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"International Tax Reform, the Tragedy of the Tax Commons, and Bilateral Tax Treaties"

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Vanderbilt Hall – 208
Time: 4:00 – 5:50 p.m.
Week 14

SCHEDULE FOR 2018 NYU TAX POLICY COLLOQUIUM

(All sessions meet from 4:00-5:50 pm in Vanderbilt 208, NYU Law School)

1. Tuesday, January 16 – Greg Leiserson. Washington Center for Equitable Growth. "Removing the Free Lunch from Dynamic Scores: Reconciling the Scoring Perspective with the Optimal Tax Perspective."

2. Tuesday, January 23 – Peter Dietsch, University of Montreal Philosophy Department. "Tax Competition and Global Background Justice."

3. Tuesday, January 30 – Andrew Hayashi, University of Virginia Law School. "Countercyclical Tax Bases."

4. Tuesday, February 6 – Gerald Auten, U.S. Treasury Department. "Income Inequality in the United States: Using Tax Data to Measure Long-Term Trends."

5. Tuesday, February 13 – Vanessa Williamson, Brookings Institution. "How the Taxpaying Experience Obscures Low-Income Taxpayers and Shapes Attitudes about Progressivity"

6. Tuesday, February 27 – Jacob Goldin, Stanford Law School. "Tax Benefit Complexity and Take-up: Lessons from the Earned Income Tax Credit"

7. Tuesday, March 6 – Lisa Philipps, Osgoode Hall Law School. "Gendering the Analysis of Tax Expenditures."

8. Tuesday, March 20 – Lisa De Simone, Stanford Graduate School of Business. "Repatriation Taxes and Foreign Cash Holdings: The Impact of Anticipated Tax Reform"

9. Tuesday, March 27 – Damon Jones, University of Chicago Harris School of Public Policy. "How Do Distributions from Retirement Accounts Respond to Early Withdrawal Penalties? Evidence from Administrative Tax Returns."

10. Tuesday, April 3 – Ajay Mehrotra, American Bar Foundation and Northwestern University School of Law. "T.S. Adams and the Beginning of the Value-Added Tax."

11. Tuesday, April 10 – Jason Furman, Harvard Kennedy School. "Should Policymakers Care Whether Inequality Is Helpful or Harmful For Growth?"

12. Tuesday, April 17 – Emily Satterthwaite, University of Toronto Law School. "Electing into a Value-Added Tax: Survey Evidence from Ontario Micro-Entrepreneurs."

13. Tuesday, April 24 – Wolfgang Schon, Max Planck Institute. "Taxation and Democracy."

14. Tuesday, May 1 – Mitchell Kane, NYU Law School. "International Tax Reform, the Tragedy of the Tax Commons, and Bilateral Tax Treaties."

[PRELIMINARY DRAFT: PLEASE DO NOT CIRCULATE]

International Tax Reform, the Tragedy of the Tax Commons, and Bilateral Tax Treaties

Mitchell A. Kane

[NOTE to NYU Colloquium Participants: I obviously drafted this paper before the passage of the 2017 Tax Act. Its relevance has increased with adoption of a partial foreign tax credit mechanism under that legislation. Over the summer I would like to revise this draft so that it is reflective of current law. I have not done any of this work yet. But I believe the substance of the arguments and the ultimate conclusions I have drawn in this early stage draft should remain sound and will hopefully inform topical debates. Also, apologies for the sorry state of the footnotes; more work for the summer. I am looking forward to your comments. --MK]

Abstract: *This paper analyzes the compatibility of novel approaches to the taxation of foreign source income with the double taxation article under bilateral tax conventions. Building upon Dan Shaviro's distinction between marginal tax rates and marginal reimbursement rates, the paper defends an approach to treaty compatibility which is premised on direct examination of the aggregate tax burden borne by foreign source income, as opposed to the formal method (credit versus exemption) of double tax relief. The paper first presents a graphical presentation of this test, which is an extension of a narrative and algebraic analysis produced in earlier work by Fadi Shaheen. The paper provides a justification of the offered test based both on textual interpretation and on a novel argument that reads the double tax article as regulating tax competition in the face of a common pool problem -- the "tragedy of the tax commons." The paper concludes with an analysis of highly strategic approaches that residence jurisdictions could take with respect to the treatment of foreign source income in order to encourage foreign-to-foreign stripping of tax base. Surprisingly, such approaches seem not to be ruled out by current treaty text. The paper offers proposed modifications to the double tax article that could address this issue.*

In the beginning were the words, and the words were "double taxation." That is, in the canonical account of the birth of the modern international tax system, the foundational document is often taken to be the "Report on Double Taxation" commissioned by the Financial Committee of the League of Nations and authored by four economists (Bruins, Einaudi, Seligman, and Stamp) in 1923.[1] This report, in turn, set the stage for the development of the entire modern

1. Report on Double Taxation Submitted to the Financial Committee by Professors Bivens, Einavai, Seligman, and Sir Josiah Stamp, at 18, League of Nations Doc. E.F.S.73 F.19 (1923) [hereinafter 1923 Report]. Not everybody accepts an account whereby the 1923 Report is taken as some sort of foundational text of the modern international tax system. See **[Cite to Graetz and O'Hear, at 1027.]** The point Graetz and O'Hear emphasize, however, has more

bilateral tax treaty network which remains in place today. As the title of the report suggests the central concern, from the beginning, was the potential adverse effect of double taxation. Thus the terms of reference for this commissioned report inquire, inter alia, as to the economic consequences from double taxation on the equitable distribution of burdens and the interference with "economic intercourse" and with the "free flow of capital."[2] The terms of reference go on to inquire about general principles that might determine the form of conventions to address the "evil consequences of double taxation."[3] In short, the magnitude of the enemy and the optimal remedy were the appropriate subject of further study. But the identity of the enemy -- double taxation -- was not a puzzle.

Nearly 100 years later, everything has changed and nothing has changed. At least for now, the primary gaze of the international tax community has been focused on the problem of inadequate taxation, whether this is cast under the rubric of base erosion and profit shifting, double nontaxation, or stateless income.[4] But the old enemy is not dead.

In part that's because the new economy will never fully displace the old economy. To be sure, the bulk of complex international tax planning structures that achieve the perceived ill of inadequate taxation involve new economy value in the form of intangibles which are difficult to value and difficult to pin down in the sense of territorial location. It would be a mistake, though, to proceed as if physicality and locatability have become irrelevant. Tangible products continue to be

to do with the **[proper understanding of the relationship between source and residence taxation than with a diminishment of the import of "double taxation," which they also seem to take as foundational.]** Also, this is not quite the true "beginning." Seligman's comprehensive treatment of the topic traces historical antecedents back to the 13th century. See Edwin R.A. Seligman, Double Taxation and International Fiscal Cooperation 133-34 n.10 (1928).

2. **[Cite.]**
3. **[Cite.]**
4. **[Cite.]**

built, shipped, and consumed in a way that pays little heed to national boundaries. Under well-accepted jurisdictional norms, these activities generate income, quite aside from the value added by any embedded intangibles, which is justifiably taxable in more than one jurisdiction, though arguably will be overtaxed in the absence of some coordinating device among sovereigns.

In part the old enemy lives on also because of the inevitable pendulum effect that arises whenever sovereigns attempt to expand tax base. As soon as, and likely before, the ink had dried on the final reports of the OECD BEPS project (at least on the handful of old economy tangible reports that were consumed physically rather than digitally), scholars and practitioners began to consider the potential spike in disputes as multiple jurisdictions might attempt to use at least some of the outputs of the BEPS project in ways that would lead to unresolved overlapping claims to tax the same income.[5] It turns out that achieving the end result of "single taxation," if that is the goal, is not a natural state of affairs. It takes effort. This is not surprising. So long as we are committed to nation states, income taxes, and at least somewhat free flow of capital, goods, and services, overlapping claims to the tax base will be inevitable.

Jurisdictions in an interconnected global economy will thus necessarily, for the indefinite future, have to give some answer to the question of how they wish to take account of the fact that income within the bounds of their jurisdictional entitlements to tax has already borne, or will bear, tax imposed by some other sovereign. That fundamental aspect of the international tax problem has not changed in a century. The interesting question is the durability of the framework put in place to handle this problem.

5. **[Cite BEPS final reports. Cite new concerns about 2x taxation.]**

In some sense that question of durability is the motivating question behind a great deal of contemporary international tax scholarship. I propose in this paper to deal with one particular issue, which is the question of whether various novel proposals regarding the treatment of foreign source income ("FSI"), which have arisen particularly in the United States, are consistent with the standard terms present across the range of bilateral tax conventions on the question of relief from double taxation. The discussion in this paper owes a substantial debt to the work of two scholars who have written on this topic: Professor Dan Shaviro and Professor Fadi Shaheen. This paper is in many ways an extension of their work and largely (though perhaps not entirely) consistent with what they have written. I will give below thumbnail sketches of their motivating contributions, but first it will be useful to set the stage with a quick, stylized account of how the policy ramifications of the double tax problem have been framed for the bulk of the period since 1923.

In the framework that came to dominate, jurisdictions face a basic binary choice. They can simply ignore FSI taxable by another sovereign or not. If ignored, then the jurisdiction is said to maintain a territorial system because it taxes only income arising domestically, while exempting income that arises abroad. Conversely, if the jurisdiction does not ignore FSI, then the jurisdiction is said to maintain a worldwide system. All income, regardless where it arises, comes into the base in the first instance. The fact that such income may also be taxed by another sovereign is handled by offering a credit for foreign taxes. That is, the jurisdiction offers a dollar-for-dollar offset for foreign taxes paid. This basic binary setup is enshrined in all model tax conventions including the OECD Model Convention, the UN Model Convention, and the US Model Convention.[6] It is also

6. **[Full cites.]**

forms the essential approach to double tax relief of countless binding bilateral conventions currently in force.[7]

In reality, it is well understood that matters are not as sharply delineated as this and that no jurisdiction operates on a pure worldwide or pure territorial model.[8] Jurisdictions that are nominally territorial may well have an interest in taxing foreign income (particularly passive income) that bears a sufficiently low rate of foreign tax. In that case, such a jurisdiction would need to solve the double tax problem through the offering of foreign tax credits for any foreign income that comes into the base. Jurisdictions that are nominally worldwide systems may well have an interest in actually exempting certain portions of the base. The U.S., for example, takes that approach with certain foreign earned income of U.S. citizens that would otherwise come into the worldwide tax base.[9] Further, jurisdictions may effectively move towards exemption via timing concessions. Again the U.S. example of deferral of large amounts of foreign income earned in foreign corporate solution is a prime example. There is no question that these sorts of ubiquitous worldwide-territorial hybrid systems are treaty compatible.

Binarity persists, however, in the following sense. Hybridity is created through a sort of molecular structure -- say three parts worldwide and two parts territorial -- but the periodic table is a highly abbreviated one. There would seem to be two, and only two, permissible atoms from which jurisdictions can build their systematic approach to FSI and the issue of double taxation. We have exemption and we have dollar-for-dollar credit.

7. **[Cite particulars and examples.]**
8. **[Cite crossroads/seesaw.]**
9. **[Cite.]**

In addition to these two, there was thought to be a third, rogue atom in the universe of double tax relief tools. Specifically, a deduction for foreign taxes paid operates by applying the domestic rate on a worldwide base, net of foreign taxes. Thus $1 of foreign tax paid offers double tax relief in an amount equal to $1 times the taxpayer's marginal tax rate, as opposed to the dollar-for-dollar value embedded in a credit. A deduction for foreign taxes was typically associated with the so-called "national neutrality" principle first named by Peggy Musgrave.[10] The approach was thought to favor the national interest in the short run, to the extent it treats foreign taxes just like any other expenses. The approach, however, has generally been disfavored on the grounds that it would invite retaliatory moves by other jurisdictions seeking to constrict the generosity of their double tax relief.[11] In any event, although there were some historical antecedents for jurisdictions offering a deduction for foreign taxes as the sole method of double tax relief, it would seem clear from the text of the model treaties and enacted treaties that a deduction method is not a permissible means of double tax relief.[12]

In the standard analysis that took center stage for many years the basic choice between worldwide and territorial system was cast in terms of the efficiency tradeoffs as between each. This type of analysis, however, came under sustained critical inquiry at least as early as 2000, when Professor Michael Graetz offered a wide-ranging critique of international tax policy in his Tillinghast lecture.[13] A further major development in the literature on the analysis of double tax relief came in Shaviro's work strongly criticizing the current U.S. system, in particular its approach

10. **[Cite.]**
11. **[Cite Graetz/Tillinghast.]**
12. **[Cite to historical practice in the UK.]**
13. **[Cite.]**

to deferral of foreign income earned in corporate solution (and the accompanying lock-in that this likely creates) and the provision of foreign tax credits.[14] The focus here is on foreign tax credits.

Shaviro has developed his arguments through a series of articles and ultimately in a sizable portion of his book on reformation of the international tax system.[15] This highly abbreviated summary could not possibly do the full argument justice. However, for present purposes, what is crucial is Shaviro's introduction into the literature of a basic distinction between two important margins impacted by a jurisdiction's choice of instrument in relieving double taxation.[16] Historically, the focus had been on *one* such margin. In particular, the concern had been with respect to the marginal tax rate (MTR) on foreign income earned by domestic taxpayers. Note that as defined and used throughout this paper the term "MTR" refers to the rate on *foreign* source income imposed by the country where the taxpayer is resident. This could be the statutory rate or the effective rate, depending upon the circumstances.[17] This should be distinguished from the tax rate that applies to domestic source income. To clarify that distinction, I will in places reference the variables $t_{\text{R-DSI}}$ and $t_{\text{R-FSI}}$. Throughout $t_{\text{R-FSI}}$ and MTR refer to the same thing, but I will use Shaviro's label "MTR" where discussing his contribution so as to better link the analysis with the existing treatments in the literature. Further, I will use variable t_{S} to refer to the source country tax rate.

The central concern with double taxation has been that in the absence of suitable relief, the tax burden would be too high, thus discouraging cross-border investment. The residence country's MTR, coupled with the approach to double tax relief, will be a key determinant here.

