

THINKING OUTSIDE THE (TAX) TREATY

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While the legal literature contains numerous discussions on how to increase cooperation and resolve disputes in trade, investment, environment, intellectual property, and other areas, there has been remarkably little written on how to utilize these mechanisms to increase multinational cooperation for tax purposes. Rather, the debate has tended to devolve into two competing and irreconcilable camps: those supporting worldwide harmonization based on the network of bilateral tax treaties and those invoking the right to tax sovereignty to oppose any efforts at harmonization or cooperation. The primary thesis of this Article is that the fundamental problem with cooperation in the modern international tax regime is that it builds on the tax treaty model, thus effectively excluding countries which have not entered into tax treaties—mostly small, poorer countries. Reconsidering international tax in this light leads to a potentially surprising conclusion: that the move towards institutionalizing the web of bilateral tax treaties—which has dominated the modern international tax debate—may actually be counter to its stated goal of encouraging broader worldwide tax cooperation across all nations of the world. Instead, this Article proposes the creation of a tax cooperation mechanism specifically geared towards non-treaty member countries, conceding certain disputes in exchange for increased cooperation more generally. Such an approach could effectively replicate some of the benefits of a tax treaty, but with non-treaty member countries, without needing to overcome the obstacles which have prevented full treaties from being entered among such countries to date. Building a tax cooperation mechanism specifically around the premise of incentivizing cooperation of the least cooperative states in this manner could harness the same forces that led to the emergence of the modern international tax regime in the early twentieth century to address the fiscal crisis facing the early twenty-first century.

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INTRODUCTION

Every country needs money; the United States is no exception. The problem is nobody seems to have any. Raising tax rates seems to be off the table, as does any additional borrowing. So is there a magic pot of gold hiding at the end of a rainbow that can solve the problem without doing either of these? Just as with the mythical pot of gold, the one revenue pot politicians and multinational institutions seem to return to time and again is the supposed money left “on the table” from harmful tax competition.¹ A simplified version of the story goes as follows: (1) bad countries, much like tiny fictional creatures, lure multinational corporations away from good countries by enticing them with tax goodies, and (2) evil multinational corporations exploit these bad countries to avoid paying taxes they should have paid to the good countries in the first place. The answer to this problem, the story goes, must be to capture these tiny creatures and force them to give up their pots of gold. In other words, good countries should force bad ones to cooperate with them so they can collect more tax against aggressive, highly mobile, multinational corporations.

1. See, e.g., OECD, HARMFUL TAX COMPETITION: AN EMERGING GLOBAL ISSUE (1998) [hereinafter OECD Report], available at <http://www.oecd.org/dataoecd/33/1/1904184.pdf>; cf. Daniel Shaviro, *Money on the Table?: Responding to Cross-Border Tax Arbitrage*, 3 CHI. J. INT'L L. 317 (2002).

For example, the news has recently documented how companies such as Google and Apple pay extremely low rates of tax.² Meanwhile, Wal-Mart reportedly pays a worldwide effective tax rate of approximately 35%.³ Why the disparity? Did the United States affirmatively choose to subsidize Google and punish Wal-Mart? Is there some statute that applies a lower rate of tax to Apple than to Wal-Mart? Of course, the answer is no. Rather, the more mobile certain companies are, the more they can seek out low taxes worldwide, leading to tax revenue simply “fall[ing] through the cracks”⁴ with no country able to meaningfully impose tax.⁵

What can we learn from this? These gaps in the international tax regime are not the result of any affirmative policy choice, but rather the unintended consequence of the interaction of several policy choices, each of which may make sense on its own but, when combined, lead to this problematic result. First, the United States, along with most of the rest of the world, has decided as a fundamental policy choice that double taxation, or two countries imposing a tax on a single item of economic income, should be avoided or mitigated to permit business to cross borders efficiently.⁶ This leads to the second problem of properly dividing the income tax base among countries, often referred to as the

2. See Jesse Drucker, *Google 2.4% Rate Shows How \$60 Billion Lost to Tax Loopholes*, BLOOMBERG (Oct. 21, 2010), <http://www.bloomberg.com/news/2010-10-21/google-2-4-rate-shows-how-60-billion-u-s-revenue-lost-to-tax-loopholes.html>; Charles Duhigg & David Kocieniewski, *Apple's Tax Strategy Aims at Low-Tax States and Nations*, N.Y. TIMES (Apr. 28, 2012), http://www.nytimes.com/2012/04/29/business/apples-tax-strategy-aims-at-low-tax-states-and-nations.html?_r=2&pagewanted=5&hp&pagewanted=all.

3. See Brett Neely, *For Many Companies, Low Taxes Are Key to Profits*, NPR (Jan. 29, 2011), <http://www.npr.org/2011/01/29/133311907/for-many-companies-low-taxes-are-key-to-profits?sc=17&f=1001>.

4. Michael C. Durst, *Congress: Fix Transfer Pricing and Protect U.S. Competitiveness*, 128 TAX NOTES 401, 401 (2010).

5. See generally Edward D. Kleinbard, *Stateless Income*, 11 FLA. TAX REV. 699 (2011). This does not mean a country such as the United States would, or should, necessarily want to impose a higher rate of tax on Google. Rather, it means that due to the lack of tax cooperation with other countries the United States could not make Google and Wal-Mart pay the same effective rate of tax even if it wanted to, since most of Google's profit could simply disappear without a trace, hiding in other countries with no way to know where it is, how much it is, or even if it exists at all, all while fully complying with the law.

6. The mechanism the United States has chosen effectively defers the right to tax U.S. companies to the foreign country, or the country of “source,” by granting a credit to U.S. taxpayers for taxes paid to foreign countries, see 26 U.S.C. § 901 (2006), although the details get more complicated. See generally JOEL D. KUNTZ & ROBERT J. PERONI, U.S. INTERNATIONAL TAXATION (1991).

“transfer pricing problem.”⁷ Then, even if the double tax and transfer pricing problems could be overcome,⁸ a third issue plagues the modern international tax regime: that of double non-taxation, or income escaping tax altogether.⁹ Double non-taxation is concerning because it permits certain taxpayers to reduce or avoid paying tax, simply by exploiting gaps between different regimes, all while complying with the laws of every country involved.¹⁰ This disappearing tax base is the heart of the problem plaguing the modern international tax regime.¹¹

Much has been written on the ills of transfer pricing as an exploitation of double tax regimes,¹² and a recent literature has emerged questioning the effectiveness of anti-double tax regimes themselves.¹³ What has received less attention, however, is the question of how to track down income that has escaped the United States and fallen

7. See, e.g., Eduardo Baistrocchi, *The Transfer Pricing Problem: A Global Proposal for Simplification*, 59 TAX LAW. 941, 943, 948 (2006) (“One major consequence of the globalization movement was the emergence, in the late 19th century, of a novel strategic problem among nations: how to divide the international income tax base in the absence of a centralized authority. Developed countries eventually reached a fundamental consensus on how to solve this problem. That consensus is currently embodied in the Organization for Economic Cooperation and Development (OECD) Model Tax Convention on Income and on Capital (OECD Model).”).

8. See, e.g., Edward D. Kleinbard, *The Lessons of Stateless Income*, 65 TAX L. REV. 99, 154 (2011).

9. See, e.g., Reuven S. Avi-Yonah, *Globalization, Tax Competition, and the Fiscal Crisis of the Welfare State*, 113 HARV. L. REV. 1575 (2000).

10. See, e.g., Allison Christians, *How Nations Share*, IND. L. REV. (forthcoming 2012), available at <http://ssrn.com/abstract=1815305>; Thomas Rixen, *From Double Tax Avoidance to Tax Competition: Explaining the Institutional Trajectory of International Tax Governance*, 18 REV. INT'L POL. ECON. 197, 199 (2011) (“Whether there is tax competition and what form it takes crucially depends on the rules that determine the consequences for particular cross-border transactions.”).

11. See, e.g., Kleinbard, *supra* note 5, at 713; Vito Tanzi, *Is There a Need for a World Tax Organization?*, in THE ECONOMICS OF GLOBALIZATION: POLICY PERSPECTIVES FROM PUBLIC ECONOMICS 173, 183 (Assaf Razin & Efraim Saka eds., 1999) (“As trade is liberalized further, and as capital becomes freer to move, the advantages to some countries of engaging in tax competition, and the temptation to do so, will increase. The world tax base will thus become one of the ‘commons’ to be exploited.”); cf. NICHOLAS SHAXSON, *TREASURE ISLANDS: TAX HAVENS AND THE MEN WHO STOLE THE WORLD* (2011).

