. While developing countries may be expected to give up at least some of their tax revenues in order to encourage more foreign investment, there is no reason for them to forego tax revenues without increasing the incentive for

124. See Rosenbloom & Langbein, supra note 7, at 380; When the first U.S. treaty with such a provision—the treaty with Pakistan—was submitted to the Senate for ratification, the "tax sparing" idea was greeted with hostility by the Foreign Relations Committee . . . [T]he Committee . . . entered a reservation to the tax sparing provision, and the treaty was approved by the Senate subject to the reservation. Three other treaties with tax sparing provisions . . . were never reported out by the Committee.

Id; see also id. at 392 ("We think it inappropriate to use tax treaties to favor foreign investment over domestic investment. Moreover, given the history of this issue, we believe that a treaty reflecting a different view would be unlikely to achieve ratification.").

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a considerably more aggressive approach seeking treaty terms which, in effect, provide subsidies to private investors at the expense of First World treaty partners.") Tax sparing is one such potential measure. 123. See Surrey, supra note 90, at 366;

[[]T]he other industrialized countries entering into tax treaties with less developed countries . . . have found it necessary to incorporate a provision which the less developed countries consider a stimulus to capital in-flows One approach followed involves exemption Another approach is the so-called "tax sparing credit" In our view these approaches are undesirable. Thus, tax exemption of income . . . would be viewed as a highly inequitable provision It would be basically inconsistent with the principle of the foreign tax credit A tax sparing credit would operate capriciously, providing the largest tax benefits to investors in countries having the highest nominal tax rates and without any necessary relationship to the fundamental economic needs of a country.

foreign investment—which is the case when the residence country collects the tax revenues that the host gives up. Mechanisms like exemptions and tax sparing are intended to encourage more foreign investment into host countries, rather than raise their tax revenues. This is the reason why, despite the fact that tax sparing does not harm the revenues of the residence country from a single transaction, developed countries are not thrilled to grant it. Nevertheless, this Article has shown that tax sparing may be the only mechanism that will convince a developing country to enter into a treaty—unless, of course, the international legitimacy, investor certainty, and reduction of bureaucratic hassles entailed in the treaty are worth paying the price of tax revenues without any corresponding increase in foreign investment.

V. CONCLUSION

Tax treaties are an important mechanism for a host of good reasons. Treaties coordinate the rules of their signatories, they provide some certainty for investors and ease their bureaucratic hassle, and they may even assist in collecting information and in establishing diplomatic relations between countries. But tax treaties are not required to prevent double taxation.

Treaties are not necessary for preventing double taxation because unilateral mechanisms could alleviate double taxation just as effectively. Residence countries, as well as host countries, share a strong incentive to alleviate double taxation unilaterally. The interaction of their unilateral mechanisms creates a stable equilibrium under which double taxation is prevented. Although the unilateral equilibrium reduces double taxation to the same extent and as effectively as the treaty arrangement, the two mechanisms differ in the way in which they allocate tax revenues between the signatory countries.

From this we can conclude that the function of preventing double taxation attributed to tax treaties is highly overrated.

Countries do enjoy administrative, economic, political, and social benefits from signing treaties, even if such treaties are not necessary to

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^{125.} As mentioned above, in a tax sparing mechanism, the residence country provides a credit both for taxes that have actually been paid and for taxes that would have been paid but for a specific alleviation in the host country's rules, typically under an encouragement of foreign investment law. The purpose of such a mechanism from the host point of view is to minimize the "tax wedge." The residence country does not give up more taxes than it would have given up under a "regular" treaty with a credit. It does, of course, provide a different level of outbound investment than under a treaty.

alleviate double taxation. The costs of these benefits differ though, depending on whether the country is a *developed* or a *developing* country. Developed countries do not have to pay any price above what they would pay unilaterally for the benefits of the treaty. Developing countries, however, have to sacrifice more to become members of the "treaty club."