14. **[Cite early FTC papers/book.]**
15. **[Cite cross-reference.]**
16. **[Cite.]**
17. **[Cite Shaviro on effective/statutory.]**

Shaviro, argues, however, that it is also crucial to consider a separate margin, what he calls the "marginal rate of reimbursement" (MRR). The MRR captures the marginal relief that a taxpayer receives from the residence jurisdiction on an additional dollar of tax paid to a foreign jurisdiction. In this terminology, an MRR of 1 reflects a full dollar-for-dollar credit. By contrast, an exemption system has an MRR of 0. Finally, a deduction has an MRR equal to the MTR. The MRR gives a way to think about taxpayer sensitivity to foreign taxes. With an MRR of 1 the taxpayer is completely insensitive to foreign tax because an extra dollar of foreign tax will be wholly reimbursed by the residence jurisdiction. By contrast under an MRR of 0, one expects taxpayers to be highly sensitive to foreign tax as the full amount of foreign tax is actually borne by the taxpayer.[18]

One of Shaviro's central points in analyzing the MTR and MRR margins distinctly is that there is absolutely no reason to think that from a national welfare perspective the optimal relationship between MTR and MRR would just happen to be that embodied by the two permissible options historically on the table of credit and exemption.[19] That is, in the highly constrained universe of available options the MTR must be equal to either $t_{\text{R-DSI}}$ (credit system) or to 0 (exemption system). And the MRR must be equal either 0 or 1. But we have good reason to think these are not optimal. For example, Shaviro suggests that an MRR of 1 (reflected by the

18. Shaviro focused on taxpayer sensitivity and seemingly perverse effects created by MRR's of 1. That is, from the residence jurisdiction's perspective it would seem to be in the national interest for the taxpayer to exhibit some sensitivity to foreign tax, so they might seek to reduce such tax burden. Because reductions in the tax burden can involve strategies of borderline legality, casting the issue in terms of taxpayer sensitivity may make it look like the residence country that purposefully reduces the MRR is engaging in bad behavior. But note there is also a parallel issue of jurisdictional sensitivity. An MRR of 1 also means that a source jurisdiction may be able to raise rates without suffering an adverse outflow of mobile capital. That result could be seen as problematic from a tax competition standpoint, irrespective of dubious taxpayer level profit shifting. I discuss the relevance of tax competition at greater length below. **[*See* infra ___.]**
19. **[Cite.]**

credit) is almost certainly too generous.[20] It makes taxpayers completely insensitive to foreign taxes, thus treating foreign taxes the same as domestic taxes even though foreign taxes are not mere transfers within the economy. It is also highly likely that an MTR equal to the full domestic rate is too high, as evidenced by the pressure towards inversions and the move towards allowing taxpayers greater and greater flexibility in planning to achieve deferral.[21] On the other hand, there is also a good argument from the basic analysis of deadweight loss under welfare economics that the MTR on foreign source income under an exemption system is too low.[22]

The chief way in which Shaviro suggests we could expand the universe of available options is by breaking free of the idea that the MTR has to be equal to either zero or $t_{\text{R-DSI}}$. Why not set the MTR somewhere in between these two numbers?[23] Further, once one alters the MTR in this fashion it is possible to take approaches to the MRR other than one or zero that would generate a revenue neutral or burden neutral result. Specifically, Shaviro proposed in his book that the U.S. might lower the MTR to something between 5% and 10% but then offer only a deduction for foreign taxes, thereby bringing the MRR in line with the MTR.[24] For a move to make the MTR = MRR, there will be some MTR that will leave matters revenue neutral and burden neutral in the aggregate.[25] Notwithstanding the aggregate similarity the marginal incentives will be very different. One potentially substantial hurdle to any such reform, however, is that by affording double tax

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21. **[Cite.]**
22. **[Cite.]**
23. **[Cite.]**
24. **[Cite.]**
25. **[Cite.]**

relief through deduction (rather than credit or exemption) it plausibly runs afoul of US treaty commitments, as Shaviro highlighted at the time he advanced the initial argument.[26]

In the wake of Shaviro's publication of his proposal for a deduction method paired with an MTR lying between $t_{R\text{-}DSI}$ and 0, several reform proposals were floated which did indeed break free of the constraint that MTR should be equal to either $t_{R\text{-}DSI}$ or zero. A prime example was so-called Option Z in the reform proposals put forward by then-Chairman Baucus of the Senate Finance Committee.[27] Under Option Z a taxpayer's foreign business income was split into two components in a 60%-40% ratio. The first (60%) component would be subject to tax at the full US rate (i.e., $t_{R\text{-}FSI} = t_{R\text{-}DSI}$) but with allowance for foreign tax credits. The second (40%) component was simply exempt from tax. On its face this approach would seem to be treaty compatible in the sense that income is either afforded a credit or an exemption, thus seemingly keeping us within the bounds of the permissible two element periodic table.[28] However, the system would also seem to have key features that Shaviro had advocated. First, the MTR on $1 of foreign business income is between 0 and $t_{R\text{-}DSI}$. More exactly, the MTR on $1 of foreign business income will be equal to $0.6t_{R\text{-}DSI}$. This is a simple weighted average that follows from the 60-40 split (i.e., $0.60*t_{R\text{-}DSI} + 0.4*0$). Second, the MRR under this proposal is 0.6. This reflects the fact that credit is only given for the 60% of foreign business income which actually comes into the U.S. base. Thus for $1 of additional foreign tax paid, the taxpayer will receive credit of only 60 cents.

26. **[Cite.]**
27. **[Cite.]**
28. Shaheen provides an elaborate argument for such treaty compatibility which is discussed below. **[*See* infra ___.]**

Upon the initial introduction of Option Z Shaviro described the proposal as a seemingly treaty compatible version of his own proposal.[29] That is, Option Z seems to satisfy the requirement that double tax relief be composed of one of the two permissible atoms, exemption or credit. To follow the molecular metaphor, this system is six parts credit and four parts exemption. With respect to the taxes properly allocable to the credit portion of the stew, the proposal offers a dollar-for-dollar credit.

This raises an interesting question about whether the potentially differential assessment of Shaviro's proposal versus Option Z in terms of treaty compatibility makes any substantive sense. Shaviro has been sharply critical of any such distinction as embodying an empty formalism.[30] On this account a deduction for foreign taxes paid paired with a decreased MTR (relative to $t_{\text{R-DSI}}$) fails to be treaty compatible because it does not eliminate "double" taxation. That is, by bringing foreign income into the base at all but then offering an MRR less than one, the residence jurisdiction is taxing for a second time what has already been taxed before by the source country. Shaviro observes, however, that such an obsession with the formalities of "double" taxation versus "single" taxation is just silliness, as both taxpayers and governments surely care about tax due and revenue collected rather than (administrative costs aside) the formal number of collection points. Thus what taxpayer would prefer the single tax of 40% to two taxes of 15%?[31]

Ultimately Shaviro seems not excessively troubled by the empty formalisms, allowing a sort of live-by-the-formalistic-sword, die-by-the formalistic-sword approach.[32] That is, he sees Option Z

29. **[Cite.]**
30. **[Cite.]**
31. **[Cite.]**
32. **[Cite.]**

as fairly close to his own proposal. Forcing legislation through formalistic hoops may waste some amount of time and drafting resources but so long as the treaty respects the formalisms and it is possible to substantively craft the sort of policy with respect to foreign source income that is in the national interest, perhaps the obsession with formalism is not of great concern. Perhaps. One key theme I propose to explore in this paper, however, is whether the treaty formalism is in fact all silliness or whether the formal categories demanded by the treaty actually map on in some way to substantive categories that are sensibly distinguished from one another.

I will return to this question below but first it will be helpful to bring Shaheen's argument into the fold. Shaheen's argument is important because it provides a general test for assessing whether a particular treatment of foreign source income is treaty compatible or not on the question of relief of double taxation. The test that Shaheen proposes is that any system which can be expressed as a fixed or floating mix of exemption and pure (dollar-for-dollar) credit is treaty compatible.[33] By a "fixed" mix Shaheen has in mind any system which exempts a fixed percentage of foreign income from the base and then taxes the remainder with allowance of allocable dollar-for-dollar credits. By "floating" mix Shaheen has in mind a system which will exempt a variable percentage of foreign income from the base and then tax the remainder with allowance of allocable dollar-for-dollar credits. As he notes, a floating system will involve indeterminate percentages *ex ante* because the exemption percentage will depend on some variable, but a floating system will also devolve into a fixed system *ex post*, as soon as we know what the actual percentage of exempt income is.[34] Shaheen suggests that even if a system is not formally expressed in this

33. **[Cite.]**
34. **[Cite.]**

fashion, it should be fine for treaty compatibility so long as it *could* have been so-expressed.[35] The argument here is grounded in substance over form principles which it is argued should be used to interpret treaties for which the interpretive question points back to U.S. domestic law.[36]

It is important to stress that this appeal to substance over form is entirely consistent with Shaviro's reading of treaty formalism regarding double tax relief. Shaheen's argument is that if an approach to double tax relief could be re-expressed as a fixed or floating combination of credit and exemption without changing the economic substance then it is treaty compatible. Shaheen further demonstrates algebraically why Shaviro's initial proposal *cannot* be so-expressed in every state of the world.[37] This will depend on the interaction of domestic and foreign tax rates. Thus Shaheen's argument implies that there is *some* substantive, not merely formal, difference between Shaviro's proposal and proposals such as Option Z which is said to be treaty compatible. But what is the difference exactly? How large is it and should it matter?

In the course of answering these questions I hope to make three contributions to the existing scholarly treatments in this area. First, I present a graphical representation of what it means for an approach to double tax relief to be treaty compatible. This graphical representation is largely, though not entirely, overlapping with the substance of Shaheen's proposed condition for treaty compatibility, which he presents narratively and algebraically. The graphical extension presented here has a number of merits. It allows for a simple visual description of treaty compatibility that is likely more readily explicable to policymakers and other audiences. It allows for a ready comparison of different proposals. It allows one to readily assess proposals that are just

35. **[Cite.]**
36. **[Cite.]**
37. **[Cite.]**

barely treaty non-compatible and accordingly various routes available to fix them. It allows for a simple identification of relevant strategic interest from the national perspective. Finally, it allows for ready identification of those instances in which the test I propose here would treat certain systems as treaty compatible, even where the Shaheen test would not. I will present and develop the graphical representation of treaty compatibility in part I of this paper. Part I of the paper is not a justificatory analysis. Rather, the approach is simply to offer a graphical representation of a certain test of treaty compatibility, while simply assuming that this is a legitimate test.

The second contribution of this paper relates to the justificatory story. Part of the justification is grounded in an interpretive analysis of treaty text. Here, I offer a somewhat different argument than that advanced by Shaheen. In addition to the interpretive story I also argue that the proposed test makes sense as a policy outcome. As noted Shaviro has suggested that the line separating treaty compatible approaches from incompatible ones seems to be one of mere formalism tied to an untutored obsession with elimination of "double taxation." But there is a way to read the line between treaty compatibility and non-compatibility that has actual substantive merit. The basic idea is that the demarcation between compatibility and non-compatibility can be understood as a sensible way to set an ex ante commitment to police tax competition among states. I will develop these justificatory arguments in Part II of the paper.

The third aspect of the paper is more forward looking. Existing treatments have sensibly posed the question whether various possible reforms to the U.S. international tax system would be compatible with treaty obligations. The discussions have understandably, and rightly, viewed it to be a clear mark in favor of a proposal if it is treaty compatible. Enacting a reform that is not treaty compatible leads one instantly down the road either of treaty override or treaty renegotiation.[38] Neither route is particularly desirable. Treaty override invites tension with treaty partners and obviously casts doubt upon future treaty negotiations to the extent that trading partners will rightly question whether the deal that is being agreed to in the moment is the deal that will in fact be honored in the U.S. Treaty renegotiation is not a happy outcome either. If a reform were to be inconsistent with every treaty the U.S. is currently party to, then the renegotiation effort in terms of time and expense is massive. Accepting this point about the clear merits of compatibility versus non-compatibility, the analysis in the existing literature and the extension presented here puts on the table the question whether the existing treaty approach is sufficiently well-adapted to current realities. One can bring this back to the distinction between the two margins regarding MTR and MRR identified and developed by Shaviro.

I do not think there is any basis in the historical record suggesting that treaties have been negotiated with an eye toward the implications for MRRs. The concern, rather, has been about the incremental burden that a residence country will place on FSI that has borne foreign tax (or could bear foreign tax). That is, the concern has been with the MTR and the interaction of the MTR with the chosen method of double tax relief. But countries should be, and are, increasingly concerned with the impact of MRRs. That is, source countries have an interest in how residence countries set their domestic policy in ways that may lead to incentives for taxpayers of the residence country to lower source country tax burden. That's the clear lesson of some of the outputs in the final BEPS reports, where, for example, the OECD has taken up the question of the way in which residence country CFC legislation can affect incentives for foreign-to-foreign

38. **[Cite Shaheen on this point.]**

stripping (that is, behavior which reduces the source country tax). MRRs are obviously crucially related to incentives to undertake foreign-to-foreign stripping. But there is no treatment of this in bilateral tax conventions and no attempt to tie this concern together with MTRs. The margins are distinct, as Shaviro has shown, but they are also overlapping because the very same instrumental choice may simultaneously affect both margins. That would suggest that perhaps treaties should evolve to include mechanisms that cover the effect on MRRs explicitly.

As with any work on tax treaties one must make an initial decision about which treaty text to analyze. Given the particular relevance of the question analyzed here to certain U.S.-based reform proposals, I will take my primary subject of analysis to be the U.S. Model Income Tax Convention (US Tax Convention). However, the basic analysis here has clear relevance for the general interpretation of tax treaties outside the U.S. as well. I will, accordingly, call attention to the OECD Model Tax Convention on Income and Capital (OECD Model Convention) as appropriate.

I. A Graphical Representation of Double Tax Relief and Treaty Compatibility

The task of this part of the paper is to develop a graphical representation of whether a form of double tax relief offered by a residence country is treaty compatible. It will help to begin with a simple narrative description of the test that I ultimately defend here. Specifically, under this analysis, the residence country must grant double tax relief in a way such that the aggregate (i.e., domestic plus foreign) tax rate, t_A, faced by its residents on income arising in the treaty partner jurisdiction is no greater than the rate, $t_{R\text{-}DSI}$, that would have applied had the income arisen domestically, unless t_S is itself greater than $t_{R\text{-}DSI}$. I mean this to state both necessary and sufficient conditions. Thus, any approach in which t_A is less than or equal to $t_{R\text{-}DSI}$ (where t_S is less than or equal to $t_{R\text{-}DSI}$) is sufficient for treaty compatibility. It is also necessary. That is, any approach in which t_A is greater than $t_{R\text{-}DSI}$ (where t_S is less than or equal to $t_{R\text{-}DSI}$) is *not* treaty compatible.

This is different from the narrative description offered by Shaheen, though it is largely overlapping in result.[39] It also would seem to be something of a departure from the text of Article 23 of the U.S. Model Convention, which speaks specifically in terms of the United States relieving double taxation by offering a "credit" against U.S. tax. The seeming gap between the test proposed here and the treaty text raises an issues whether the test is a legitimate interpretation of Article 23. I will take that issue up in Part II. For now I will bracket legitimacy and consider how a graphical representation of such a test allows for ready evaluation of both typical and novel approaches to the taxation of foreign source income.

The first step in establishing a graphical analysis of the test proposed here is to articulate a functional expression that captures the relevant information. What we are concerned with under the proposed test is the aggregate tax burden -- residence country and source country -- that is implicated in a given scenario. Within the standard treaty framework (at least for active income), the source country is permitted to assess its tax and the residence country must provide double tax relief.[40] The source country tax rate, t_S, could thus be thought of as the independent variable, while the aggregate tax rate will be a function of the source country tax rate and the residence country's approach to taking account of source country tax. Finally, in attempting to relate the issue of

39. I discuss particular instances where my test produces a different result from that of Shaheen's below. *See* infra ___.
40. **[Cites to Article 5/7 framework.]**

treaty compatibility to the two margins identified by Shaviro we need a functional expression that represents the import of both the MRR and MTR. Taking these conditions together we can write down an expression for total tax burden as a function of the source country rate as follows: $t_A = t_S(1\text{-MRR}) + \text{MTR}$.

In other words, the total tax burden can be broken down into three components: the foreign tax rate (t_S), the domestic tax rate on foreign source income (MTR), and a reduction for the amount of tax relief given by the residence jurisdiction in virtue of the foreign tax rate ($-t_S$*MRR). We can make a few observations about this function that tie in with the existing treatments in the literature.

First, note that the slope here is (1-MRR). In Shaviro's treatment an MRR of 1 (full credit) is consistent with taxpayer indifference to the foreign tax burden. In the function I have presented above this means that graphically flat lines will accord with taxpayer indifference to the foreign tax rate. Conversely, steeper lines will accord with greater taxpayer sensitivity.