12. See, e.g., Yariv Brauner, *Value in the Eye of the Beholder: The Valuation of Intangibles for Transfer Pricing Purposes*, 28 VA. TAX REV. 79 (2008); John JA Burke, *Re-Thinking First Principles of Transfer Pricing Rules*, 30 VA. TAX REV. 613 (2011); Durst, *supra* note 4; Susan C. Morse, *Revisiting Global Formulary Apportionment*, 29 VA. TAX REV. 593 (2010).

13. See, e.g., Adam H. Rosenzweig, *Why Are There Tax Havens?*, 52 WM. & MARY L. REV. 923 (2010); see also David Hasen, *Tax Neutrality and Tax Amenities*, 12 FLA. TAX REV. 57 (2012).

through the cracks of the murky international tax regime. Rather, the literature has tended to focus on the straightforward proposition that a lack of cooperation—or “a position whereby nations work together for their mutual benefit but stop short of imposing obligations upon each other to operate identical tax systems”¹⁴—stands in the way of the United States preventing multinational corporations from exploiting these gaps.¹⁵ After all, if a country such as Ireland simply shared all the information it had on a company like Google with the United States, the two countries could easily gang up and tax Google as much as they wanted to.

So why do countries not just cooperate with each other? The short answer is that they do . . . just not all of them. Many, if not most, developed countries enter into tax treaties with each other to prevent precisely this kind of problem, by agreeing to a common tax base and to share information with each other.¹⁶ Further, many countries have begun to cooperate with each other through organizations such as the Global Forum on Transparency and Exchange of Information for Tax Purposes, under the auspices of the Organisation for Economic Cooperation and Development (OECD).¹⁷ The problem is that certain countries, and in particular smaller, less developed countries, generally have not entered into tax treaties, at least not with the United States, and have not fully participated in these transparency forums.¹⁸ Once

14. ADRIAN J. SAWYER, *DEVELOPING A WORLD TAX ORGANIZATION: THE WAY FORWARD* 30 (2009).

15. See, e.g., Julie Roin, *Can the Income Tax Be Saved? The Promise and Pitfalls of Adopting Worldwide Formulary Apportionment*, 61 *TAX L. REV.* 169 (2008).

16. See Allison D. Christians, *Tax Treaties for Investment and Aid to Sub-Saharan Africa: A Case Study*, 71 *BROOK. L. REV.* 639, 660–66 (2005); Sunita Jogarajan, *Prelude to the International Tax Treaty Network: 1815-1914 Early Tax Treaties and the Conditions for Action*, 31 *OXFORD J. LEGAL STUD.* 679 (2011).

17. See *Global Forum on Transparency and Exchange of Information for Tax Purposes*, OECD, <http://www.oecd.org/tax/transparency> (last visited Mar. 28, 2012). See generally Allison Christians, *Taxation in a Time of Crisis: Policy Leadership from the OECD to the G20*, 5 *NW. J.L. & SOC. POL'Y* 19 (2010).

18. See, e.g., SAWYER, *supra* note 14, at 32 (“[T]ax havens are extremely unlikely to be a party to any agreements in setting tax policy, given their reluctance to enter tax treaties in many instances.”); Christians, *supra* note 16; Thomas Rixen, *The Institutional Design of International Double Taxation Avoidance* 13 (WZB Discussion Paper No. SP IV 2008-302, 2008), available at <http://ssrn.com/abstract=1210402>. One exception has been the emergence of “Tax Information Exchange Agreements” (TIEAs) which provide that a signatory country must disclose information to the other signatory about a taxpayer upon request. Most countries of the world have agreed to either sign TIEAs or adopt similar rules unilaterally. See *A Progress Report on the Jurisdictions Surveyed by the OECD Global Forum in Implementing the Internationally Agreed Tax Standard*, OECD (Dec. 15, 2011), <http://www.oecd.org/dataoecd/50/0/43606256.pdf>.

income disappears into one of these countries, it becomes difficult, if not impossible, to find, even in the face of cooperation among the other countries.

For example, if Google allocated \$50 million to Ireland, and then Google immediately re-allocated \$49 million away from Ireland to the Cayman Islands, even complete cooperation between the United States and Ireland would account for only \$1 million of income. The rest would have disappeared. Without cooperation from every country in the world, therefore, cooperation alone would seem unable to resolve the problem.¹⁹

The United States could attempt to get at such income unilaterally, by denying the benefits of the double tax relief regime or aggressively policing transfer pricing, but doing so could lead right back to double taxation, potentially making the cure worse than the disease.²⁰ Even if not, such efforts could prove difficult and expensive. So complete worldwide cooperation seems to be the only solution available to satisfy the policies of double tax relief, transfer pricing, and double non-taxation all at the same time.²¹

Consequently, wealthier countries would like poorer countries to help them,²² leading to calls for universal tax transparency and cooperation,²³ or even the creation of worldwide tax organizations.²⁴

While TIEAs have proven a significant success of the movement, they have not necessarily proven a panacea to the larger problem of tax cooperation and harmonization. Beckett G. Cantley, *The New Tax Information Exchange Agreement: A Potent Weapon against U.S. Tax Fraud?*, 4 HOUS. BUS. & TAX L.J. 231, 233 (2004); see, e.g., Miguel González Marcos, *Seclusion in (Fiscal) Paradise Is Not an Option: The OECD Harmful Tax Practices Initiative and Offshore Financial Centers*, 24 N.Y. INT'L L. REV. 1 (2011); see also *infra* notes 190–193 and accompanying text.

19. See, e.g., Wolfgang Schön, *International Tax Coordination for a Second Best World* (pt. 1), 1 WORLD TAX J. 67 (2009).

20. See, e.g., Fred B. Brown, *An Equity-Based, Multilateral Approach for Sourcing Income among Nations*, 11 FLA. TAX REV. 565 (2011).

21. See, e.g., Peggy B. Musgrave, *Combining Fiscal Sovereignty and Coordination: National Taxation in a Globalizing World*, in THE NEW PUBLIC FINANCE: RESPONDING TO GLOBAL CHALLENGES 167, 173, 177–78 (Inge Kaul & Pedro Conceição eds., 2006) (“Cooperative rules are needed for both economic efficiency and international equity.”); Diane Ring, *Democracy, Sovereignty and Tax Competition: The Role of Tax Sovereignty in Shaping Tax Cooperation*, 9 FLA. TAX REV. 555, 556 (2009) (“Virtually all efforts to confront and curb tax competition effectively require some measure of cooperation among nation-states.”).

22. See OECD Report, *supra* note 1; see also Reuven S. Avi-Yonah, *Double Tax Treaties: An Introduction* 15 (Dec. 3, 2007) (unpublished manuscript), available at <http://ssrn.com/abstract=1048441> (“Tax laws have converged a lot since the 1920s, and multilateral treaties are now the norm, so that a renewed effort to negotiate such a multilateral DTT (perhaps in the WTO context) seems to be called for.”).

23. See, e.g., U.S. TREASURY DEP'T, JOINT STATEMENT FROM THE UNITED STATES, FRANCE, GERMANY, ITALY, SPAIN AND THE UNITED KINGDOM REGARDING AN

But no matter how many times the wealthier countries “roared their terrible roars and gnashed their terrible teeth and rolled their terrible eyes and showed their terrible claws”²⁵ in an attempt to force the other countries to sign on to a global tax information sharing regime, they just seem to continue to say, no!²⁶ So the world seems stuck, leaving aggressive, mobile, multinational companies free to move profits around the world in search of the lowest tax bill.

Countries such as the United States can continue to try to bribe, threaten and subpoena on a case-by-case basis,²⁷ but there is no reason to think this might not go on forever.²⁸ Any system in which at least one country, let alone an entire subclass of countries, has an incentive not to cooperate essentially requires repeatedly engaging in such

INTERGOVERNMENTAL APPROACH TO IMPROVING INTERNATIONAL TAX COMPLIANCE AND IMPLEMENTING FATCA (2010), available at <http://www.treasury.gov/press-center/press-releases/Documents/020712%20Treasury%20IRS%20FATCA%20Joint%20Statement.pdf>; Marcos, *supra* note 18, at 15–17. Even with respect to countries nominally cooperating with each other, such as Switzerland and the United States, the United States had to resort to using subpoenas and other threats to try to force cooperation over the taxation of specific issues or taxpayers. See Beckett G. Cantley, *The UBS Case: The U.S. Attack on Swiss Banking Sovereignty*, 7 B.Y.U. INT’L L. & MGMT. REV. 1 (2011); Charles H. Gustafson, *The Role of International Law and Practice in Addressing International Tax Issues in the Global Era*, 56 VILL. L. REV. 475, 478 (2011) (“[T]he principal elements of the UBS saga provides a rather dramatic illustration of a recurring and troublesome problem of international tax administration.”); see also *UBS Head Calls Tax Flap ‘Economic War’*, BOSTON.COM (Apr. 22, 2009), http://articles.boston.com/2012-04-22/business/31383126_1_banking-secrecy-swiss-banking-ubs-ag?goback=.gde_42838_member_109961060.