Second, this expression perhaps offers an intuitive way to grasp Shaviro's claim that an exemption system is an implicit deduction system.[41] From within the standard framework that claim sounds discordant because exemption and deduction are generally thought to be on opposite sides of the spectrum of generosity with respect to double tax relief. But once we consider the MRR and MTR margins distinctly, Shaviro's meaning is plain. He suggests that we think of a "deduction" system as any system in which MRR = MTR.[42] That is, it is precisely the meaning of a "deduction" that the taxpayer gets relief for the deducted item with tax value equal to the

41. **[Cite.]**
42. **[Cite.]**

amount deducted times the MTR. In the above expression, then, one can think of setting the MTR first and then making the MRR match. Historically, we've seen two ways, and only two ways, in which MTR and MRR could match in the above expression. Either they could both be equal to the full domestic rate (deduction) or they could both be zero (exemption). But the functional form should make it plain that there are an infinite number of ways that we could set MTR = MRR. It should also make plain that even though exemption can be seen as a species of deduction, it is also the case that exemption and a non-exemption deduction system where MTR and MRR are, by definition, equal but both greater than zero, will produce the identical result in only one circumstance. Namely, in the never encountered circumstance where the foreign tax rate equals 100%.

It is a trivial matter to generate expressions for the standard three approaches of credit, exemption, and deduction using the above function. Specifically, for a credit we simply set MRR =1. Note that if we assume this is the case for *any* t_S that is tantamount to saying we have a fully refundable credit and we can write:

(1) Credit (Refundable): $t_A = t_S(1\text{-}1) + \text{MTR} = \text{MTR}$[43]

For an exemption system we simply substitute MTR = MRR = 0 and can write:

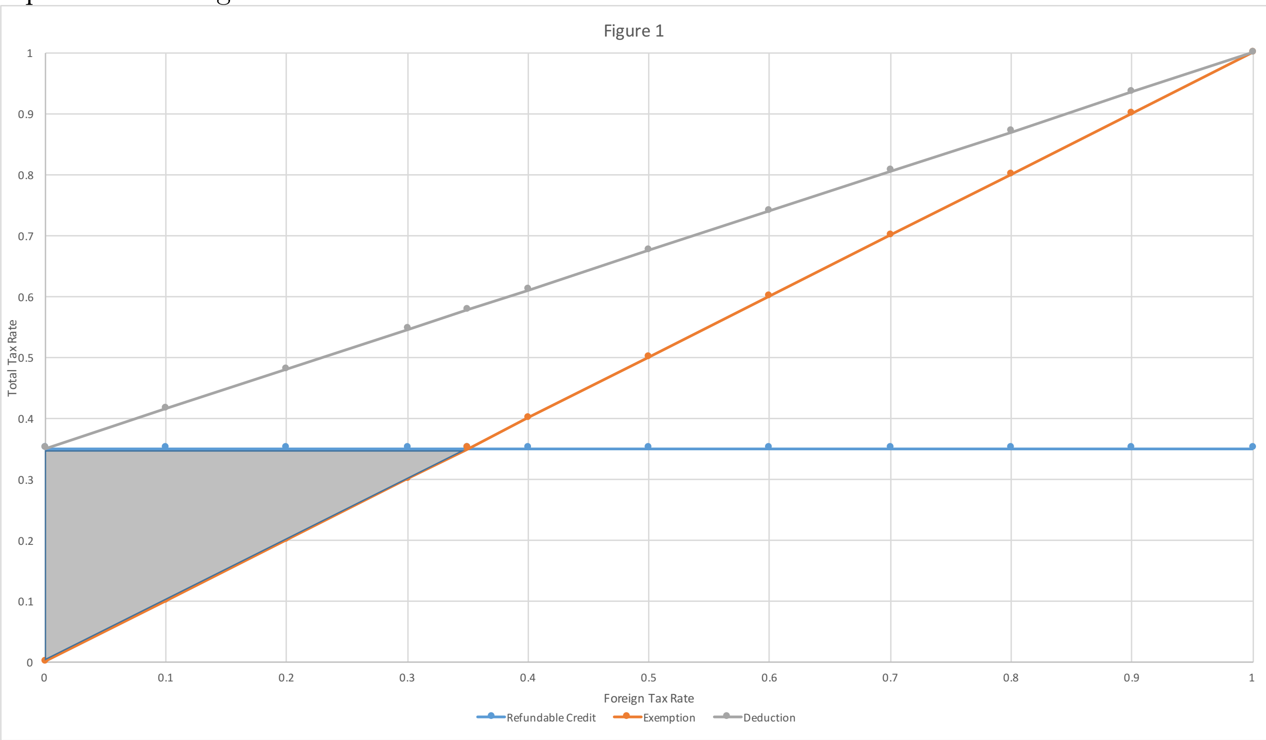
(2) Exemption: $t_A = t_S(1\text{-}0) + 0 = t_S$

For a deduction system we can substitute MRR with MTR and write:

(3) Deduction: $t_A = t_S(1\text{-MTR}) + \text{MTR}$

43. In the ensuing discussion I analyze a credit as if it were fully refundable. This is for ease of exposition and graphical presentation. Nothing in my argument, however, depends on credits actually being refundable. The test I analyze for treaty compatibility concerns the range where t_S is not greater than $t_{R\text{-}DSI}$. In that range the distinction between refundability and nonrefundability is not important. **[Discuss relevance of FTC limits here?]**

With an assumed domestic tax rate we can graph these three expressions. For these purposes I will assume the U.S. current corporate tax rate of 35% reflects the MTR. This produces the results represented in Figure 1.[44]

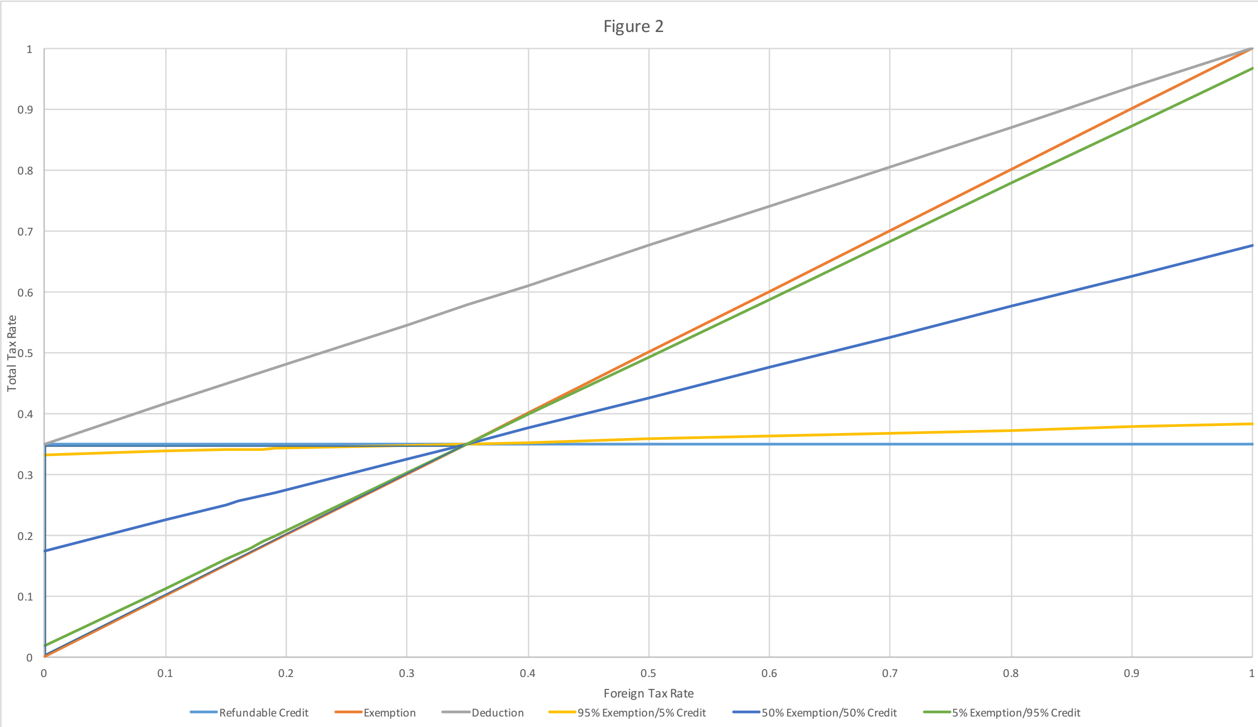


In this graph I have shaded grey the area below the credit line and above the exemption line up to the point that the credit line intersects with the exemption line. The claim here is that any line which traces a trajectory solely through this grey triangle over the range $[0, t_{\text{R-DSI}}]$ reflects an approach to double tax relief that is treaty compatible. This is simply a graphical representation of the narrative presentation of the test above. That is, for any point inside the grey triangle, we have: (i) t_A is less than or equal to $t_{\text{R-DSI}}$ and (ii) t_S is less than or equal to $t_{\text{R-DSI}}$.

44. I noted above that circumstances will determine whether to analyze MTR as an effective or statutory rate. The rate can be analyzed as a statutory rate here. Suppose that under a theoretically sound definition of an income base a taxpayer has \$110 of FSI. The source jurisdiction taxes this at 30%, for a tax of \$33. The U.S. grants some additional deduction, bringing the base down to \$100, and maintains a 35% statutory rate. The claim under the proposed test is that tA can be no greater than 35% of the domestically defined base. This could be restated in terms of effective rates but nothing would turn on this, so long as the residence jurisdiction does not use different base definitions for FSI and DSI.

As noted in the introduction this is generally consistent with the Shaheen result. Consider that any line that falls wholely within the demarcated space over the prescribed range could be translated into a fixed combination of full dollar-for dollar credit and exemption (that is, the Shaheen test). One way to visualize this point graphically is to focus on the vertex of the triangle where the credit line and exemption line meet. Now imagine drawing a line between that vertex and the *y*-axis. At the extreme of 100%/exemption and 0% credit we obviously have the full exemption line. As we increase the percentage of credit in the mix the line will sweep upward hitting every point in the grey triangle, until we hit the opposite extreme of 100% credit/ and 0% exemption. For illustration I have graphed in Figure 2 the functions for a 5% exemption/95% credit system; a 50%-50% system; and a 95% exemption/5% credit system.[45]

45. Following Shaheen's notation, if we take α to represent the fraction of the income base that will be subject to tax and afforded credit (with $1-\alpha$ reflecting the exemption portion) then the expression for the total tax rate under a mixed system is $t_A = t_S(1- \alpha MRR) + \alpha MTR$. Note that this functional form is consistent with offering full dollar-for-dollar credits. The term $-\alpha MRRt_S$ can be understood as the effect of a dollar-for-dollar credit for allocable foreign taxes under a mixed system. For example, imagine a taxpayer has $100 of foreign business income under a system that is 95% credit-5% exemption and the source jurisdiction imposes $10 of tax on the full $100 base. It is well understood that when the residence country relieves double taxation through a credit it need only credit the amount of foreign taxes allocable to the income that has been brought into the residence country base, or $9.50 here. Thus the overall rate on the $100 drops 9.5 percentage points in virtue of the foreign tax credit, which is simply the evaluation of the term $-\alpha MRRt_S$ with $\alpha = 0.95$, $MRR = 1$ (reflecting dollar-for-dollar credit), and $t_S = 0.1$. Similarly, the expression is consistent with the residence country formally taxing whatever foreign income comes into the base at the full domestic rate. That is, the term αMTR can be read to reflect a weighted average of the rate that results with full taxation of the credit portion and zero taxation of the exempt portion. Using the same numbers as above, we have $\alpha MTR = 0.95 * 0.35 + 0.05 * 0 = 0.3325$. Of course, one could achieve that result by taxing all foreign income at 95% of the domestic rate. But formally, one would get the same result by taxing 95% of foreign income at the 35% rate and 5% foreign income at a 0% rate.



Observe that under the standard for treaty compatibility presented here it is entirely possible to make a determination about treaty compatibility without any reference to "double taxation" whatsoever. Thus one can explain the fact that the deduction method is not treaty compatible wholely by reference to the fact that the resultant total tax rate in light of the way the residence jurisdiction has reflected the burden of foreign tax in its calculation of domestic tax is outside what is permissible for the range [0, $t_{R\text{-}DSI}$]. That concept can be expressed and understood without reference to anything about duplicative taxation.

But if the test for treaty compatibility is *not* actually about duplicate taxation, then how is it that the original Shaviro proposal runs afoul of treaty obligations, while Option Z apparently does not? At least in some analyses after the floating of Option Z, Shaviro suggested that the difference lie in the fact that his proposal formally involved "double taxation" while Option Z did not.[46]

46. **[Cite.]**

Similarly, Shaheen has argued that approaches to double tax relief which involve a simple deduction or partial credits (which can be restated as simple deductions) are not treaty compatible.[47] Each of a simple deduction and a partial credit formally might seem to involve double taxation, so is that the problem? Under the analysis presented here, the answer is negative. The problem, where there is one, should be understood entirely in terms of the overall tax burden that falls on foreign income. When that burden becomes “too high” -- understood in the terms presented above -- then we have a problem under the treaty. To see this point more clearly, one can graph Shaviro’s original proposal and Option Z within the framework just presented.[48] This result is presented here in Figure 3.

47. **[Cite.]**
48. Shaviro originally proposed a reduced MTR in the range of 5%-10%. I have graphed a tax with a 7% MTR as illustrative of the proposal. The substantive analysis would be identical for taxes at the 5% or 10% end of his proposed range. Thus the functional expression for the Shaviro proposal graphed here is simply: $t_A = t_S(1 - MRR) + MTR$, with MTR=MRR=0.07. The functional expression for Option Z (in the relevant range) graphed here is: $t_A = t_S(1 - MRR) + MTR$, with MRR = 0.6 and MTR = 0.21.

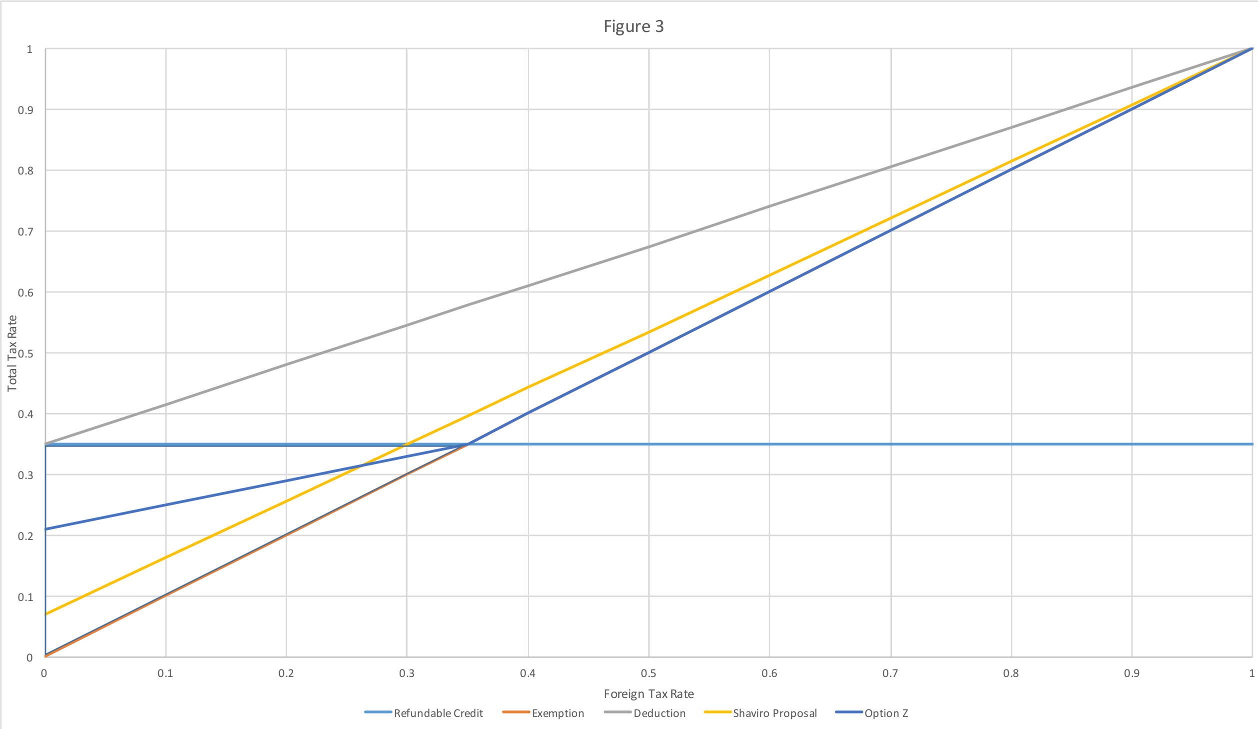


Figure 3 demonstrates several interesting features.

First, we have a nice graphical illustration of Shaviro's point about how a deduction system with a low MTR starts to look a lot like an exemption system. With the reduced MTR we can see how the traditional hierarchy of generosity of double tax relief running exemption-credit-deduction in terms of generosity has been almost completely unwound. For the entire range between $t_S = 0$ and $t_S = 0.3$ we see that in fact the deduction system yields a lower overall burden than the credit. But the reversion to the traditional hierarchy, at the point where the deduction line crosses the credit line, is precisely the fundamental problem with treaty compatibility for in the range between $t_S = 0.3$ and $t_S = 0.35$, the deduction yields an impermissible overall tax burden.

Second, it should be apparent precisely why Option Z is treaty compatible, whereas the original proposal from Shaviro was not. Option Z traces an overall tax burden which falls entirely within the permissible zone sketched by the lower bound of exemption and the upper bound of credit. Further, under this interpretation the reason that Shaviro's proposal is non-compatible while Option Z passes muster has nothing to do with one system involving formal double taxation while the other does not involve formal double taxation. Of course, each system involves two sovereigns collecting tax on the same economic income from the same taxpayer over certain ranges. But the distinguishing feature should be understood purely in terms of the relationship between the overall tax burden and the foreign rate of tax.

It is notable that if Shaviro's proposal fails to be treaty compatible on the test suggested here, it is also the case that it does not miss the mark by very much. Rather, it is only problematic in the range where the foreign rate climbs above 30%. But what if the foreign rate never climbs above 30% or at least is never expected to climb above 30%? Would that mean that the proposal is treaty compliant after all?

Shaheen considered this possibility in his analysis of Shaviro's proposal and concluded that the mere fact that the likelihood of foreign rates climbing to problematic levels would not be sufficient to preserve the treaty compatibility of the proposal.[49] The most relevant authority would seem to be *PPL Corp v. Commissioner*, a recent Supreme Court case on the creditability for U.S. purposes of a one-time windfall tax imposed by the U.K. Creditability turned on whether the tax had the "predominant character" of an income tax in the U.S. sense, or rather whether it was a tax on value.[50] The government was able to adduce evidence that at least as applied to a handful of companies the tax did not function like an income tax at all. (For example, the total liability was

49. **[Cite.]**
50. **[Cite.]**

not increasing in income.) For the bulk of companies, however, the tax could be cast in substance as an income tax, even if it did not have such a structure formally. The Court held that under the "predominant character" test of the regulations (and the common law before) the outliers could be ignored. The Court thought the regulation required an all or nothing determination and given that the bulk of the cases could be characterized as income taxation, this was sufficient to satisfy the "predominant character" test.

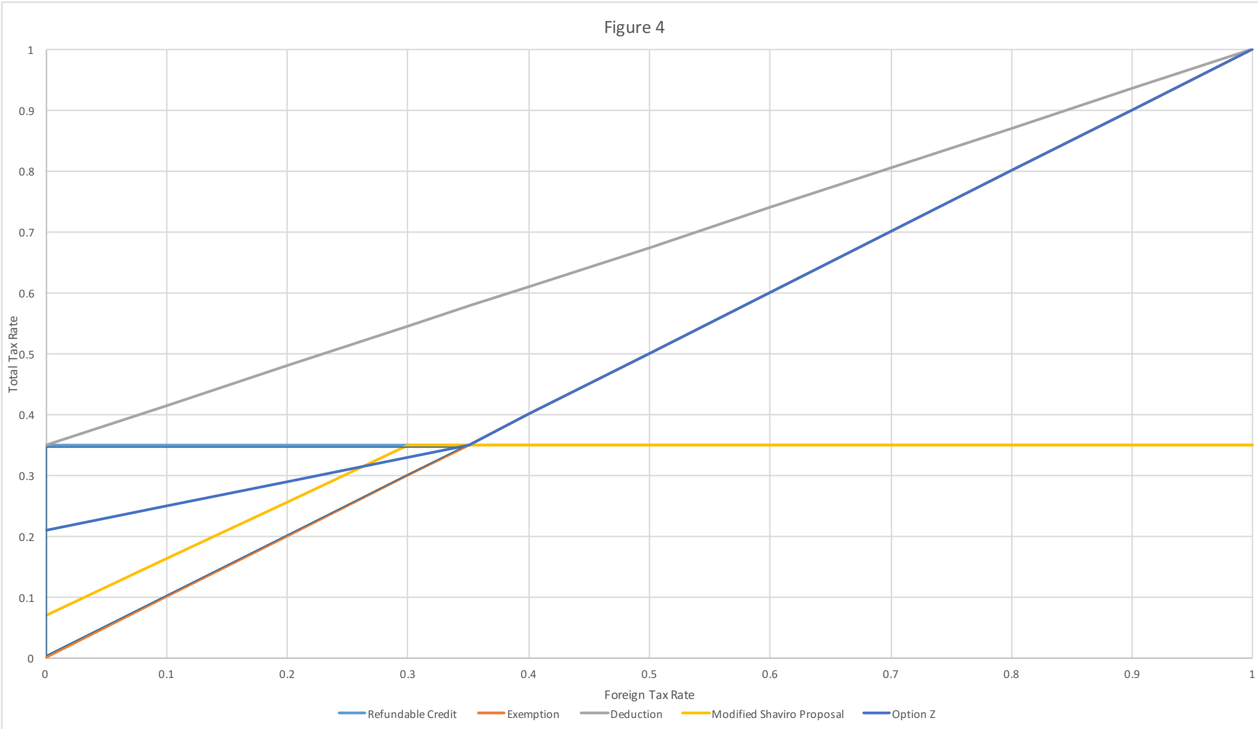
The holding could not be read, however, to say that there is a general principle of ignoring outliers when assessing the validity of a method of double tax relief.[51] The holding is based on the "predominant character" language, which is not the issue under the treaty compatibility issue discussed here. Moreover, there are very good policy reasons for *not* ignoring outliers in the treaty context. Specifically, there are clear advantages to a jurisdiction being able to determine whether a method of double tax relief is treaty compatible at the time of adoption. This factor could well be determinative in the decision to adopt a policy in the first place. But under an "ignore the outliers" approach, a residence country proposal regarding double tax relief that was initially treaty compatible could cease to be so if the source country were in fact to raise its tax rate sufficiently to make the overall tax burden fall outside the permissible zone.

But even if one is required to take into account the possibility of the source country rate rising above 30% in this case, it is important to be clear that there are ways to render Shaviro's proposal treaty compatible that do not involve moving to Option Z and which, more generally, do *not* involve abandoning the deduction for foreign taxes (with reduced MTR as compared to $t_{R\text{-}DSI}$) as the chosen method of double tax relief. This claim is arguably in tension with Shaheen's final

51. **[Cite Shaheen.]**

conclusion on the permissibility of reduced rate deduction systems. For example, Shaheen makes the blanket statement that "reduced rate deductibility cannot be expressed as a perfect combination of exemption and full credit all circumstances. This means that there are situations in which reduced rate deductibility does not allow a dollar-for-dollar credit with respect to the fully taxable portion."[52] Under Shaheen's basic test for treaty compatibility, this would mean reduced rate deductibility systems are not treaty compatible as a general matter. I would agree with this statement with one elaboration. A reduced rate deductibility system is not going to be treaty compatible so long as reduced rate deductibility is applied through the entire range $[0, t_{\text{R-DSI}}]$. However, a system that involved reduced rate deductibility without ever resulting in a total rate in excess of the permissible rate should still be treaty compatible. Further, there is no conceptual bar to providing different approaches to double tax relief through the range $[0, t_{\text{R-DSI}}]$. To be concrete, suppose we were to modify Shaviro's proposal such that it would apply in original form in every case where the resultant total tax burden is less than or equal to the full domestic rate but that in any case where the application of the deduction with reduced MTR produced a total burden higher than the full domestic rate we would revert to a full dollar-for-dollar credit assessed with the full domestic rate (fully refundable just for simplicity, though nothing in the argument changes if we make it, as we surely would, a nonrefundable credit). The results are expressed in Figure 4 below.

52. **[Cite.]**



Based on the conditions imposed under the modified proposal it is not surprising that it is now treaty compatible under the test defended here.

Are there reasons to prefer the "modified Shaviro proposal" to Option Z, or to any other reform option? I do not take any position on that question in this paper, which is a difficult one. The whole point of the Shaviro separation of the MRR and MTR margins is that it may well make sense to set these independently. However, like all cases where one has two margins on which to optimize it is very often the case that it becomes impossible to optimize on both margins simultaneously. There will inevitably be tradeoffs, which tend to be difficult. What matters here is that the modified Shaviro proposal is importantly different and could be preferable to Option Z. For example, perhaps we prefer the relatively lower overall rate on low-taxed foreign income embodied by the modified Shaviro proposal. Or maybe we prefer the relatively greater tax sensitivity embedded in the modified Shaviro proposal (recall, the steeper the line, the greater the tax sensitivity). The broader point is simply that if we preferred the modified Shaviro proposal to Option Z, we ought not to adopt Option Z simply because of the erroneous view, in my opinion, that the modified Shaviro proposal would likely involve a deduction method for double tax relief in the bulk of cases and is thus treaty non-compatible. Rather, the approach to double tax relief should be set in a way that approaches optimality to the extent possible within the bounds of the treaty restrictions. Or put a little more simply, policy should be set such that we draw the "best" line through the triangle that sketches treaty compatible options.

The character of the line reflecting the chosen form of double tax relief will be determined by two basic choices. First, what is the y-intercept? Or, put in policy-relevant terms, what rate of tax do we think should apply to 0-taxed (and, by implication, low-taxed) foreign income? Second, what is the slope of the line at each point in the range [0, $t_{R\text{-}DSI}$]. The slope, as we have seen, is dependent on the MRR and reflects taxpayer sensitivity to the foreign tax rate. At each point in the range a jurisdiction will plausibly be considering an MRR such that the slope is greater than or equal to 0. Although conceptually possible it would seem that negative slope can be ruled out from the start. The meaning of negative slope would mean that for $1 of extra foreign tax paid the taxpayer receives a domestic benefit of *more* than $1. It is next to impossible to come up with an argument for how that result could possibly be a desirable policy outcome. Considering the choice of y-intercept and slope alongside one another makes the tradeoffs fairly plain. There may well be good policy reasons to drive the rate on 0-taxed or low-taxed foreign income above zero.[53] There may also be good policy reasons to achieve greater sensitivity (steeper slope) to foreign taxes. But, in effect, the higher the y-intercept, the less flexibility the jurisdiction will retain in putting in place

53. See Shaviro, supra, on basic efficiency argument.

a policy that fosters sensitivity to the foreign tax burden. Given the constraint that one cannot impose total burden higher than that sketched by the full credit line, then for a chosen y-intercept, a jurisdiction will only have so much slope to work with before it produces an overall burden that exceeds the permissible level.

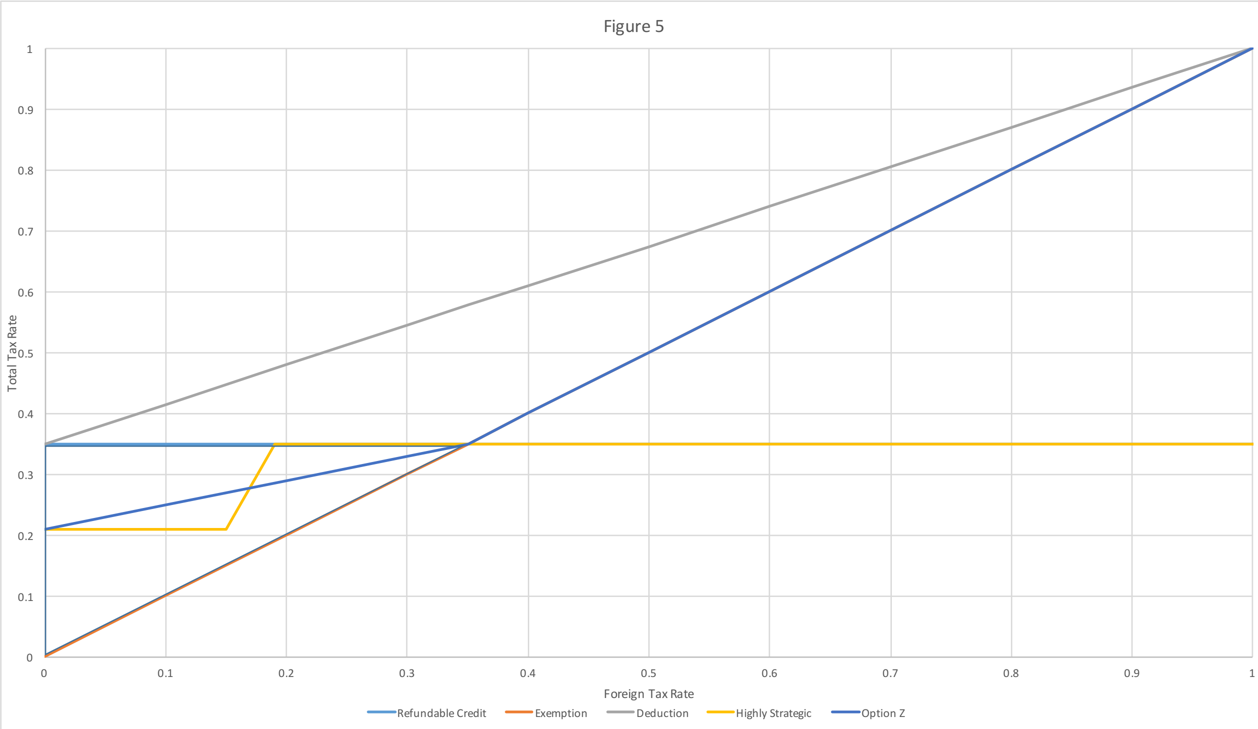
This raises some interesting strategic considerations. For example, does it make sense for a jurisdiction to apply a full, normal credit in certain ranges (0 slope) in order to open up the possibility of a policy that produces greater sensitivity to the foreign tax burden in other ranges? That is precisely the approach, in fact, which renders the modified Shaviro proposal treaty compatible as compared to the original Shaviro proposal. It certainly seems possible that this could be a desirable outcome.

A subtle point should be emphasized here. Shaviro is highly critical of the traditional foreign tax credit and the MRR of 1 that it entails. From this one might conclude that Shaviro himself might look askance at what I have called the modified Shaviro proposal insofar as the price of treaty compatibility here is the adoption of the full credit at least in a certain range. But one needs to unpack a bit how the MRR would actually feed into a taxpayer's overall liability. A natural interpretation of the MRR, because it is a marginal construct, is to conclude that taxpayers will be completely insensitive to the foreign tax burden just in case they happen to be at a point in the range $[0, t_{R\text{-}DSI}]$ where the MRR happens to be 1. Referring to Figure 4, this would mean that if the foreign tax rate happened to be 32% then the taxpayer would be indifferent to foreign taxation. But this is not right. We can't analyze the MRR just in terms of the effect of a \$1 decrease in foreign tax, at least not in all cases. We must think as well about the effect, if any, of any increase in some other foreign tax. That is, taxpayer sensitivity to foreign tax may in some cases be a single jurisdiction phenomenon -- for example can a taxpayer claim accelerated depreciation for foreign purposes or not. If the MRR is 1, then the taxpayer is predicted to be indifferent if liability goes up in virtue of not being able to claim accelerated depreciation. But very often taxpayer sensitivity reflected in the MRR is going to be not about single jurisdiction base calculation but rather is going to be about jurisdiction-to-jurisdiction base transfer. For example, a taxpayer might be able to make a deductible payment from a high tax jurisdiction to a low tax jurisdiction thereby lowering the foreign tax bill. With an MRR of 1 the taxpayer is indifferent to such a reduction.