24. See, e.g., SAWYER, *supra* note 14; Andrew T. Guzman, *Public Choice and International Regulatory Competition*, 90 GEO. L.J. 971 (2002).

25. MAURICE SENDAK, *WHERE THE WILD THINGS ARE* (1991).

26. For a recent example see *Vodafone Tax Issue: War of Words Escalates after Finance Secretary’s Comment*, ECON. TIMES (India), Apr. 21, 2012, available at <http://m.economictimes.com/news/economy/finance/vodafone-tax-issue-war-of-words-escalates-after-finance-secretarys-comment/articleshow/12777164.cms> (“A statement issued by the US Treasury said Geithner noted that ‘certain tax provisions . . . have raised significant concern . . .’ . . . But despite all the criticism, pressure and entreaties, the government has shown no signs of relenting . . .”).

27. See Rixen, *supra* note 10, at 202 (“[B]ig countries—if they manage to overcome the dilemma posed by their conflicting individual incentives to continue undercutting one another—would either have to provide side payments to tax havens (which are always small countries) or somehow use their power to force them into compliance with such an agreement.”).

28. For example, the recent crackdown on the use of Swiss bank accounts by U.S. taxpayers could simply result in taxpayers moving their accounts to other countries such as Liechtenstein or even India. See, e.g., Lynnley Browning, *Turning Its Tax Evasion Focus to India, U.S. Seeks Client Names from HSBC Unit*, N.Y. TIMES, Apr. 8, 2011, at B4, available at <http://www.nytimes.com/2011/04/08/business/global/08tax.html>; see also Rosenzweig, *supra* note 13, at 995–96.

wasteful endeavors. By contrast, a system in which all countries have some incentive to cooperate could achieve the same, or even better, results without incurring the costs, time, and diplomatic headaches of combative enforcement efforts.²⁹ So the question that arises is: could such a system be designed?

This Article will propose a way to do so, contending that the impasse over tax cooperation has arisen primarily due to a flaw in the basic assumptions underlying the analysis of the modern international tax regime, more specifically the assumption that cooperation is always in the best interest of all countries of the world. Since more worldwide revenue exists with cooperation than without, the theory goes, it follows that all countries should have an incentive to cooperate. This is only true, however, if all countries of the world agree to cooperate. If even one country defects, however, other countries could fear that sacrificing tax competition could well have little to show for it.³⁰

Taken from this perspective, the situation can be thought of as a form of public goods problem, in which there is a public good (disappearing tax base) which could be captured through cooperation among states but which goes unrealized due to the incentive of individual states not to cooperate.³¹ If international tax truly is a form of public goods problem, presumably the legal literature should look to the tools used to overcome public goods problems as a means of overcoming it. And yet the literature seems stuck on only one such tool—worldwide cooperation based on the tax treaty model.³² How can this be the case?

This Article proposes the reason is due to a misapplication of the proper public goods model to the international tax regime. More specifically, international tax has been misunderstood as a form of “additive” public goods game in which the greater number of countries that agree to cooperate the bigger the pie will be for everyone. Such an approach misses an alternative way to think about public goods, however, in which the size of the pie is measured with reference to the smallest contribution, not the sum of contributions. This “weaker link” form of public goods game seems to more accurately capture the inherent essence of international tax—that wealthy countries care

29. See Bruce Zagaris, *The Procedural Aspects of U.S. Tax Policy towards Developing Countries: Too Many Sticks and No Carrots?*, 35 GEO. WASH. INT'L L. REV. 331 (2003).

30. See May Elsayyad & Kai A. Konrad, *Fighting Multiple Tax Havens*, 86 J. INT'L ECON. 295, 304 (2012), available at <http://www.sciencedirect.com/science/article/pii/S0022199611001176>.

31. See Tanzi, *supra* note 11, at 183 (referring to this as “tax degradation”).

32. See, e.g., SAWYER, *supra* note 14; Tanzi, *supra* note 11, at 183–86.

whether poor countries join the international tax system because non-cooperating countries can undermine the benefits of cooperation for the others.³³ Put differently, from the perspective of wealthy countries, tax havens serve as a form of “fiscal termite” eating away at the benefits of cooperation among the larger countries of the world.³⁴

Assuming this is true, it is not surprising that wealthier countries would want poorer countries to join the international regime, at least from the standpoint of increasing tax cooperation to collect this vast pool of untapped revenue. The problem is that the benefits of cooperation primarily tend to go mostly to wealthier countries, with little if anything left over for the smaller countries. Is there any doubt that if the Cayman Islands immediately volunteered to disclose all tax information about the hedge funds within its jurisdiction that those hedge funds would disappear faster than a hot knife through butter? If so, is it any wonder that the Cayman Islands would have little interest in doing so, even if it could?

Conversely, although wealthier countries would love to have poorer countries agree to tax cooperation, they may have much less interest in granting full treaty benefits—such as low withholding taxes—in return, as little investment would likely flow from such small “tax haven” type countries. If reciprocity is the key to agreeing to the lower taxes found in treaties, wealthy countries get little out of signing a treaty with small, poorer countries because of the miniscule prospect of reciprocal investment.³⁵ Consequently, there is little incentive for a wealthy country such as the United States to agree to low treaty rates with these countries.

Taken together, this leads to a stalemate: wealthy countries need poorer countries to cooperate with them to collect the vast amounts of revenue being lost in the cracks, but neither has an incentive to sign on to a tax-treaty-based regime, the one mechanism currently available to do so.³⁶

33. See *infra* Part I.B for a detailed description of additive, “weakest-link,” “weaker link,” “best-shot,” and “better-shot” public goods.

34. See Vito Tanzi, *Globalization, Technological Developments, and the Work of Fiscal Termites*, 26 *BROOK. J. INT’L L.* 1261, 1263–64, 1271–72, 1279–80 (2001).

35. See Christians, *supra* note 16, at 660–62; *cf.* Rixen, *supra* note 18, at 13.

36. See, e.g., Eduardo Baistrocchi, *The Use and Interpretation of Tax Treaties in the Emerging World: Theory and Implications*, 4 *BRIT. TAX REV.* 352, 391 (2008) (“Hence, developing countries’ courts have the incentive to construe the local tax treaty network in the FDI arena in favour of the taxpayer (rather than the tax authority) for fear of driving investment away and into competing jurisdictions if all other conditions are equal.”); see also Shaviro, *supra* note 1.

Does this mean that the creation of a new consensus to overcome the modern collective action problem plaguing international tax is impossible? This Article asserts the answer is no. Rather, what is needed is to re-envision precisely what international tax cooperation can, and should, be intended to accomplish, and design a uniquely international tax cooperation mechanism to this end.³⁷ This can be done by looking to some of the other tools in the game theory toolbox. It is relatively clear that one such tool, side payments to poorer countries, would theoretically resolve the collective action problem of international tax. The problem is that side payments would require all of the countries of the world overcoming the near insurmountable holdout and free-riding problems facing the international tax regime, a problem which has proven intractable to date.³⁸

Fortunately, the public goods literature provides an alternative solution to a situation where voluntary provision undersupplies a public good and there is no means to overcome the holdout and free-riding problems preventing side payments. This approach, typically referred to as a “lottery” in the literature,³⁹ is effectively a mechanism in which a portion of the regime is set aside as a sort of prize and divided among the contributors of the collective good—effectively building a side payment into the regime itself. Consequently, so long as the regime is properly structured, it can be Pareto superior to a world with an undersupplied public good.

The trick, therefore, to building an effective lottery for international tax is to find something to serve as the prize.⁴⁰ The literature to date has mostly treated the prize as a single pool of uncollected tax revenue, meaning the only way to collect this prize would be to force smaller countries to join the regime. Looking more closely at the modern international tax regime, however, there are in fact two distinct aspects of the public good of tax cooperation available to be used for a prize: tax revenue collected from the benefits of agreeing to general baseline rules, such as those found in tax treaties, and tax revenue collected by resolving specific tax disputes.⁴¹ Even

37. Cf. Frances M. Horner, *Do We Need an International Tax Organization?*, 24 TAX NOTES INT'L 179 (2001) (proposing a world organization focusing on both tax cooperation and worldwide development).

38. See, e.g., Adam H. Rosenzweig, *Harnessing the Costs of International Tax Arbitrage*, 26 VA. TAX REV. 555 (2007).

39. See *infra* note 189.

40. See *infra* notes 191–93 and accompanying text.

41. See, e.g., Steven A. Dean, *More Cooperation, Less Uniformity: Tax Deharmonization and the Future of the International Tax Regime*, 84 TUL. L. REV. 125 (2009); see also Yitzhak (Isaac) Hadari, *Tax Treaties and Their Role in the Financial Planning of the Multinational Enterprise*, 20 AM. J. COMP. L. 111, 119–24 (1972)

assuming the benefits of increased cooperation inure entirely to wealthy countries, disputed tax benefits remain as a possible tool to increase cooperation.