The important point is that once we conceive the problem as a multiple jurisdiction problem with the potential for discrete jumps in the foreign tax rate and as a problem in which MRR is not constant, then we cannot necessarily get an accurate measure of the taxpayer's sensitivity to foreign tax simply by taking a local measurement of the MRR at any particular foreign tax rate. To my knowledge Shaviro did not specifically analyze the concept in this way but what I say here is, I believe, entirely consistent with his view. He would have had no reason to consider discrete jumps in the foreign tax rate as opposed to marginal ones because he was examining methods of double tax relief that represented constant slope through the relevant range under the functional form I analyze here. For example, if one is analyzing the normal credit with MRR of 1 through the entire range, then obviously sensitivity to foreign tax (or more correctly, insensitivity) remains constant as the taxpayer shifts income from a high tax foreign jurisdiction to a low tax foreign jurisdiction. This all changes once we allow the prospect of non-constant MRR through the range.

Consider a numerical example under the modified Shaviro proposal sketched in Figure 4. Suppose a taxpayer is able to shift income from a foreign jurisdiction that imposes a 32% tax rate to a foreign jurisdiction that imposes a 10% tax rate. Although the MRR is 1 and the graphed line is flat at the point where the the foreign tax rate is 32%, it is clear that the taxpayer will be quite sensitive to foreign tax in such a case. The reason is that once the foreign tax rate drops below 30% the MRR decreases substantially (that is, the graphed line becomes much steeper).

This raises the prospect of generating methods of double tax relief that are arguably more strategic than anything that has been considered previously, including in the various U.S. reform possibilities. For example, in principle one could generate quite high sensitivity to foreign taxation precisely in the range where one expects the rate of foreign country tax to fall. The mathematical insight would simply be that the 0 MRR of the exemption system is surely not a lower bound. In Shaviro's language the MRR would be negative and in the graphical representations I have presented here the slope of the line representing the relevant function would be greater than one. I present a graphical example of such a "highly strategic" possibility, alongside Option Z, below in Figure 5.



Suppose the foreign tax rate is 19%. Under the highly strategic system the taxpayer has been given supercharged incentives to shift to a jurisdiction where the foreign tax rate is 15%. By making such a shift the taxpayer will reduce the applicable total rate by 14 percentage points (from 35% to 21%)! That is a far greater incentive than would exist under Option Z, or even under an exemption system, which would generally be viewed as the upper bound on incentivization for profit shifting.

As above I am making no claim here that this is an optimal, or even good, system for the residence country to adopt. In calling it "highly strategic" I do not mean to assume that this embodies a good strategy, only a purposive effort to achieve a certain result. For example, one cost of adopting such a system is that the taxpayer is now indifferent to foreign taxation from the whole range of [0,15%]. Maybe that's a bad thing. Maybe Option Z is superior. The final analysis here will be quite complicated. At the least it involves predictions about where the foreign rate will lie both before and after a potential foreign-to-foreign deductible payment. It also requires taking a position on how much the residence country values revenue collection, as opposed to money being held by its residents in the private sector. Under the old national neutrality framework these were treated as equivalent. A dollar in the U.S. fisc contributed to national welfare equally with a dollar in the hands of a U.S. resident. Clearly, that assumption is far too strong. At the least U.S. resident taxpayers that are entities will often have owners who are not U.S. persons who likely bare at least a part of the corporate tax. So, at a 15% foreign tax rate in Figure 5, it is surely true that the 85% after-foreign-tax take will be split between the government and the resident taxpayer. But even aside from MRR and further incentives that come from sensitivity to that 15% rate, we surely should not treat Option Z and the "highly strategic" approach as equivalent simply because they each involve 85% of the base being split among the government and the taxpayer.

I mean only to suggest the possibility of treaty compatible methods of double tax relief that have not to date been explored. One of Shaviro's contributions was to show that there is no reason to limit ourselves to MRRs of 0 and 1. When applying that insight with the development of the Shaheen result, the contribution here is to suggest that a natural extension is that there is no conceptual reason that MRRs cannot be negative and there is no conceptual reason why MRRs have to be constant. Under the test for treaty compatibility presented here, the treaty (at least at present) arguably does not rule out the possibility.

This example of the highly strategic case perhaps raises questions about whether we have the right test for treaty compatibility after all. I'll take this up more generally in Part III. But first I turn to an analysis in Part II that talks more specifically about why this is a justified treaty norm in the first place, aside from the highly strategic case.

II. On the Meaning of "Double Taxation"

In this part of the paper I turn to a justificatory analysis of the test for treaty compatibility analyzed in part I. One part of the argument is interpretive, taking account of the text, structure, and history of tax treaties. As noted, I believe the end result of the test I advocate here to be largely co-extensive with the Shaheen result. However, my textual and interpretive argument is somewhat different from Shaheen's, explaining the modest departure in end results. In the first section of this part, I briefly review Shaheen's interpretive argument and then offer a possible alternative. The second part of the justificatory story presented here is grounded more in policy considerations than in treaty interpretation. I explain here why the basic test for treaty compatibility presented in this paper is a sound outcome from a policy perspective insofar as it provides a way to coordinate tax competitive pressures through tax treaties.

A. Interpretive Analysis. I begin here with a quick review of Shaheen's interpretive argument. The crux of the Shaheen argument is that treaties bless systems which mix credit and exemption as methods of double tax relief. This is clear, for example, where a country generally follows the exemption method. In such a case countries will typically want to tax certain categories of income, particularly passive income. Where the income does not benefit from exemption it should be afforded a credit.[54] Analogously, Shaheen argues that if a country generally follows a credit method

54. **[Cite Shaheen.]**

it is permissible to pair this with an exemption of some portion of the base, in which case foreign taxes associated with the exempt income need not be credited.[55] Shaheen claims that this is consistent with the language in the U.S. Model Convention (and enacted treaties) which permits "limitations" to the foreign tax credit including limitations under the law "as it may be amended from time to time without changing the general principle hereof."[56] In other words, the allowance of foreign tax credit limitations implies that it is permissible to exempt a portion of income rather than to tax the income and provide credits. This argument is grounded in the nature of permissible limitations. At the very least the reference to limitations clearly includes the overall foreign tax credit limitation, which well pre-dates the language in the U.S. Model Convention and enacted treaties.[57] But one can go further than this. Shaheen argues that the language should also be read to permit the strictest form of limitation, the transactional per item limitation.[58] Although the United States has not ever adopted a per-item limitation, Shaheen argues that the point of allowing credit limitations under treaties in the first place is to permit residence countries to preserve the base on domestic source income. It is thus essential that one not allow excess credits on low-taxed foreign income to offset tax on domestic income. Because a per item or transactional limitation achieves just that, Shaheen concludes that it should be treaty compatible. The last step in the argument is to note that any credit system which includes a component of exempting some income and disallowing associated foreign taxes is tantamount to setting up a limitation wherein the exempt income and disallowed taxes are separately basketed.[59] Because such an approach is *less*

55. **[Cite Shaheen.]**
56. **[Cite.]**
57. **[Cite.]**
58. **[Cite.]**
59. **[Cite.]**

restrictive than a transactional limitation, the argument is that it should also be treaty compatible. Finally, Shaheen argues that on substance over form grounds the United States should not have to draft any mixed system (such as Option Z) to formally include a separate basket for exempt income and associated taxes.[60] But even if it were, it would be a trivial matter to draft legislation which stated a partial exemption and outright disallowance of associated taxes in terms of a separate basket limitation. Note that because it is clearly permissible to exclude exempt income from a foreign tax credit limitation formula, such a basket holding only exempt foreign income would never generate any limitation to absorb credits in the basket. This is why it is functionally the same as an outright disallowance.

I consider Shaheen's reading of the U.S. Model Convention to be highly plausible and suspect it would be endorsed if presented to a U.S court. However, I flag two potential complications with the Shaheen interpretive argument and result, which also happen to align with the two ways in which the end result of the test I advocate here departs from the basic Shaheen result.

The first potential complication arises from the assumption that "credit" under Article 23 can only ever mean a full dollar-for-dollar credit. The argument for that result is that "credit" is an undefined term in the U.S. Model Convention itself (and other treaties) and thus we must resort to domestic law to define the term. Finally, under U.S. domestic law "credit" has always been understood to mean a full dollar-for-dollar credit. If we adhere to this position, then partial credits are necessarily ruled out. Thus the modified Shaviro proposal presented in Part I would be ruled out because it applies a partial credit over part of the relevant range (and a full credit over the

60. **[Cite.]**

remainder). However, the modified Shaviro proposal does sketch a trajectory entirely within the permissible space bounded by full credit and full exemption at every point in the range for the foreign tax of [0, $t_{R\text{-}DSI}$]. This means that the system can be re-expressed as a combination of exemption and (full) credit. It might be useful here to analyze a simple example with concrete numbers, at a particular level of foreign tax:

> *Example 1*: Assume a 30% rate for $t_{R\text{-}DSI}$ and $t_{R\text{-}FSI}$; a 50% domestic inclusion of FSI with full dollar-for-dollar credit of associated foreign taxes; a 50% domestic exemption of FSI with no credits for associated foreign taxes; and a t_S of 10%. The residual domestic tax on $100 of foreign income is $10 (.3*$50=$15, less $5 of foreign tax credit). Total tax burden, foreign and domestic, is $20. This is clearly treaty compatible under the Shaheen test. But now suppose the residence country drops its rate on foreign income to 15%; includes 100% of FSI with allowance of a half-credit; and exempts none of the FSI. The result is identical. The foreign system has not changed and still collects $10 of tax. The domestic tax would also be $10 (15*100=$15, less $5 of FTC).

At least at this level of foreign tax burden, then, the system with a partial credit can be expressed as a combination of (full) credit plus exemption. As Shaheen observes, at higher levels of foreign tax one will encounter problems with a partial credit. But as we saw in Part I this can be cured by reverting to a full credit at the appropriate breakpoint. But now we would seem to have a tension under the Shaheen analysis. It suggests on the one hand that credit must always mean full dollar-for-dollar credit because that is what the term "credit" means under domestic law. But it also suggests that any system that can be expressed as a mixture of full credit and exemption is treaty compatible. The problem is that it will always be possible to construct a system that uses partial credits for at least some levels of foreign tax burden and yet can be expressed as a mixture of full credit and exemption so long as we allow two conditions: (i) $t_{R\text{-}FSI} < t_{R\text{-}DSI}$ and (ii) the credit methodology is variable over different levels of foreign tax burden, that is it morphs from partial to full credit at the appropriate level of foreign tax burden.

It is clear that tax treaties do not rule out the first condition. After all treaties endorse exemption systems, which are the ultimate ways in which to apply a condition of $t_{R\text{-}FSI} < t_{R\text{-}DSI}$. Nor does it seem possible to read treaties as ruling out the second condition. There is certainly nothing in treaties that explicitly rules out variance. The only way to get to that conclusion, it would seem, is if we read "credit" to mean only and forever dollar-for-dollar credit. But now we've come full circle. If that is the interpretation of "credit" then we will rule out certain formal structures (partial crediting morphing into full credit) even though the substance of such structures could clearly be achieved by adopting full credits with a different rate structure. In sum, I think the best reading of the treaty "credit" language, at least in a U.S. treaty practice, is that "credit" can be interpreted to mean partial credit so long as the effect in substance could be replicated with a mixture of full credit/exemption.

The second possible complication with the Shaheen interpretation is that it is grounded in the extremes of what the residence country is permitted to do when applying foreign tax credit limitations. That is, for any given formal approach to foreign income Shaheen asks whether it would be possible to recreate the substance of such a system with a mixture of exemption and full dollar-for-dollar foreign tax credit with a limitation that is no more onerous than a per item limitation. If so, then substance over form principles ought to prevail and the formal approach will be considered treaty compatible. This again, is a quite plausible reading of the U.S. Model Treaty given the specific language mentioning that a credit must be provided, but subject to limitations.

The problem with this reading, however, is that it confronts a different sort of tension with general substance over form principles. In particular, on the Shaheen reading the residence country would be constrained from taking certain approaches if it was facing a taxpayer with a single item of foreign income. Consider the results in the following example:

> *Example 2*: Say the taxpayer has $100 from a single item of foreign income and the foreign rate again is 10% and the U.S. rate is again 30% on both domestic and foreign source income. Under the Shaheen analysis the U.S. would be limited to either full dollar-for-dollar credit or to full exemption. That is the U.S. can either credit $10 and have residual tax of $20 or can exempt and have residual tax of 0. There would be no way to reach residual tax amounts between 0 and $20 because there would be no way to do that under a per item limitation, which is Shaheen's ending point for permissibility.

Shaheen's textual argument that anything you can do with baskets is treaty compatible makes sense. But the substance over over form principle and the structure and scope of the treaty can be pushed one step further. Specifically, it is clearly within the power of the residence country to apply residual tax anywhere between 0 and $20 in this example, simply by altering its tax rate. Nobody in the world would pretend that the treaty limited the residence country's ability to reduce its general rate on foreign source income or would limit the ability to have foreign income taxed at a lower rate than domestic income. But if the residence country can apply residual burden between 0 and $20 through reduced rates, then why could it not achieve the exact same effect through partial creditability (assuming the system remains within the zone of permissibility through the whole range) with respect to a single item of income, even if the same result could not be recreated through a formal basketing system?

This is all consistent with the basic test for treaty compatibility that I am defending here. Specifically, I am suggesting that the test for treaty compatibility under Article 23 actually can be stated in a fairly simple way. We should read Article 23 simply as saying that the residence country may not tax foreign source income of its residents with the result that the overall burden on the foreign source income is greater than the burden that would otherwise apply to domestic income (unless the treaty partner itself has chosen an approach that is more burdensome than what would apply to domestic income). This is largely co-extensive with the Shaheen result, with the exception of the two departures that my proposed test would permit partial creditability/deductions so long as the rate on foreign income is sufficiently low and the test need not be understood as bounded in the extreme by what one could do with a per item foreign tax credit limitation.

I have just discussed how the Shaheen textual interpretation may encounter tensions with general substance over form principles in the two cases where my test would seem to grant broader compatibility. But what about the actual affirmative textual basis for the alternate test I advance here? Can this really be defended? The words in Article 23 on their face seem to look a fair bit different than a simple test that looks at overall burden. I take up here two possible textual complications with the interpretation I've offered. That is, quite aside from substance over form, if the language of the treaty seems flat out inconsistent with my interpretation then this presents a clear problem.

The chief textual problem with my interpretation is that one might argue that it reads the entire concept of "double taxation" out of the treaty. For example, doesn't tolerance of a partial credit mean that the residence country is not addressing the "double taxation" problem? The source jurisdiction taxes a dollar of income. The residence jurisdiction that offers only a partial credit then taxes that same dollar, to some extent, again!

Skeptics of my reading of tax treaties might point immediately to the titles of the treaties. The U.S. Model Treaty is styled as a treaty for the "avoidance of double taxation." The title of the current OECD Model Convention currently makes no explicit reference to "double taxation" but it did up to the point of the 1977 Model Convention include a reference to the "elimination of double taxation." The removal of the explicit reference to the "elimination of double taxation," however, reflects the simple fact that the convention was taken to cover other important topics as well.[61] The change did not reflect a view that the convention was no longer addressed to the issue of the "elimination of double taxation."[62]

In light of these clear textual references to the elimination or avoidance of "double taxation" how can one plausibly read this requirement out of the conventions? In concluding that his reform proposal would face issues with treaty compatibility, for example, Shaviro clearly took the view that the treaties require one to take the phrase "double taxation" seriously, even if such a formal requirement makes little sense. But could one go further and justifiably read the formal requirement out of the conventions altogether?

There is in fact a simple argument for precisely that position. In short, the conventions cannot mean what they have been read to mean with respect to "double taxation" without thereby becoming internally inconsistent. In order to preserve the internal consistency of the conventions, then, one should read references to "double taxation" as implicitly being about overall tax burden. This claim is based on the simple meaning of the term ascribed "double taxation" in the conventions themselves. The U.S. Model Treaty does not define the term "double taxation" but the

61. **[Cite.]**
62. See Introduction to OECD Model Convention, Par. 16.

OECD Model Convention contains a clear statement regarding the concept in the very first sentence of the introduction to the convention, indicating that the convention is meant to address the issue of international "juridical double taxation." In particular, the convention provides, "International juridical double taxation can be generally defined as the imposition of comparable taxes in two (or more) States on the same taxpayer in respect of the same subject matter and for identical periods."[63] This can be contrasted with so-called economic double taxation, which refers to the case of the same item of income being taxed in the hands of two taxpayers by two jurisdictions. This can result, for example, when there are transfer pricing adjustments and treaty partners each take the position that income properly belongs to a resident of its jurisdiction.

Whereas treaties are meant to resolve, eliminate, or avoid juridical double taxation by their terms, economic double taxation is left to be resolved through dispute resolution mechanisms such as competent authority proceedings. Thus when treaties refer to "double taxation," they must be taken to mean juridical double taxation. But therein lies the potential for internal inconsistency. This is a fairly obvious point. A credit method by definition brings foreign income into the base in the first instance. In cases where source country tax is at a lower rate, then the natural operation of a credit method will result in some residual residence country tax (putting aside the possibility of cross-crediting to offset the residual). But if there is residual residence country taxation, then one clearly has not eliminated juridical double taxation, as that term has been defined. Recall that juridical double taxation just means two jurisdictions both taxing the same item of income. But that happens in every case where a credit method is applied to relatively low-taxed foreign income!

63. **[Cite to paragraph 1 of the introduction.]**

For this reason, it only makes sense to read Article 23 and its charge of "eliminating" or "reducing" double taxation in some other way.

I believe there is such a compelling reading, which traces its way from the birth of the modern tax treaties up to the present. In the materials produced in the decade that encompassed the 1923 Report and the first League of Nations model tax convention in 1928, it is fairly clear that the term "double taxation" was a sort of umbrella concept or catch-all to describe the evils of excessive burden that flowed from uncoordinated fiscal power, rather than the mere fact that two jurisdictions may have taxed the same item of income. This comes out clearly in a series of lectures delivered by Seligman in 1927 on the topic. He says, near the top of his introductory lecture: "This [category of fiscal cooperation] brings up all the problems of inequality, of injustice and of the evil results connected with multiple and excessive burdens, most of which are commonly summed up with the name of double taxation."[64]

Crucially, the 1923 Report itself distinguished between two broad ways to approach the double tax problem. One is by allocation of income and the second is by allocation of tax.[65] In the former, the tax base which is subject to overlapping claims is divided in some way such that each state has an exclusive claim to some (or all) of the base. In the latter, the tax base is not partitioned in this way. Overlapping taxing claims persist but the overall tax due must be divided in some way across the jurisdictions. This structural distinction entered the first League of Nations model convention and persists as essential in the basic treaty structure today. Specifically, the income allocation approach is present in any treaty article which categorically subdivides the base and

64. Seligman, Double Taxation and International Fiscal Cooperation 3.
65. **[Cite.]**

ascribes exclusive taxing rights to one state. For example, this is the case for royalties under the OECD Model Convention and the U.S. Model Convention. More generally, an exemption method under Article 23 embodies such an approach.[66] By contrast, a credit method of double tax relief is an embodiment of the allocation of tax approach.[67] It should be clear from this distinction that "double taxation" has never exclusively referred to the idea that the elimination of such phenomenon entails a a single jurisdiction (and only that jurisdiction) taxing any particular increment of economic income.

At least as applies to any credit method, the metric for elimination of double taxation clearly could not entail this. The credit method can only be understood as embodying a test based on tax burden. The residence jurisdiction is obliged to offer some relief such that the burden on cross-border income not be too high. Really the only question is the appropriate measure of such maximum burden. Again, there is only one natural conclusion. If the fundamental concern is the excessive burden on cross-border activity then the relevant baseline would seem to be the burden that applies absent such activity, that is the burden on DSI. But that is just the test suggested in this paper. Far from being radical, this would seem to be the fairly clear meaning throughout.

If not radical, a suggested interpretation of Article 23 in terms of aggregate tax burden, rather than in terms of methodology, would at least seem to be fairly novel. If there is novelty here, though, this could simply reflect the fact that domestic reforms have not to date been put forward which test the point. Thus as we have seen a straight dollar for dollar credit with MRR = $t_{\text{R-DSI}}$ is simply not going to present any issue on the question of aggregate burden.

66. **[Cite to OECD Commentary on Art. 23.]**
67. Id.

Further, to the extent that the term "double taxation" has come to be exclusively or disproportionately associated with the idea of allocation of income, as opposed to tax burden, across jurisdictions, this could be explained as a matter of intellectual history in terms of totally distinct phenomena. Specifically, as attention has turned in the new economy to problems of undertaxation rather than overtaxation, one sees a characterization of the problem as being about no sovereign effectively asserting tax jurisdiction. This is manifest in concerns about the violation of a supposed treaty-based "single tax principle" in cases of tax base mismatch (say debt-equity hybrids yielding deduction/non-inclusion outcomes) that lead to income not being taxed anywhere, or so-called "double nontaxation."[68] The point is the same with so-called "stateless income," in which the problem is supposed to be that no state is taxing income. In other words, the concern is primarily cast not as an issue of the aggregate rate simply being too low, but rather as an issue about no sovereign seeing the income within its base. This is a crucial rhetorical and political move because if the charge is merely low (or even zero) rate of tax, this can frequently be defended as a natural outcome of rate sovereignty.

But if the supposed evil in "double nontaxation" is about the number of sovereigns (zero) taxing income, as opposed to a phenomenon about low burden in and of itself, it is not surprising that commentators would come to think about the evil in "double taxation" as also necessarily being about taxation by multiple sovereigns, rather than as about the resultant burden. But that caged interpretation of "double taxation" conflicts with both the historical conception of the double tax problem as well as the fundamental structural components of the double tax article, which that conception led to.

68. **[Cite.]**

Indeed, there is even some evidence in the historical record that the issue about the allocation of tax burden across sovereigns was taken as even *more* fundamental than allocation of income. There is an interesting appendix to one of the League of Nations documents incorporating the 1923 Report in which an example is given involving a residence country taxing an amount of FSI at a rate lower than the source country.[69] In the example a common exemption method is applied such that the residence jurisdiction does not tax the FSI *at all*. Even so, the analysis describes the case as involving "double taxation" in an amount equal to the excess of what the residence country tax on FSI would have been absent any relief. In other words, the fundamental benchmark for "double taxation" of FSI is simply whether the overall burden exceeds the tax that would have been imposed by the residence country in isolation.

Following this principle, the test advocated here is not pinned to any particular method but rather is completely result-driven. It would say that the residence jurisdiction must bring the overall burden down to a certain rate but does not require any particular method or approach to get there. Even if one accepts the interpretation offered above regarding the proper meaning to be accorded to the term "double taxation," one might still object that the treaty text seems to be about choice of method of double tax relief, rather than effect.[70]

The U.S. Model Convention and technical explanation do not shed much light on this question.[71] The Commentaries to the O.E.C.D. Model Convention, however, provide some guidance on this interpretive question, though not all pointing in the direction. There are aspects

69. **[Cite.]**

70. Shaheen argues explicitly that treaties require particular results, not methods. **[Cite.]** I agree with that basic conclusion but offer a somewhat different approach to get there. Shaheen argues by analogy to rate reductions under provisions such as Articles 10-12 on dividends, interest, and royalties. I suggest there is a good argument that Article 23 should be interpreted to require certain results, irrespective of such analogies.

71. **[Cite.]**

of the Commentaries that clearly seem to suggest that particular methodologies are required. Thus the Commentaries distinguish between a credit "principle" and an exemption "principle."[72] Each principle, in turn, can be achieved through certain "methods."[73] The credit principle can be achieved either through a "full" credit, which is essentially an unlimited foreign tax credit. Or, it can be achieved through an "ordinary" credit, which is a credit limited to residence country tax on the foreign income. Similarly, the exemption principle can be achieved either through "full" exemption, in which the residence country takes no account of the exempt income. Or it can be achieved via "exemption with progression" in which case the residence country can take the exempt income into account for purposes of determining the rate applicable to non-exempt income. Paragraphs 28 and 29 of the Commentaries indicate that the O.C.E.D. Model Treaty endorses both principles (reflecting the fact that some countries prefer one to other) but that it "has been found important" to limit the number of methods under each principle. Accordingly, the treaty provides for exemption with progression under Article 23A(3) and for the ordinary, rather than full, credit under Article 23B(1). Although the Commentaries do not further specify the reason it had been found important to limit the number of methods, the very fact of limitation clearly seems to suggest the import of particular methods, as opposed to results.

However, this point is not dispositive. Thus Paragraph 32 of the Commentaries indicates that "the two Articles [i.e., Article 23A and Article 23B] are drafted in a general way and do not give detailed rules on how the exemption or credit is to be computed, this being left to the domestic laws and practice applicable." This could be read to mean that contracting states are free to

72. **[Cite.]**
73. **[Cite.]**

implement any particular rules that are consistent with the basic result achieved under the provided descriptions of the ordinary credit and exemption with progression. It is the ordinary credit that matters with respect to U.S. law insofar as the U.S. adopts a credit approach in the first instance. Notably, and in this respect, in the discussion of the ordinary credit the Commentaries actually state essentially the very test that I advocate here. Specifically, paragraph 25 states: "Where the tax due in State S is lower than the tax of State R appropriate to the income from State S (maximum deduction), the taxpayer will always have to pay the same amount of taxes as he would have had to pay if he were taxed only in State R, i.e., as if his total income were derived solely from State R." The only difference between this statement and the test I espouse is that under my test the tax due if the income arose only in the residence country functions as an upper bound rather than as the amount actually due. But surely this is no problem as the residence country is free at any point to offer more generous relief in virtue of juridical double taxation than the treaty requires. Further, the distinction can be understood simply as a matter of historical accident. At the time the Commentaries were drafted the authors would not have had in mind the case where the residence country rate on foreign income was somewhere in between zero and the rate on domestic income. If the rate on foreign income were the same as that on domestic income, then indeed the operation of the ordinary credit should result in the tax burden on foreign income being the same as if the income had been domestic.

The above discussion has acknowledged that the interpretation of Article 23 advanced here is not without possible objection. The proposed interpretation is about results, whereas the plain language seems to be about method. If one were to sit down to draft treaties from scratch and if the proposed interpretation were the intended meaning of Article 23, there are surely better ways to draft the language that would more clearly reflect this meaning. However, we are not drafting treaties from scratch. The challenge rather is to examine treaty text concluded when domestic law looked a certain way and give this text the best possible interpretation in the case that domestic law evolves in a way that is not clearly ruled out by the treaty. More specifically, the treaties were drafted against the backdrop of residence country systems that, if they applied a credit, applied the same rate to domestic and foreign income. In such a world it is not surprising that credit would mean dollar for dollar credit. And it is also true that an ordinary dollar for dollar credit would be consistent with the test advanced here.

The question on the table now, though, is what obligation the residence country should be understood to have in case the residence country rate on FSI is lower than its rate on DSI (and above zero). It was not a question contemplated when the treaties were drafted and concluded. But such a rate reduction is clearly not precluded by treaties. To the contrary such rate reductions precisely relieve to some extent the very potential for excessive burden that Article 23 was meant to deal with in the first place. So not only are rate reductions (short of zero) not precluded by treaties, such reductions -- being in the nature of reducing the burden of juridical double taxation -- ought to actually reduce the obligation otherwise owed under Article 23. That would be the case with a specific issue, such as offering a partial credit rather than a full dollar for dollar credit. And it would be true more generally with respect to the overall test espoused here.

B. Policy Justification.

I have just argued that as an interpretive matter it is possible to read the double taxation article in tax treaties as being centrally concerned with aggregate tax burden rather than the formal method of double tax relief. This section provides a policy rationale for why this interpretive result is a good one.

One should distinguish the disease from potential causes of the disease. On this reading the evil to be addressed is excessive tax burden. Taxation at two (or more) collection points might well contribute to the disease but is not the fundamental harm to be addressed. It is a trivial point that the burden of relatively low-rate tax collected at two points *could* be lower in the aggregate than the burden of a relatively high rate tax collected at one point.[74] But the important question is what will the natural tendency be of a system that sets the tax burden through two (or more) independent fiscal authorities. The problem is thus much like any common pool problem. One could think of it as a "tragedy of the tax commons." Without coordination sovereigns may well levy in the aggregate a burden that is harmful to all parties. The interesting questions from a policy perspective are what counts as excessive taxation and what goals are we seeking to achieve by curtailing taxation above a specific level. What I attempt here is an analysis of these questions that is grounded in concerns of interjurisdictional tax competition.

At first glance, this may seem like a fairly radical departure from the treaty article that I purport to analyze. There is no explicit mention of tax competition in treaty articles on double tax relief.[75] My point here, though, is not to argue from original intent. I mean only to point out that the issues implicated by the double tax article have crucial bearing on the issue of tax competition

74. **[Cite.]**
75. **[Verify whether commentaries say anything explicit about tax competition.]**

and further that the test articulated above is from a policy standpoint a sensible way of approaching the issue of tax competition as between treaty partners.

Note that the basic Shaheen result, as well as the extension I have argued for here, contemplates that mixed approaches to double tax relief (that is part credit, part exemption), and any approached that could be expressed as mixed approaches, are treaty compatible. Shaviro has argued that setting MRR = to exactly 1 or 0 is almost certainly not optimal from the residence country perspective. This would give us a good policy argument for why countries viewing their interest from a residence country perspective would favor the permissibility of an MRR other than 0 or 1, which would be a hallmark of mixed systems. But every jurisdiction in the treaty context stands in the position of residence jurisdiction some of the time and source jurisdiction some of the time. What of the interests of jurisdictions from the source perspective? The analysis I propose here in terms of tax competition is meant to consider the problem simultaneously from the perspective of both residence and source country. The ultimate conclusion I advance is that both residence and source countries have good reason to favor a treaty framework that permits mixed approaches, but only so long as residence country policy does not force the total rate on foreign source income over its rate on domestic source income.