One mechanism, therefore, could be to offer to let poorer countries keep the benefits of a specific taxpayer or dispute if, in exchange, the poorer country agrees to be bound to certain baseline rules typically found in tax treaties, such as information sharing, anti-base erosion rules, limitation-on-benefits clauses, or other similar rules. For example, the United States could agree to be bound to a specific transfer pricing amount with respect to a specific hedge fund located in the Cayman Islands if in exchange the Cayman Islands certified that the hedge fund were not immediately re-circulating that income back into the United States tax-free.⁴² In this manner, a truly international tax cooperation mechanism could be formed, not to resolve disputes among treaty members, which already agree on most issues, or to rule on which country should be entitled to tax a particular item of income as an abstract economic or legal matter, but rather to create incentives for non-treaty members to cooperate with each other. Put more simply, the non-treaty cooperation mechanism would be intended to invite poorer countries into the international tax regime.⁴³ In doing so, wealthier countries such as the United States could effectively develop a form of ad hoc quasi-treaty with non-treaty member countries without needing to overcome the obstacles which have prevented full treaties from being entered among such countries to date.

By building a non-treaty-based tax cooperation mechanism specifically focused on incentivizing poorer countries to engage with the international tax regime, the least cooperative states in the world would, for the first time since the rise of the modern international tax regime, directly benefit from joining the international tax regime, at least in part. Since under a weaker link form of public goods game it is

(comparing and contrasting the avoidance of double tax and certainty functions with exchange of information and consistent determinations of the law functions). This is apparent in that dispute resolution, even within the treaty regime, has its own mechanism and has received significant attention in recent years. *See, e.g.*, OECD Report, *supra* note 1; William W. Park, *Income Tax Treaty Arbitration*, 10 GEO. MASON L. REV. 803, 813 (2002); Sharon A. Reece, *Arbitration in Income Tax Treaties: "To Be or Not to Be"*, 7 FLA. J. INT'L L. 277 (1992); Diane Ring, *Who Is Making International Tax Policy?: International Organizations as Power Players in a High Stakes World*, 33 FORDHAM INT'L L.J. 649 (2010).

42. *See infra* Part IV.D for a detailed example and *infra* Appendix A for a model.

43. *Cf.* Musgrave, *supra* note 21, at 176 (“[N]o single formula based on economic theory alone can be claimed to correctly assign profits to source countries. Consequently, to achieve mutual international agreement, it is necessary to adopt a formula that is generally acceptable for reasons of fairness.”).

precisely these parties which influence the worldwide payoff, this also means there would be a higher payoff for the wealthier countries which disproportionately benefit from increased tax cooperation. In this manner, all countries would be better off: poorer countries through winning specific disputes and wealthier countries through the returns from increased international tax cooperation.

Equally as important, the mechanism would also serve as a form of sorting and signaling device to identify those countries which are truly engaged in harmful forms of tax competition. Any countries not willing to engage in the mechanism would be sending a clear signal that they are likely engaged in the most harmful types of tax competition, precisely because they do not want to disclose this as the price of admission. This signal would permit a much more targeted and effective form and means of punishment as well, further enhancing the benefits of the mechanism.

To this end, Part I of this Article will survey and describe the basic game theory of collective action and survey the literature on how and when collective action problems can be overcome. Part II will then frame the current international tax debate, demonstrating how the present regime can be thought of as a web of collective action problems proving resilient to traditional responses. Part III will then frame the role of law in overcoming collective action, introducing the concept of a lottery mechanism to the legal literature. Part IV will then propose the creation of the uniquely international tax non-treaty cooperation mechanism as a means to overcome the collective action problem plaguing the modern international tax regime.

I. INTERNATIONAL TAX AND THE PROBLEM OF COLLECTIVE ACTION

Why do states disagree over taxes? Assume a U.S. corporation has active operations in multiple countries throughout the world, but maintains an intellectual property holding company in Andorra which has a very low tax rate.⁴⁴ Under U.S. international tax law, taxpayers are supposed to allocate income under the “arm’s length” method of allocation; in other words, the Andorran company should charge the same royalty to its U.S. parent as it would to a third party.⁴⁵ The problem is that subsidiaries do not do any business with third parties,

44. Tax havens could have low, but positive, rates of tax even with a zero income tax rate, including through franchise taxes on the privilege of incorporating in that state. *See* Rosenzweig, *supra* note 13, at 955.

45. *See* 26 C.F.R. § 1.482-1(b)(1) (2011).

making any arm's length analysis wholly artificial.⁴⁶ Assume Andorra, on the other hand, uses a formula to allocate royalties from intellectual property based on the location of the intellectual property, which means all of the income would be allocated to Andorra.

As a result, a dispute arises with respect to the allocation of income among these entities. Assume that the U.S. parent earns \$10,000,000 in gross revenue from worldwide sales, but then claims to the United States that it pays \$4,000,000 in royalties to the Andorran entity. Since this is deductible in the United States, that leaves only \$6,000,000 of net income subject to U.S. tax. The United States in response argues that under an arm's length standard only \$1,000,000 in royalties should have been paid to the Andorran entity, meaning \$9,000,000 of income would be taxable in the United States and thus more revenue collected.⁴⁷ Andorra, on the other hand, wants the taxpayer to be able to allocate \$4,000,000 to it through transfer pricing, since either Andorra imposes a small income tax on this amount or imposes no income tax on it but is able to charge a fee for the privilege.

The problem is that the United States has not entered into a tax treaty with Andorra, meaning there is no way for the United States to find out what amount of royalty income the company is actually reporting to Andorra, or what methodology it is using to do so, or even if it is paying any tax on that income to Andorra. Given this, the United States could unilaterally impose tax on the additional \$3,000,000 of income, but without knowing whether Andorra (or someone else) is taxing this income, such a unilateral approach could result in double taxation. So which is worse: potential double taxation of \$3,000,000 if the United States unilaterally imposes tax on the income or potential non-taxation of \$3,000,000 if it doesn't? Of course, neither is perfect. Perhaps more importantly, however, the United States only faces this dilemma because of the lack of cooperation with Andorra over the income of this taxpayer.⁴⁸

Ideally, therefore, the United States and Andorra would be able to sit down and negotiate the proper amount of royalties and then have both countries apply the same number. In this manner, the United States would know with certainty that it prevented both double taxation and double non-taxation. The problem is that the United States and Andorra have no way to do so—they have not entered into a tax treaty with each other and have not even agreed on what baseline rule to use

46. See, e.g., Thomas C. Pearson, *Proposed International Legal Reforms for Reducing Transfer Pricing Manipulation of Intellectual Property*, 40 N.Y.U. J. INT'L L. & POL. 541, 579–85 (2008).

47. See, e.g., Drucker, *supra* note 2.

48. See Brown, *supra* note 16, at 629.

to divide the royalty income, let alone how to resolve disputes over a specific royalty number. Further, it is safe to assume that Andorra and the United States do not want a tax treaty with each other precisely because they have not entered into one.⁴⁹

The United States could try to “force” Andorra to agree with its allocation by, for example, engaging in diplomatic pressure or threatening seizure of any Andorran assets held in the United States.⁵⁰ Alternatively, the United States could petition a multinational institution such as the OECD to label Andorra as “uncooperative” unless it works with the United States to solve this problem.⁵¹ But if Andorra has no assets located in the United States and is indifferent to diplomatic pressure or blacklisting, such efforts would have little impact. Taken together, this means that any attempt to induce cooperation by Andorra would require an overwhelming amount of time, energy, and resources on behalf of the United States and, even then, would run the risk of failure.⁵² As a result, the system is at an impasse.

This hypothetical demonstrates the fundamental nature of the international tax regime as a collective action problem: cooperation theoretically would be in the best interest of all countries, but individual countries have an incentive not to cooperate. Of course, in a two-country setting, the United States and Andorra probably could find some way to sit down and negotiate this one dispute away, especially if there were so much to gain for the United States that it could simply buy off Andorra and still come out ahead. But in a world with multiple taxing jurisdictions, even finding which country income has fled to, let alone negotiating over its division, can prove difficult if not impossible, making it more and more valuable for countries to resist efforts to be the last to give up their tax competition.⁵³

This form of “collective action problem” is not unique to international tax,⁵⁴ but has proven particularly difficult to overcome in

49. This is because Andorra would likely lose what little tax base it has for little in return, while the United States would lose withholding taxes on income departing to Andorra with little to no investment coming back the other way. *See, e.g.*, Christians, *supra* note 16, at 660–62; Rixen, *supra* note 10, at 202 (“For small country governments, the situation is different. Since their domestic tax base is small compared to the foreign tax base, they can overcompensate the potential welfare loss of lower taxes with the inflow of tax base from other countries. . . . Thus, small countries oppose collective agreements to abolish under-taxation.”).