Treaty partners inhabit a world where it is understood that each state will be setting rates independently and that such rates have substantial bearing on the magnitude of transactional undertakings as between the countries. In light of this the double tax article could be understood as setting ground rules within which permissible tax competition will take place. The two structural possibilities of credit and exemption, on this view, could be understood as establishing two basic forms of competition. That is, the exemption method can be seen as blessing competition over price and the credit method can be seen as blessing competition over quality at a fixed price.[76]

To see this, consider the basic dynamics of the various choices faced by source and residence countries. There are five points of interest, four of which we already encountered in the analysis in Part I. First, the residence country will choose some tax rate to apply to foreign source income of its residents, or $t_{\text{R-FSI}}$. This rate applies irrespective of source country policy and irrespective of any particular approach to double tax relief. Second, the residence jurisdiction will also choose some rate to apply to the domestic source income of its residents, or $t_{\text{R-DSI}}$. Historically, $t_{\text{R-FSI}}$ and $t_{\text{R-DSI}}$ have been equal, but we have already seen that there is no conceptual necessity to that point. Third, the source jurisdiction will choose a tax rate to apply to domestic source income (from its perspective) earned by non-residents, or t_{S}. Fourth, the residence country's adopted approach to double tax relief (captured in the notation from Part I by the MRR), t_{S}, and $t_{\text{R-FSI}}$ will interact to produce an aggregate tax rate, t_{A}, which applies to foreign source income of a resident of the residence country. Lastly, both source and residence countries will each make countless decisions regarding matters such as infrastructure, governance, regulation, etc. that will have bearing on the desirability of the jurisdiction as an investment location. For exposition I will collapse all of those factors into a term for "quality."

We can now cast these variables in terms of a tax competitive framework. Specifically, when the residence country chooses its MRR, it can be seen as forcing the tax competitive framework into a competition over price (i.e., tax rate) versus a competition over quality. Thus if the residence jurisdiction chooses MRR = 0, which would follow from a pure standard exemption

76. **[Cite David Hasen article here?]**

system, this can be understood in a tax competitive framework as competition over price. In other words $t_A = t_S$, which is to say the source jurisdiction gets to choose the tax rate the foreign resident will face on foreign source income. It can purposefully set this lower than $t_{R\text{-}DSI}$ in an attempt to attract residence country capital through a preferential tax rate. If the residence jurisdiction chooses MRR = 1, as under a standard credit system, then this can be understood in a tax competitive framework as the residence jurisdiction forcing the competitive frame to be wholly about quality. That is, $t_A = t_{R\text{-}FSI}$ (if there is a refundable credit or if there is a non-refundable credit and $t_s < t_{R\text{-}DSI}$), such that the source jurisdiction is prevented from competing over price. The resident will face at least $t_{R\text{-}FSI}$ in any event and thus the source jurisdiction can only compete over quality.

To summarize there are two essential features of this attempt to coordinate tax competitive outcomes. First, if there is to be competition over price, then the competition will play out as between t_S (set by the source jurisdiction) and $t_{R\text{-}DSI}$ (set by the residence jurisdiction). Second, the residence jurisdiction always has the option of precluding price competition by forcing the same price on domestic and foreign source income of its residents, thereby forcing the dynamic into one over competition about quality. The source jurisdiction does not have this option.

These features reveal something important about jurisdictional incentives. It is tempting to think that the two extreme options of credit and exemption set out two poles of generosity with respect to double tax relief. On such a view the exemption is the most generous form of double tax relief because the residence jurisdiction is never taxing foreign source income at all. The residence jurisdiction is in a sense ceding the whole overlapping base to the source country. And the credit is less generous in the sense that the residence jurisdiction retains full rights to tax the base of foreign source income. At the limit where the source jurisdiction imposes no tax, the residence jurisdiction will collect its full rate on the relevant base. If one analyzed the problem solely from this perspective, then one might conclude simply that if the source jurisdiction has agreed by treaty to permit the residence jurisdiction to relieve double taxation through a credit, then it presumably would be satisfied with any form of double tax relief in the direction of exemption, as this would seemingly be more generous. That is, the source jurisdiction should have no objection to any sort of mixed approach to double tax relief.

The analysis is more complicated than this, however, and a tax competitive frame shows why. It is not possible to analyze source jurisdiction incentives without making some assumptions about how the source jurisdiction is approaching the ubiquitous tradeoff between revenue collection and capital attraction. Suppose the source country would like to raise more revenue on the margin, then the residence jurisdiction's provision of a credit is going to look more appealing. At least where the foreign taxpayer is in an excess limitation position, the source jurisdiction can increase the marginal tax rate without the foreign resident facing an increased burden. Conversely, if the source country wants to sacrifice revenue on the margin in order to attract more investment, then an exemption method is going to look more appealing, as it allows the foreign resident actually to enjoy the benefit of a reduced tax rate. Notwithstanding this complexity there is good reason to think that both source and residence jurisdictions should prefer treaty arrangements that tolerate mixed approaches rather than simply pure credit or pure exemption systems.

Consider the problem from the perspective of the source jurisdiction first. To the source jurisdiction that wants to be able to compete over price (i.e., the jurisdiction wants to sacrifice revenue for capital attraction), allowing mixed approaches will clearly dominate over disallowing them. This is because the residence jurisdiction that chooses a mixed approach would continue to allow at least some competition over price. A mixed system will essentially set a floor on price competition somewhere above zero, thus allowing price competition to that point. Source jurisdiction incentives might go the other way if the source jurisdiction is in the position of seeking more revenue on the margin. A residence country approach that treated 100% of the base under a credit approach could allow for more room for the source jurisdiction to capture additional revenue without the foreign taxpayer bearing any marginal cost. There are good reasons, however, to think that the incentive favoring mixed approaches will dominate. First, at least over the course of the last several decades the trend has been wholly in the direction of reduced capital taxation of foreign residents, suggesting that source jurisdictions in general are much more interested in the ability to compete over price than in the ability to raise additional revenue from foreign residents.[77] Second, and related, a strategy of collecting more revenue from foreign residents at no marginal tax cost to the taxpayer is highly context-dependent. The taxpayer must obviously hail from a jurisdiction that gives foreign tax credits. And the taxpayer must be in an excess limitation position. It is nearly impossible for source jurisdictions to target tax rate increases just to foreign taxpayers with that profile, making the strategy much less appealing than might seem at first blush.

Residence jurisdictions should also find mixed systems to dominate. The mixed system increases option value for the residence jurisdiction. If the residence jurisdiction prefers

77. **[Cite.]**

competition to be wholly over quality then it always has the option to force matters back to that situation by resorting to a full credit method. This, however, might result in t_A being higher than optimal. But just because it is higher than optimal does not mean that the residence jurisdiction prefers unmitigated competition over price. As noted, in a mixed system the residence jurisdiction essentially is able to set a floor on price competition. If the source jurisdiction drops t_S to the floor and the residence country matches that with $t_{R\text{-}FSI}$, then further competition can only be over quality.

So far I have attempted to sketch an argument in tax competitive terms that shows why one part of the endorsed test for treaty compatibility is good policy. Put in terms of the graphical representations in Part I, the argument has shown why both source and residence jurisdictions should generally prefer that treaties would permit methods of double tax relief that result in the aggregate tax burden resting somewhere in between what would result with full credit and what would result with full exemption. This satisfies the sufficient condition aspect of the test advanced here.

There is another aspect to the test for treaty compatibility, which is the necessary condition. It implies that approaches to double taxation are incompatible if they result in $t_A > t_{R\text{-}DSI}$ in the range where t_S is between 0 and $t_{R\text{-}DSI}$, inclusive. Note initially that this is an issue properly analyzed under the double tax article rather than the nondiscrimination article.[78] The nondiscrimination article deals with differential treatment of foreign versus resident taxpayers. The situation here is different. The issue is with differential treatment of domestic and foreign *income* of resident taxpayers. The nondiscrimination article is silent on this question.

78. [**Cite.]**

Historically this has not been a substantial issue under treaty interpretation. That is, we do not generally encounter instances where residence jurisdictions adopt a policy that would force the burden above that on the rate that would apply to domestic source income. But the initial Shaviro proposal analyzed in Part I is just such a proposal.

My argument here is that the non-compatibility of the proposal can be readily understood in terms of the plausible incentives regarding regulation of tax competitive moves. In terms of price versus quality competition, it is quite clear that outcomes that forced t_A higher than $t_{R\text{-}DSI}$, should be ruled out of hand from the start. This would be tantamount to the residence jurisdiction saying that it will condone competition on quality only but that it will at the same time force a price *disadvantage* with respect to the foreign income. It is difficult to see any jurisdiction agreeing to those treaty terms. Consider the absurdity in any competitive framework of one party being permitted to set the price of its competitor's product at an arbitrarily high level. Crucially, note that this argument does not rely on formal notions regarding double taxation versus single taxation. This is the sense in which I would argue that the noncompatibility of the initial Shaviro proposal can be understood in a way that has normative merit. The non-compatibility of (some) approaches that rely on deductions is not just formal silliness.

III. The Future of the Tax Treaty

This paper might be criticized to some extent for pushing the bounds of what treaty text can bear. My response has been that treaties sometimes have to be interpreted to grapple with issues, transactions and legal developments that were not in play when a given treaty was concluded. Nothing like Option Z or the Shaviro proposal were contemplated when the basic outlines of tax treaties were formulated. Evaluating such proposals thus requires sophisticated analysis of text drafted in a simpler world. But sometimes the world might evolve sufficiently that one might rethink the whole enterprise. That is the topic of this final part of this paper.

The above analysis in parts I and II suggest that the basic extant framework of the double tax article in tax treaties could beneficially be reconsidered on two fronts. First, if it is correct to say that the fundamental issue of importance is the level of t_A, as a function of t_S, then treaties could profitably be redrafted to say just that. Second, and more difficult, current treaties fail completely to disentangle the distinct marginal effects at play with the MTR versus the MRR. This begs the question whether the double tax article might profitably be redrafted not simply to make explicit reference to the relative level of tax burden but also might profitably be renegotiated to separate out the import of MRRs versus MTRs. If we could be certain that MRRs were always constant through the range of concern then this would probably be unnecessary. If the MRR is constant, then it would necessarily have to fall in between zero and 1 at all points, which is an outcome that does not raise any particular issues. However, as noted above, current treaties do not obviously rule out variable MRRs, nor do they obviously rule out negative MRRs over some range.[79] The question I take up here is whether and how treaties might address such matters.

A. The Role of Residence Country Tax Policy in Encouraging Foreign-to-Foreign Stripping

79. The meaning of a negative MRR is that the fact of foreign liability means the resident taxpayer owes more tax to the residence country, not less. For an MRR of -1, the meaning would be that a liability of $1 to the source country would generate an additional $1 of liability to the residence country. One's intuition might naturally lead one to think that surely this is a violation of the double tax article. I argue below, however, that in fact negative MRRs are an artifact of the general tolerance of rate sovereignty. The numerical example I offer below will show this in more detail.

This brings the discussion back to the prospect of what I referred to as a "highly strategic" approach to double tax relief in part I. In general this scenario is most likely to be implicated when the taxpayer is shifting income to some third country, with the goal of achieving a lower foreign tax burden on the income. For exposition we can refer to such rate as $t_{\text{F-LOW}}$. From the source jurisdiction's standpoint the potential problem is that a residence country applying any type of foreign tax credit should generally prefer, from a revenue standpoint, for foreign tax to be lower rather than higher. Further, the approach that the residence jurisdiction takes to the taxation of FSI will affect the taxpayer's incentives to shift income from the source jurisdiction to some third country. This raises the prospect that this sort of scenario could be a proper subject matter for bilateral tax treaties, even if that has not been the case to date.

One might usefully begin with a baseline here. Of course, income stripping from the source jurisdiction to the low tax foreign jurisdiction can, and does, happen all the time quite irrespective of tax policy of the residence country. To take the most blunt example, one could have capital owned by local source country residents that generates income which is stripped to the low tax foreign jurisdiction. In such a case the residence jurisdiction is not in the picture at all. A convenient way to measure the incentive of the taxpayer to shift income in such a situation is by a simple comparison of the relative tax rates in the source country and the low tax foreign country, that is what we are interested in is the ratio $t_{\text{F-LOW}}/t_{\text{F}}$. One would think this should range from 0, where the low tax jurisdiction imposes no tax at all, to 1, where the "low" tax jurisdiction actually imposes the same tax as the source jurisdiction. The scenario of potential interest is where the calculated ratio becomes *lower* with residence country involvement than would have been the case with no residence country involvement. In such a case it could be said that the residence country approach to double tax relief has actually given heightened incentives for the taxpayer to strip income from the source jurisdiction to the low tax third country.

That seems like something that countries might well want to take up by tax treaty. The claim here is not that treaties should prohibit such an outcome. Treaties are negotiated instruments and jurisdictions must choose on a case-by-case basis which provisions they want to trade off one another in an agreed convention. The point here is simply that the approach to double tax relief can affect this particular issue which jurisdictions have good reason to be concerned about and thus plausibly should form part of the bundle of issues negotiated in the treaty process.

To explore the possibility of the potentially troubling outcome we can return to the functional form for total tax burden introduced in part I: $t_A = t_S(1\text{-MRR}) + \text{MTR}$. And we can consider how matters play out with traditional credit and exemption methods. The point is to compare $t_{F\text{-LOW}}/t_F$ to the ratio of $f(t_{F\text{-LOW}})/f(t_F)$. This will give us a measure of how residence country tax affects the incentives to engage in foreign-to-foreign shifting. For a standard exemption we can substitute MRR = 0 and MTR = 0. This yields $[t_{F\text{-LOW}}(1\text{-}0) + 0]/[t_F(1\text{-}0) + 0]$, or simply $t_{F\text{-LOW}}/t_F$. In other words, a classic exemption system leaves incentives regarding foreign-to-foreign stripping untouched, as expected. For a standard credit we assume that MRR = 1 and that MTR > 0. This yields $[t_{F\text{-LOW}}(1\text{-}1) + \text{MRR}]/[t_F(1\text{-}1) + \text{MRR}]$, or simply MRR/MRR = 1. The meaning of this is that the taxpayer has been rendered completely insensitive to the tax savings that would have arisen from income shifting had the residence country not been involved, again as predicted under a standard credit.

Now that we have a baseline in place it is possible to analyze the highly strategic case from above. I noted in the presentation of that material that one way to read these graphs is that discrete jumps in the foreign rate can be interpreted as the result from shifting income from one jurisdiction to another. I drew the graph in the highly strategic case to have essentially three phases. In phase 1 the aggregate tax is a flat 21% until the foreign tax reaches 15%. The aggregate tax then climbs sharply to 35% as the foreign rate rises from 15% to 19%. Finally, the aggregate tax levels off at 35% thereafter. First, it is instructive to evaluate our indicator for incentives to engage in shifting as between the breakpoints where the foreign rate is 15% versus 19%. If the residence country were not in the picture, then the relevant indicator is $t_{F\text{-}LOW}/t_F$ = .15/.19 = 78.9%. By contrast, the evaluation of $f(t_{F\text{-}LOW})/f(t_F)$ yields .21/.35 = 60%. This looks to be problematic. The ratio is *lower* than in the case where the residence country is not in the picture. In other words, residence country tax policy is creating an affirmative incentive to shift from the source jurisdiction to the low tax third country. How should one evaluate this under the current treaty framework? Matters are not as clear as they might seem. Let's consider first the actual values for MRR and MTR that would produce the tax rate schedule that I have indicated. Returning to our basic functional form, phases 1 and 3 are straightforward:

Phase 1: (t_S < .15); $t_A = t_S(1 - MRR) + MTR$; MRR = 1 and MTR = .15; t_A = .15

Phase 3: (t_S > .21); $t_A = t_S(1 - MRR) + MTR$; MRR = 1 and MTR = .35; t_A = .35

In these ranges we have a standard credit and unobjectionable MTRs. It would not seem that these phases present particular problems under treaty interpretation. The results in Phase 2, by contrast, look outright bizarre:

Phase 2: (t_S >= .15 and t_S <= .21); $t_A = t_S(1 - MRR) + MTR$; MRR = -2.5 and MTR = -31.5%.