50. *See supra* notes 20–21 and accompanying text.

51. *See* OECD Report, *supra* note 1.

52. *See, e.g.*, Robert Thomas Kudrle, *Did Blacklisting Hurt the Tax Havens?*, 12 J. MONEY LAUNDERING CONTROL 33 (2009).

53. *See generally* Rosenzweig, *supra* note 38.

54. *See infra* notes 76–77 and accompanying text.

the area of international tax. Thinking of tax cooperation from a game theory perspective, however, not only arguably more correctly describes the modern world but also potentially makes the issue more tractable. This Part will begin to do so by framing and analyzing the differing game theory approaches to collective action so as to be able to apply the proper framework to international tax in Part II.

A. Collective Action, Public Goods, and Game Theory

Collective action is a generic term for the phenomenon in which, in a system with multiple actors, cooperation among the actors would be optimal. That is, collective action provides that individual actors acting collectively can create superior outcomes than acting separately. A collective action problem, therefore, is one in which the incentives of individual actors in such a system lead to non-cooperation, and thus the collective action never occurs.⁵⁵ As a result, collective action problems are rightly causes for concern.

Collective action interactions are often modeled as a type of two-by-two game, which can be generalized more broadly to take into account iterations and multiple actors. Among the most familiar of these games is the Prisoners Dilemma: Prisoner 1 and Prisoner 2 each potentially face jail time unless they inform on their partner.⁵⁶ If neither confesses, both get a short jail sentence, but if one confesses and the other does not, the confessing prisoner receives no jail time while the other receives a long jail sentence.⁵⁷ If both confess, both go to jail for a long sentence.⁵⁸ The payoffs from such a system are generally portrayed as follows:

		Prisoner 2	
		Cooperate	Defect
Prisoner 1	Cooperate	3, 3	0, 5
	Defect	5, 0	1, 1

55. See MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* (1965).

56. See Richard H. McAdams, *Beyond the Prisoners' Dilemma: Coordination, Game Theory, and Law*, 82 S. CAL. L. REV. 209, 215–16 (2009).

57. *Id.*

58. *Id.*

Under this payoff structure, Prisoner 1 has the choice to either “cooperate” by remaining silent or “defect” by confessing. If Prisoner 1 defects, the payoffs are either 5 (if Prisoner 2 cooperates) or 1 (if Prisoner 2 defects), while if Prisoner 1 cooperates the results are either 3 (if Prisoner 2 cooperates) or 0 (if Prisoner 2 defects).⁵⁹ As a result, looking solely from Prisoner 1’s perspective, in all circumstances Prisoner 1 is better off defecting regardless what Prisoner 2 does.⁶⁰ This is true notwithstanding that the total payoffs for both parties would be 6, as opposed to a maximum of 5, if both prisoners cooperated.⁶¹

Not all collective action problems are a form of Prisoners Dilemma, however. Consider the “Chicken” (or Hawk/Dove) game in which two parties are headed towards a mutually disastrous confrontation, such as two cars driving towards each other.⁶² Under the Chicken game, both parties would prefer to drive straight and have their opponent “blink” first, thus resulting in the highest payoff, much like the Prisoner’s Dilemma.⁶³ The difference, however, is that the worst-case scenario has become much worse. Thus, unlike in the Prisoner’s Dilemma, there is no single dominant strategy in all circumstances. Rather, the problem in a Chicken Game is one of negotiation, where the two parties must agree on their respective actions and how to divide the resulting social surplus so as to avoid the worst-case scenario.⁶⁴

Another variation of a collective action problem is the Assurance, or Stag-Hunt, game. In the Assurance game, two players are both hunting for food and there are two possible targets, a rabbit or a stag.⁶⁵ Each player chooses whether to hunt for a rabbit or to hunt for the stag. Each player alone can catch a rabbit, but it will only provide enough food for one day.⁶⁶ Neither player working alone can catch the stag, but the two players working together can, and the stag would provide each hunter with a week’s worth of food.⁶⁷ Under this payoff structure, the

59. *Id.*

60. *Id.*

61. *Id.*; see, e.g., Daniel Shaviro, *Beyond Public Choice and Public Interest: A Study of the Legislative Process as Illustrated by Tax Legislation in the 1980s*, 139 U. PA. L. REV. 1, 38 (1990).

62. Christoph Engel, *Governments in Dilemma: A Game Theoretic Model for the Conclusion of Bilateral Investment Treaties*, 2008 U. ILL. L. REV. 305, 310–11; McAdams, *supra* note 56, at 223–24.

63. McAdams, *supra* note 56, at 223–24.

64. *Id.*

65. See Lee Anne Fennell, *Common Interest Tragedies*, 98 NW. U. L. REV. 907, 962 n.202 (2004); McAdams, *supra* note 56, at 220–21.

66. McAdams, *supra* note 56, at 220–21.

67. *Id.*

optimal situation is for the hunters to cooperate with each other and hunt the stag.⁶⁸ The problem, however, is that if any one chooses the stag while the other chooses the rabbit, that hunter is in the worst case scenario.⁶⁹ Thus, even knowing that it is in the interest of the other hunter to hunt the stag, absent any information the first hunter would hunt the rabbit.⁷⁰ The key to the stag-hunt game is therefore for each hunter to “assure” the other that they will hunt the stag.⁷¹ Since each knows it is in the other’s interest to do so, once a sufficient level of assurance has been reached the hunters will both hunt for the stag.⁷²

Typically, legal analysis of game theory has attempted to identify a given game structure existing at a particular place and time, and use the lessons from game theory to inform the resulting legal response. For example, in a non-cooperative game such as the Prisoner’s Dilemma, communication between the prisoners to allow agreement and some enforcement mechanism for that agreement would encourage optimal cooperation. In a game such as the Assurance Game, by contrast, unilaterally informing the other party of the intention to cooperate would be sufficient to encourage optimal cooperation. The paradigm of this approach to the law and collective action is: (1) a single game exists, (2) such game has a theoretically unique legal prescription, and (3) the game can be empirically identified with a sufficient degree of certainty so as to justify adopting the appropriate legal prescription to achieve a socially optimal outcome.⁷³

The crucial insight of more recent game theory literature, however, is that in a collective action setting all of these perceived games can, in reality, be thought of as merely manifestations of a single collective action problem, notwithstanding that they differ significantly not only in their payoffs but also in their equilibria and prescriptions.⁷⁴ Assume a world with two actors and a range of policy preferences ordered as follows:

68. *Id.*

69. *Id.*

70. *Id.*

71. *Id.*

72. See Fennell, *supra* note 65, at 962 n.202; McAdams, *supra* note 56, at 220–21.

73. See Stephen W. Salant & Theodore S. Sims, *Game Theory and the Law: Ready for Prime Time?*, 94 MICH. L. REV. 1839 (1996) (reviewing DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* (1994)).

74. See, e.g., Douglas D. Heckathorn, *The Dynamics and Dilemmas of Collective Action*, 61 AMER. SOC. REV. 250 (1996); Pamela E. Oliver, *Formal Models of Collective Action*, 19 ANN. REV. SOC. 271 (1993).

		Country B	
		Cooperate	Defect
Country A	Cooperate	R _a , R _b	S _a , T _b
	Defect	T _a , S _b	P _a , P _b

where R = reward, T = temptation, S = sucker, and P = punishment.

In two scenarios, the payoffs result in a non-cooperative dynamic. Thus, assuming that the order of preferences of both parties are $T > R > P > S$ and that $T_a + S_b < R_a + R_b$ and $T_b + S_a < R_a + R_b$, the collective action situation is a classic Prisoners Dilemma.⁷⁵ In other words, each party is tempted by the prospect of T and wants to avoid S at all costs, so they each choose to defect in all circumstances.⁷⁶ As a result, the parties end up in $P_a + P_b$, even though $R_a + R_b$ would be optimal.⁷⁷ Coordination and enforcement among the two players would resolve this dilemma, but absent both the incentives would lead to non-cooperation. If instead the preferences are $T > R > S > P$, then the parties are in a Chicken Game.⁷⁸

By contrast, if the preferences are $R > T > P > S$, the parties would be in an Assurance Game rather than a Prisoners Dilemma or Chicken Game.⁷⁹ In other words, since all parties prefer R, all that is required for cooperation is to assure each player that S is not a realistic alternative.⁸⁰ This can be done by demonstrating that all parties are acting rationally and they each share a preference for R. The cooperative dynamic can even dominate if the preferences are $R > T > S > P$.⁸¹ In this case, all parties would have an incentive to

75. See Heckathorn, *supra* note 74, at 256–57; McAdams, *supra* note 56, at 227–29.

76. McAdams, *supra* note 56, at 227.

77. *Id.*

78. See Heckathorn, *supra* note 74, at 258. This is because the sucker payoff is now preferable to the punishment payoff, but the incentives for division of the payoff are divergent. In other words, each player wants to avoid P, but only if they can achieve either R or T. *Id.* This is why the Chicken Game is referred to as a “bargaining” game in that the issue is not one of cooperation and enforcement, but rather agreement as to how to divide the social surplus. *Id.* If agreement is reached, the disaster is averted without enforcement since incentives will dominate; if not, the worst-case scenario occurs and the social surplus is wasted.

79. *Id.* at 259; see also McAdams, *supra* note 56, at 227–28.

80. Heckathorn, *supra* note 74, at 259.

81. *Id.*

cooperate regardless what the other parties do. In this “privileged” circumstance the system is cooperative and no information, negotiation, bargaining, or assurances are necessary to achieve Pareto optimality.⁸²

Since collective action presents itself in this manner, the list of ordinally distinct games is limited to this set.⁸³ Thus, once a collective action problem is identified, the dynamics of the collective action will fit one of these game dynamics so long as the parties have single preferences. In such case, the happenstance of the initial preferences of the parties will determine the outcome, absent some exogenous influence. If the preferences happen to align as a Prisoner’s Dilemma, the resource will be depleted, while if the preferences happen to align as a Privileged Game the resource will not be depleted. Common responses such as side payments will tend to prove inadequate due to the holdout problem in any collective action setting—the more individual parties accept a side payment to cooperate the more valuable defection (free riding) becomes to the remaining parties. By the last holdout, the danger is that this value will exceed the amount of the remaining social surplus which can be cooperatively pooled, making the side payment ineffective.⁸⁴

In other words, although significantly different both in their analogies and policy prescriptions, the collective action games of Prisoner’s Dilemma, Chicken, Assurance, and Privilege are much more closely related than often thought.⁸⁵ This insight does not necessarily add anything to the prescriptions that flow from the game theory models if they were solely descriptive. If a system is defined empirically as having payoffs describing a Prisoner’s Dilemma, the fact that the system could have been an Assurance Game had the empirical data proved otherwise is of little practical use. The insight becomes relevant, however, once different participants have differing preferences. In such a world, even if a Prisoner’s Dilemma is empirically observed among one group of players, it is possible for such a situation to be a Chicken Game for some or an Assurance Game

82. *Id.*

83. *See id.* at 260.

84. *See, e.g.,* Susan Block-Lieb, *Congress’ Temptation to Defect: A Political and Economic Theory of Legislative Resolutions to Financial Common Pool Problems*, 39 ARIZ. L. REV. 801, 817–18 (1997). This is not to say side payments are not important. In fact, they are the primary means of overcoming the Suasion Game. Diane Ring, *International Tax Relations: Theory and Implications*, 60 TAX L. REV. 83, 106 n.129 (2007). A Suasion Game requires one player to have no dominant move, however, and thus cannot be part of an ordinally distinct set of collective action problems. *See* Heckathorn, *supra* note 74, at 254–56.

85. *See* McAdams, *supra* note 56.

for others, all at the same time, solely by reason of the differing starting positions of the players.⁸⁶

B. Public Goods, Best Shots, and Weakest Links

In addition to the general concepts of collective action as described above, a second relevant issue, which has received significantly less attention in the legal literature, must be considered before legal prescriptions can be crafted—that is, the method of calculating the payoff. More specifically, in 1983 Jack Hirshleifer pointed out in an influential paper that how the payoffs in a collective action game are calculated could impact how the parties play the game.⁸⁷ He described these as “weakest-link” and “best-shot,”⁸⁸ to which have been added modified versions “weaker link” and “better-shot.”⁸⁹

The intuition behind the “weakest-link” and “best-shot” games are relatively straightforward. Assume a collective action problem where one city is surrounded by a dike that keeps the city from flooding.⁹⁰ Each person in the city is responsible for maintaining the portion of the dike on his or her land. Under this set of facts, the optimal payoff—that is, not flooding the city—is dependent on every person maintaining the dike.⁹¹ In other words, any one breach will flood the city. Of course, this means that no one party has an incentive to build the dike any higher or stronger than the lowest or weakest one, as building any higher would provide no additional protection. As a result, the game fails if any one person contributes nothing, for example by building no dike protection.⁹² This is why it is named the “weakest-link”: the payoffs are determined not by the sum of the contributions of the parties but rather by the contribution of the least contributing member.⁹³

The “best-shot” game is the opposite of the “weakest-link” game, that is, the payoffs are determined by the most successful player.⁹⁴ An

86. See Peter Kollock, *Social Dilemmas: The Anatomy of Cooperation*, 24 ANN. REV. SOC. 183, 209 (1998); McAdams, *supra* note 56.

87. See Jack Hirshleifer, *From Weakest-Link to Best-Shot: The Voluntary Provision of Public Goods*, 41 PUB. CHOICE 371, 372–73 (1983).

88. *Id.* at 372.

89. Todd Sandler, *Treaties: Strategic Considerations*, 2008 U. ILL. L. REV. 155, 176.

90. Richard Cornes, *Dyke Maintenance and Other Stories: Some Neglected Types of Public Goods*, 108 Q.J. ECON. 259, 259 (1993); Hirshleifer, *supra* note 87, at 371.

91. Cornes, *supra* note 90, at 259.

92. *Id.*

93. Sandler, *supra* note 89, at 172.

94. Cornes, *supra* note 90, at 259.

example of a “best-shot” game is that of a wild animal charging a group of people.⁹⁵ Each member of the group has a gun, and they all shoot at the animal to try to stop it before it reaches the group. So long as any one member successfully shoots the animal the group is saved. Thus, the payoff to the group is determined by the most successful party in the group, hence the name “best-shot”;⁹⁶ given this feature, it is irrelevant whether any other member of the group shoots the animal, or even attempts to do so.

The reason “weakest-link” and “best-shot” payoffs are relevant to game theory is because they change the strategy of the players. For example, in a game with multiple parties in which the payoff is determined solely by the lowest contributor, each party would have an incentive to contribute the same amount as the least contributor but no more, since any more would just be wasted. Conversely, in the “best-shot” game the incentive to free ride is much greater since only one party has to contribute to maximize the payoffs.⁹⁷

Weaker-Link and Better-Shot games are merely variations of Weakest Link and Best Shot in which the least and best contributors, respectively, influence the payoff but do not determine it.⁹⁸ Thus, for example, a Weaker-Link version of the Weakest-Link game described above would be one where it would take two leaks in the dike to flood the city rather than just one, but that one leak would cause serious but not devastating damage. Similarly, a Better-Shot version of the Best-Shot game would be where two shots would be needed to stop the animal instead of one.⁹⁹

The single crucial element that unites these different versions of collective action problems, and makes them uniquely relevant to international tax law, is that in a multi-party setting each party can impact the total benefit available to the group. This differs significantly from traditional notions of collective action where each party can add to the public good but cannot subtract from the public good. Thus, what becomes important is not maximizing the number of parties contributing to the public good, but rather finding the optimal amount

95. *Id.*

96. Sandler, *supra* note 89, at 174.

97. *Id.*

98. Daniel G. Arce M. & Todd Sandler, *Transnational Public Goods: Strategies and Institutions*, 17 EUR. J. POL. ECON. 493, 496 (2001).

99. Behind the intuition, the mechanics of Weakest Link and Best Shot games are to change the payoff for the public good from an additive one (that is, each party's contribution is added to the total pot of public good) to a maximum/minimum one (in the case of Best Shot and Weakest Link, respectively) or a multiplicative one (in the case of Better Shot and Weaker Link). *See, e.g.*, Sandler, *supra* note 89.

for all parties to contribute.¹⁰⁰ In other words, if you can influence how much I get out of a common pool, I care both whether and how much you contribute.

A corollary to this insight is that, when parties to a weaker link game are heterogeneous, wealth transfers from rich to poor can be Pareto-improving if (and only if) the poor player contributes all or part of the transferred wealth to the public good.¹⁰¹ Put differently, the loss to the rich player from the transfer is more than offset by the increased public good created by the poorer player's larger contribution,¹⁰² or the poorer player has a higher marginal productivity of the public good.¹⁰³ Similarly, the poorer player is clearly better off since it has more wealth as a result of the transfer. Thus, when confronted with the situation of a weaker link game, wealth transfers themselves can, and should, be considered as an optimal response—not due to considerations of distributional fairness, but purely from an efficiency standpoint.