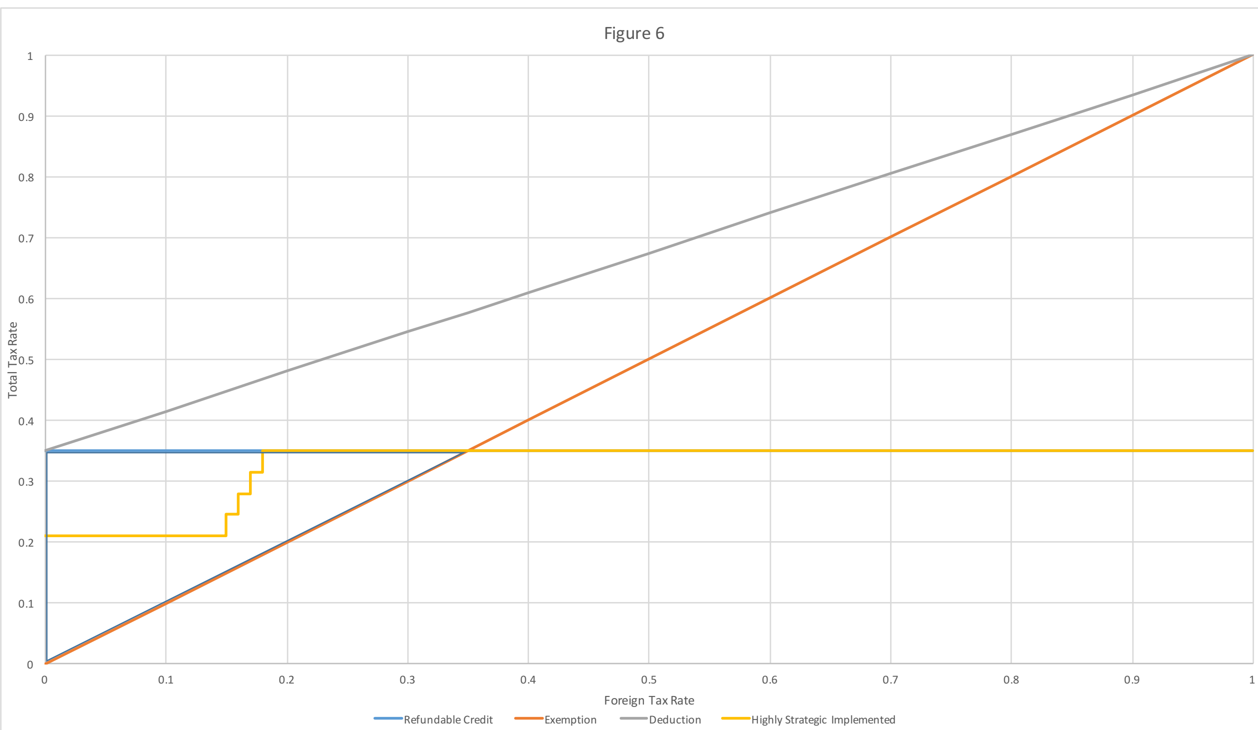
That, at least, is the result from the simple algebraic exercise of writing the function that produces the schedule in this phase. But what is the intuitive meaning of something like an MRR of -2.5 and an MTR of -31.5%? We've already seen the import of negative MRR. What this means is that in virtue of paying an additional dollar of foreign tax on the margin the resident country taxpayer gets no credit or deduction or exemption but instead must pay an additional $2.50 to the residence country in virtue of the foreign tax liability. And what of the MTR of -.31.5%? This could be interpreted as telling us that *if* the residence country applied this MRR through the entire range covered by Phase 1, then at the point where the foreign jurisdiction imposes zero tax, the residence country taxpayer would get a home country refund of $31.50 for every $100 of *untaxed* foreign income that it earns. These truly anomalous outcomes, especially the effect of the MRR, would surely be precluded by treaty one might assume. But not so fast.

Consider first that residence country tax policy need not, and likely will not, be expressed formally in terms of an MRR. It takes a little bit of work to back that out from applicable marginal tax rates and nominal amounts of double tax relief afforded. Second, treaties leave sacrosanct the right of jurisdictions to set marginal tax rates on income that is within their power to tax. Third, we know from the general blessing of mixed systems, that countries are understood to be able to tax different batches of foreign income at different marginal tax rates. Just consider the simple case of an otherwise exemption jurisdiction imposes a positive MTR on some selected foreign source income. Against these points consider a table that a residence jurisdiction might announce in order to put the highly strategic approach into place.

Sample Tax Schedule for the "Highly Strategic" Approach

Foreign Rate	MTR	Method of DTR
<15%	15%	1-1 Credit
15% . . . <16%	24.5%	1-1 Credit
16% . . . <17%	28%	1-1 Credit
17% . . . <18%	31.5%	1-1 Credit
18% . . . <19%	35%	1-1 Credit
19% or higher	35%	1-1 Credit

Graphically, I present the effect in Figure 6 below:



Note first that such a schedule is very close in effect to that produced by the highly strategic option first introduced above. It is essentially a step function version of the highly strategic option.

Rather than having a smooth increase in aggregate tax liability over the range where the foreign rate increases from 15% to 19%, the schedule includes discrete jumps at each percentage point cutoff. It is that simple distinction which seems to render the step strategic function clearly treaty compatible.[80] After all, the schedule employs full dollar-for-dollar credits at all points. But this schedule would have identical incentive effects for taxpayers contemplating a shift of income in a foreign-to-foreign stripping case that reduced the foreign rate from 19% to 15%. If it is the case that jurisdictions might be concerned about the way in which residence country tax policy can provide super-charged incentives to engage in foreign-to-foreign stripping, the lesson would seem to be that the current framework of the double tax article is completely inadequate to address this issue.

Negative MRRs look to be entirely inconsistent with the relief of double taxation, so one might think that treaties would have the tools to preclude them. But in the limit as an MRR approaches negative infinity, we can characterize the tax function as a step function, accompanied with a treaty-blessed MRR of 1. Different treaty tools will be required if one wants to counter this sort of approach. I take that issue up in Part III.C. First, though, it is important to link the issue of incentives to engage in foreign-to-foreign stripping with some particular doctrinal instantiations that have presented themselves to date.

B. Particular Instances of Problematic Foreign-to-Foreign Stripping

The type of tax schedule embodied in the highly strategic approach (including the step function version) does not look quite like approaches to the taxation of FSI that jurisdictions have

80. Although he did not discuss a system with these particular features, it would seem that the schedule satisfies the basic Shaheen test for treaty compatibility, which is not conditioned in any way on the MTR.

generally taken. As suggested, though, there does not seem to be anything in current treaties to rule out the prospect of something like the step function version of the highly strategic option. Further, source jurisdictions are clearly very concerned with the prospect of foreign-to-foreign stripping. That concern has played out in a number of particular forms.

The most prominent recent instance arose in the context of the OECD BEPS work on CFC rules.[81] The final report on that action item reached the conclusion that it was an appropriate task of a worldwide system maintaining CFC rules to force CFC inclusions in the cases of certain hybrid arrangements.[82] Hybrid arrangements come in many flavors but the basic goal tends to be consistent. Relying on hybridity, the taxpayer is able to remove tax base from one jurisdiction and pick up some lower (possibly zero) tax burden in some other jurisdiction on the shifted income. If the taxpayer is a CFC from the residence country perspective, then the approach taken under the CFC rules will affect marginal incentives for foreign to foreign shifting. It is just the same as cases discussed above, which did not involve hybridity but rather simple tax rate differentials. The important point is that this is one of a general class of cases in which residence country tax policy affects incentives about foreign-to-foreign shifting.

Another important instance, which has been discussed in consideration of reform of the U.S. international tax rules, is an overall (rather than a per country) minimum tax.[83] Under an overall minimum tax residence country firms will have incentives to engage in foreign-to-foreign stripping up to the point that the overall rate on FSI drops to the minimum. Consider a simple example with t_S = 30%, $t_{F\text{-}LOW}$ = 0%, a residence country overall minimum tax of 15%, and a

81. **[Cite.]**
82. **[Cite.]**
83. **[Cite Altshuler article.]**

taxpayer who has $200 of taxable income in the source jurisdiction. Initially, the taxpayer will face $60 of source country tax and no residual residence country tax. If the taxpayer shifts $100 of taxable income to the low tax jurisdiction, it can bring source country liability down to $30, but still have no residence country liability because the 15% minimum has still been met. Further shifting, however, will be ineffective to bring the aggregate liability under $30. Once again residence country tax policy has an effect on incentives to engage in foreign-to-foreign shifting.

One clarification is important here. Simply because residence country policy affects marginal incentives does *not* mean that residence country policy has super-charged such incentives. Consider the metric discussed above. In the overall minimum tax example the evaluation of $t_{F\text{-}LOW}/t_F$ is 0. That's the same as the evaluation of $f(t_{F\text{-}LOW})/f(t_F)$, up to the point where $100 has been shifted. In other words, the residence country policy has made the incentive to shift no greater. In fact, it has made the incentive smaller, in virtue of the minimum tax, for income shifting in excess of $100.

This feature might lead one to say that the affect of residence country policy is not problematic. I believe there is a strong case for that position.[84] However, jurisdictions have clearly become concerned about such affects, as evidenced by the OECD BEPS work. The point of this paper is not to resolve such disputes. As noted, because treaties are products of bilateral negotiations there is nothing to prevent jurisdictions from negotiating over affects of residence country policy on incentives, including in cases where such incentives may already be weaker as compared to cases where the residence country is not involved at all. The point I seek to bring out here, once again, is that these should all be viewed as part of the same general class of problem. In

84. **[Cite my CFC paper.]**

particular, the choice that the residence jurisdiction makes with resect to MTR and MRR will have incentive affects, including on foreign-to-foreign stripping, which have not historically been an explicit matter of treaty negotiation but arguably should be.

C. Revisions to Treaty Text

Here, I take up the question of how treaties might evolve to deal with this issue. In keeping with the spirit of the project, which defers to treaty negotiation, this section will be brief. The discussion so far has hopefully highlighted the two crucial ways in which the traditional approach to the double taxation article in tax treaties comes up short. First, from the standpoint of the effect on tax competition as between the source country and the residence country, jurisdictions should care crucially about the way in which the overall rate of tax changes depending on where an investor deploys capital. This is clearly the matter of primary importance, with the method of double tax relief but a crucial input into this output. The actual quantity of concern, however, is a function of the residence jurisdiction's approach to MTR and MRR. Second, from the standpoint of the effect of tax policy on attempts to strip tax base from source countries, the residence country's approach to MRR is of crucial importance, not simply the method of double tax relief.

These observations suggest that a more nuanced approach to the issue of double taxation under tax treaties would explicitly disentangle the MTR and MRR margins. Further, once these elements are separated, jurisdictions may well like to bargain for constraints that have not existed in treaties to date. Such constraints would have been difficult, if not impossible, to negotiate because treaties have lacked the analytical tools necessary to disentangle the relevant margins. I provide here a sketch of what future approaches under tax treaties might look like.

First, consider the issue of aggregate burden. Tracking the analysis of what I have suggested are necessary and sufficient conditions of treaty compatibility even under current practice, the basic evolution here would be simply to make this explicit. In particular, MTR and MRR pairs that produce aggregate liability lower than what would apply to domestic source income seem unproblematic. Conversely, MTR and MRR pairs that produce aggregate liability higher than what would apply to domestic source income (in the range where source country tax is no higher than residence country tax) seem deeply problematic. Treaty articles on double taxation could fruitfully be redrafted to make this point explicit. For example, treaties could provide something like the following:

> *Sample Treaty Modification to Article 23 (Aggregate Burden)*. A Contracting State will ensure that income earned by a resident of that Contracting State and arising in the other Contracting State will not be taxed in such a way that, when added to tax imposed by the other Contracting State in accord with this convention, is more burdensome than the tax that would apply had the income arisen in the first Contracting State, except that the first mentioned Contracting State has no such obligation in any case where the other Contracting State imposes a tax burden that is higher than would apply had the income so-arisen.

Second, consider the role of the MRR. As a mathematical construct we have seen why source countries would have good reason to reject the prospect of residence country adoption of negative MRRs. Practically speaking, however, one faces some challenges in constructing treaty text that would police the adoption of untoward MRRs. One obvious strategy, which would be preservation of the status quo of allowing only credits or exemptions, is not an adequate approach. That strategy might appear appealing because it would seem to put a lower bound of MRRs at zero (with an exemption method). But as discussed above, such an approach would fail to take account of the fact that step functions involving double tax relief via foreign tax credit throughout can essentially replicate the perverse incentive effects of negative MRRs. In order to counter that possibility one would have to derive treaty text that captures the essence of the problematic functional relationship between the foreign burden on foreign source income and the aggregate tax liability. Further, in light of the fact that the basic concern here would seem to be about the prospect of foreign-to-foreign stripping, the treaty text would likely have to explicitly reference the tax effect arising outside of either contracting state (assuming the treaty remains a bilateral construct). The graphical representation of my highly strategic case, as well as the tabular form of the modified step function version, readily reveal the basic problematic aspect of residence country tax policy. Specifically, the residence country MTR has been made to depend on the source country tax burden. And, it has been done so in a way such that the aggregate rate is increasing more rapidly than the foreign rate, over certain ranges.

To be clear, the problem is *not* that the aggregate rate is higher than the source country rate. That is a ubiquitous feature of credit systems where the source country rate is lower than the residence country rate. The problem rather is about the *rate* of change. To put it back in the terms from above, shifts in the MTR over a certain range embed information about the MRR. Thus although the MRR is the real target here, one can and should go after this by examination of variable MTRs and the relationship to the foreign burden. Sample treaty text might look something like this:

> *Sample Treaty Modification to Article 23 (Explicit Account of MRR)*. If a Contracting State determines the tax rate applicable to income arising outside that Contracting State by reference to the tax rate imposed by the other Contacting State, or another state, other than the Contracting state, then the rate of increase in the Contracting State's

tax rate may be no greater than the rate of increase in the rate of tax imposed by the other Contracting State, or another state, on such income.

Note that this would not rule out a system like an overall or per country minimum tax. It would, however, preclude something like the highly strategic approach, or the step function version of that approach.[85]

If treaties were to evolve to take account of MRRs in some fashion, then the text proposed above would seem to be a plausible candidate for a minimal constraint on residence country tax policy. One could go further. One could, for example, seek to rule out MRRs that are positive but too small. On the one hand, it is perhaps difficult to square such an outcome with the continued, one can assume, permissibility of straight exemption systems. On the other hand, concerns about the interaction of residence country tax policy and foreign-to-foreign stripping in the context of the BEPS final report on CFCs clearly suggest some amount of displeasure with residence country policy that embeds positive, though low, MRRs.

* * *

The scholarly analysis of the double taxation problem made a substantial leap forward in sophistication with the initial contribution of Shaviro, which was then extended by Shaheen. Further, in light of the fiscal demands that jurisdictions currently face, the option of taxing FSI at some positive rate may become increasingly appealing, even as the option of taxing FSI at the full domestic rate with dollar-for-dollar credits and deferral remains a decidedly poor choice. In this paper I have tried to extend the existing scholarly treatment by presenting a graphical representation of treaty compatibility which rests on the functional relationship between source

85. Graphically, the point of the text would be to preclude any residence country tax policy that had the effect of increasing aggregate tax liability more rapidly than would be the case with exemption. That is, it would rule out approaches that manifested slope > 1 for any continuous segment of the graph and step increases for non-continuous segments.

country tax and the aggregate burden. Although this may seem a fairly radical departure from treaty text, I have argued that it fits with the historical understanding of "double taxation" and is a plausible interpretive stance. The test also manifests independent merit on policy grounds.

The dark side of the greater sophistication that has been brought to the literature in this context is that by disentangling the MTR and the MRR margins, the door may have been opened for jurisdictions to adopt novel beggar-thy-neighbor strategies. Tax treaties, with their focus on negotiated fiscal cooperation, are an obvious tool to deal with this issue.