II. THE TENSION BETWEEN RICH AND POOR IN INTERNATIONAL TAX

Collective action, and the role of law in creating and ameliorating collective action problems, has received significant attention in the international law and international relations literature. Issues such as international banking and capital markets¹⁰⁴ and global climate change¹⁰⁵ have been analyzed in terms of collective action, often to great success.

100. See, e.g., Scott Barrett, *The Problem of Averting Global Catastrophe*, 6 CHI. J. INT'L L. 527 (2006) (analyzing disease eradication as a weakest link global public good).

101. See Cornes, *supra* note 90, at 264–68.

102. *Id.* at 268 (“[T]he high income donor, though disadvantaged by the loss of income, is advantaged by the transfer of that income to a more productive generator of the public good, on which he places positive value.”).

103. This effect actually increases as the disparities among the players increase. *Id.* (“If disparities are sufficiently great, the net effect can be to the benefit of both giver and receiver.”).

104. See, e.g., Roy Kreitner, *The Jurisprudence of Global Money*, 11 THEORETICAL INQUIRIES L. 177, 199 (2010); Robert T. Miller, *Oversight Liability for Risk-Management Failures at Financial Firms*, 84 S. CAL. L. REV. 47, 116–18 (2010).

105. See, e.g., Jody Freeman & Andrew Guzman, *Climate Change and U.S. Interests*, 109 COLUM. L. REV. 1531, 1594 (2009) (“The dilemma of climate change is often described (accurately) as a collective action or public goods problem. No single country has an incentive to control its emissions of GHGs optimally because the cost of those emissions in the form of climate change are borne by all countries, while the benefits in the form of lower economic costs are enjoyed entirely by the emitting state. Indeed, in some ways climate change may be an especially difficult kind of collective action problem because the harmful consequences are not spread evenly among states. The standard prediction of such problems in models is that each player, if behaving rationally, should ‘free ride’ on the efforts of the others.”).

International tax has yet to receive such attention from a similar perspective, however, possibly under a false sense of tax exceptionalism.¹⁰⁶

Approaching international tax from this perspective, with the additional insight that different parties can play similar games differently depending on their starting position, can lead to starkly different conclusions and prescriptions than those under traditional approaches. For example, if a game presented itself where half of the players played a Prisoner's Dilemma and half played an Assurance Game, there would be no single solution to achieve perfect cooperation by everyone. In fact, the more a solution to the Assurance Game were pursued, the more intractable the Prisoner's Dilemma would become.

This new insight is what has been missing in the international tax debate. To the extent international tax represents this form of game, the goal needs to shift from finding the one "solution" to the problems of tax competition to finding a policy that maximizes the amount contributed from all sides by balancing the interests of the differing games.¹⁰⁷ This requires revisiting two underappreciated areas of international tax law: the heterogeneity of the players and the benefits of cooperation. This Part will do so.

A. *International Tax as Collective Action*

The debate over double taxation of international business was slowly growing in the immediate aftermath of World War I, as capital increasingly began to cross state borders and nations increased interactions with each other on economic matters.¹⁰⁸ The primary, if not sole, focus of debate at the time was double taxation, or two states imposing a tax on a single taxpayer or item of income; double taxation was considered undesirable because it would prevent trade and business across borders.¹⁰⁹ After all, why would a United States business export to France and pay two taxes when it could sell in the United States and pay only one?

Although most if not all countries agreed that double taxation was problematic, not all agreed on how to overcome it. Two primary

106. Cf. Kristin E. Hickman, *The Need for Mead: Rejecting Tax Exceptionalism in Judicial Deference*, 90 MINN. L. REV. 1537, 1559–63 (2006).

107. But see Rixen, *supra* note 18 (analyzing this as a coordination game with a distribution problem rather than as different games).

108. Steven A. Dean, *Philosopher Kings and International Tax: A New Approach to Tax Havens, Tax Flight, and International Tax Cooperation*, 58 HASTINGS L.J. 911, 945–47 (2007).

109. See *id.*; see also Michael J. Graetz & Michael M. O'Hear, *The "Original Intent" of U.S. International Taxation*, 46 DUKE L.J. 1021, 1026 (1997).

positions arose in this debate: the “source”-based position and the “residence”-based position.¹¹⁰ The source position claimed that countries that were the source of payments being made to other countries should have the right to impose a tax on such payments when they leave the country. The residence position claimed that countries could only impose a tax on the economic activities of people resident within the country. Both methods would have alleviated double taxation (since only one country would impose tax); the difference was over which country would forego taxing income to achieve this result.¹¹¹

For example, assume two countries, Italy and the Netherlands. Banks in the Netherlands loan money to a local Italian business for purposes of capital expenditures (such as building a factory) and charge interest on the loan. As interest is paid, the issue becomes whether Italy (the country where the income from the business is generated) or the Netherlands (the country from which the loan was made) should be entitled to tax the interest income. From the face of this example it becomes clear that residence-based taxation favors capital-exporting countries (the Netherlands) while source-based taxation favors capital-importing countries (Italy). Thus, as would be expected, the countries of the world generally split along these lines, with capital-exporting countries preferring residence taxation and capital-importing countries preferring source taxation.¹¹² The result was a stalemate in which no double tax relief could be agreed upon.

By 1918, the issue of double taxation was becoming increasingly important in the United States as marginal tax rates were climbing rapidly to fund war spending and the United States was becoming a capital-exporting nation.¹¹³ Prior to 1918, the United States decided to tax the worldwide income of its taxpayers, meaning that to the extent countries of source imposed a tax, the combination of the source tax and the United States residency tax would result in double taxation on U.S. businesses operating overseas.¹¹⁴ When U.S. rates were low this was less of a problem, but as rates increased it became perceived as an increasing problem.¹¹⁵ Consequently, the United States was faced with

110. See, e.g., Ke Chin Wang, *International Double Taxation of Income: Relief through International Agreement, 1921-1945*, 59 HARV. L. REV. 73, 81-82 (1945).

111. See *id.* at 86-87 (detailing Austria's and Chile's objections to a residence-based model); see also Rixen, *supra* note 18.

112. See, e.g., Wang, *supra* note 110, at 86-87.

113. See Dean, *supra* note 108, at 946.

114. See Graetz & O'Hear, *supra* note 109, at 1044-45.

115. *Id.* at 1045.

the choice of continuing double taxation or adopting one of the means of ameliorating double taxation.

To alleviate the “unfairness” of this double taxation, the Treasury Department proposed granting a credit to U.S. taxpayers for taxes paid to foreign countries (as opposed to the deduction allowed under the law at the time).¹¹⁶ In 1919 the foreign tax credit was enacted into law by the United States.¹¹⁷ The result was a source-based taxation model, adopted not in the context of negotiations or side payments to benefit debtor countries but rather unilaterally to ameliorate a perceived harm to domestic taxpayers. The effect, however, was that countries of source could impose a tax on payments to U.S. taxpayers, and the United States would collect less revenue on such income by granting a credit to its taxpayers; in effect, a wealth transfer to debtor nations.

During the same time, the international community began considering the issue of ameliorating double taxation worldwide. From 1920 to 1925 the International Chamber of Commerce studied the issue of double taxation and continued to propose resolutions on a unified international solution.¹¹⁸ The problem was that Great Britain, as a net exporter of capital, strongly supported a residence-based system of taxation while countries such as France and Italy, which were net capital importers, strongly supported a source-based system of taxation.¹¹⁹

In 1923, a panel of economists appointed by the League of Nations issued a report calling for the amelioration of double taxation through a complex set of initiatives that relied primarily on a residence-based system of taxation. In 1925 a panel of technical experts issued a report that more strongly favored a source-based taxation model than the report issued in 1923.¹²⁰ The 1923 report was authored primarily by creditor countries while the 1925 report was authored primarily by more debtor nations. As expected, neither could garner significant support from the other. By 1927 a compromise had been reached in which countries of source would have the right to first tax income at source, but only if sufficient contacts had arisen between the foreign taxpayer and the country of source. Notwithstanding this concession to residence taxation, in general the source-based model of taxation quickly took hold.¹²¹ Those countries which preferred shifting to a more

116. *Id.*

117. *Id.* at 1045–47.

118. *See* Allison D. Christians, *supra* note 16, at 651–52.

119. *See id.*

120. *See* Ring, *supra* note 84, at 120–22.

121. *See, e.g.,* Reuven S. Avi-Yonah, *All of a Piece Throughout: The Four Ages of U.S. International Taxation*, 25 VA. TAX REV. 313, 315 (2005).

residence-based model could enter into treaties with each other to do so on a bilateral basis.¹²² Thus, the regime that developed was a default of source taxation with a mechanism for countries to shift to a more residence-based taxation on a case-by-case basis.

The modern international tax regime that arose as a result of the adoption of the foreign tax credit has been hailed as a miracle—in that any regime arose at all—while also being criticized on other fronts, including that source-based regimes are less efficient than residence-based regimes, and that the modern regime permits “harmful” tax competition by handfuls of “tax havens” to undermine the benefits of the regime for everyone else.¹²³ The general idea is that the original compromise emerging from 1918 was based solely on mitigating double taxation but did not focus sufficiently on the scourge plaguing the twenty-first century—that of double non-taxation.¹²⁴ This arises not because two countries both assert the right to impose tax on a single item of income but rather a country attracts capital by using its tax laws to help taxpayers lower their worldwide tax burden. In other words, tax competition. Tax competition is always bad, the theory goes, because it distorts worldwide capital allocation and results in lost revenue for the worldwide system as a whole.¹²⁵ Thus, the conclusion follows that tax competition resulting in double non-taxation must be stopped.

The problem is that, the more certain countries insist on pursuing cooperation, the more other countries resist, declaring their tax sovereignty sacrosanct.¹²⁶ These other countries insist that the modern international tax regime reflects the right of poorer countries to tax income at its source before it leaves for wealthier countries.¹²⁷ Under this theory, cooperation is irrelevant; rather, each country should be allowed to maximize its own revenue through whatever means available. Understandably, therefore, insistence on this type of tax

122. See Avi-Yonah, *supra* note 22, at 2.

123. See, e.g., Reuven S. Avi-Yonah, *The Structure of International Taxation: A Proposal for Simplification*, 74 TEX. L. REV. 1301, 1303, 1336 (1996); Victor Zonana, *International Tax Policy in the New Millennium: Developing an Agenda*, 26 BROOK. J. INT'L L. 1253, 1253, 1255–58 (2001).

124. See Avi-Yonah, *supra* note 9, at 1576.

125. See generally Avi-Yonah, *supra* note 9, at 1578; Mitchell A. Kane, *Ownership Neutrality, Ownership Distortions, and International Tax Welfare Benchmarks*, 26 VA. TAX REV. 53 (2006).

126. See Ring, *supra* note 21, at 569.

127. See Allison Christians, *Sovereignty, Taxation and Social Contract*, 18 MINN. J. INT'L L. 99, 110–11 (2009).

sovereignty runs directly counter to the goal of worldwide tax cooperation.¹²⁸

What has been missing from this debate, however, is that both sides are partially correct—the international tax regime emerged as a compromise between two groups with disparate interests: wealthy countries, looking to maximize their ability to collect tax around the globe, and smaller, less developed countries, looking to protect what little tax base they had from their larger neighbors.¹²⁹ Assuming this is correct, both the problems of double taxation and double non-taxation can be thought of as a form of a single, larger, collective action problem among the countries of the world in the international tax regime.¹³⁰ More generally, international tax law consists of a form of commons problem where worldwide tax base represents the commons; countries make policy choices about how much and which base to tax, but if some base “disappears” solely due to the lack of cooperation among countries, no affirmative policy choice can be made unilaterally with respect to such base. If this base should ideally bear some tax as an affirmative policy matter, a country wishing to impose the tax would need cooperation from other countries to do so. Thus, it should theoretically be in the interest of all countries to cooperate on matters of taxation.

International tax represents a form of commons problem, however, because of the following characteristics of the regime: (1) the players are non-excludable, since every country can “cheat”—for example, by providing tax secrecy or aggressive transfer pricing—as a means to attract tax revenue or foreign capital investment, or both, from another country; and (2) the benefit is exhaustible, meaning that resulting changes in taxpayer behavior diminish the overall available worldwide tax base. Knowing this, each country has an incentive to grab as much

128. See SAWYER, *supra* note 14, at 43 (“[S]overeignty remains a hurdle to be overcome if the proposed international tax policy setting and dispute resolution process is ever to become a practical reality.”).

129. See *generally* Baistrocchi, *supra* note 7. Opponents of tax competition point to the wide network of tax treaties and emerging multinational institutions such as the Global Forum as evidence that a consensus towards cooperation and harmonization is arising among all countries, see *supra* note 24, while supporters of tax sovereignty point to the vast differences among the internal tax laws of individual countries as evidence that each country has an absolute right to adopt whatever tax law is in its best interest regardless of the effect on the worldwide tax base, see Ring, *supra* note 21. Effectively, one side is looking to maximize worldwide tax revenue, which will inure primarily if not exclusively to its benefit, while the other is looking to maximize its own country-by-country tax revenue, regardless of any harm to revenue in other countries. See *generally* Christians, *supra* note 16 (describing the effect of the lack of reciprocity between wealthy and poor countries).

130. See Rixen, *supra* note 10, at 198.

tax revenue as it can to avoid being the “sucker”—or the only country left holding the bag. Theoretically, at some point, this incentive structure would be sufficient to prevent the effective ability of any one country to use tax revenue for redistribution of public goods, a version of the tragedy of the commons.¹³¹

This by itself is not a new insight.¹³² The alarm has been sounded; the primary response has been that some form of multinational institution is necessary to “force” cooperation among countries to prevent this tragedy of the commons from occurring.¹³³ Interestingly, however, while the lack of revenue is what has been driving the call to arms, it has been the theoretical superiority of residence taxation which has formed the basis of most of the proposals to harmonize the international tax regime. More specifically, academics and multinational institutions have consistently insisted that residence-based taxation form the basis of any new international consensus or multinational tax organization.¹³⁴ This may make sense for those countries that are losing revenue to tax competition, since reduced competition would increase tax revenue, but would not necessarily be attractive to those countries making money off of tax competition.

The traditional story begins to break down when looking at international tax through this lens. Any particular law can have not only an effect on the individual taxpayer but also an interstate effect. Thus, to fully analyze the impact of a particular international tax law, its impact must be thought of not only with respect to the distortion of taxpayer behavior, but also with regard to the incentives provided to

131. More accurately, this may be thought of as a “common interest tragedy” in that it could be thought of as a variation of a tragedy of the commons or a tragedy of the anticommons, depending on the perspective. *See generally* Fennell, *supra* note 65. Thus, if the starting point is considered as each country starting with a sovereign “right” to engage in tax competition, the only way to result in cooperation would be to achieve cooperation from every country. Failure to achieve cooperation from even one country would effectively prevent the optimal result. Since this is the same as requiring unanimity among actors exercising the right to exclude, it could just as easily be considered an anticommons as a commons. Since both commons and anticommons represent collective action problems involving rivalrous consumption, the difference is merely descriptive and not normative. *Id.*

132. *See, e.g.*, Rixen, *supra* note 10, at 208–09; Julie Roin, *Rethinking Tax Treaties in a Strategic World with Disparate Tax Systems*, 81 VA. L. REV. 1753, 1757–58 (1995); Daniel Shaviro, *Why Worldwide Welfare as a Normative Standard in U.S. Tax Policy?*, 60 TAX L. REV. 155, 159–61 (2007); Tanzi, *supra* note 11, at 177–81.

133. *See, e.g.*, Arthur J. Cockfield, *The Rise of the OECD as Informal “World Tax Organization” Through National Responses to E-Commerce Tax Challenges*, 8 YALE J.L. & TECH. 136, 139 (2006).

134. *See, e.g.*, Reuven S. Avi-Yonah, *International Tax as International Law*, 57 TAX L. REV. 483 (2004); Yoram Keinan, *The Case for Residency-Based Taxation of Financial Transactions in Developing Countries*, 9 FLA. TAX REV. 1 (2008).

states as they try to raise revenue to provide public goods within their own borders.¹³⁵ Analyzing the international tax laws of the United States through this multifaceted lens, new perspectives can arise, even on old debates, since it fundamentally challenges the base assumption that neutrality itself is necessarily a desired goal of the international tax system.¹³⁶ In such a circumstance, an alternative approach could actually be welfare-maximizing.¹³⁷

An example of this can be seen in the modern debate surrounding tax havens.¹³⁸ There have generally been two proposed responses to tax havens. The first involves home countries adopting laws that penalize their own taxpayers for making investments in or through tax havens.¹³⁹ The second has been to pressure tax havens to cease their tax haven activities and join the international tax regime of the developed countries.¹⁴⁰ Neither has proven particularly successful in either minimizing the growth of tax havens or preventing new tax havens from arising.¹⁴¹

In recent years the OECD has undertaken a project to reduce the prevalence of abusive tax havens worldwide.¹⁴² It has issued two reports calling on countries to abandon their role as tax havens and join the international community.¹⁴³ To some extent, this effort has been successful. Countries denominated as “tax havens” have begun sharing some information with developed countries to be removed from the list of “abusive” tax havens generated by the OECD.¹⁴⁴ It has proven less

135. See Hasen, *supra* note 13. It is for this reason that a Coasean solution is not available, since the taxing power has generally been thought of as sovereign (to provide public goods) and thus not amenable to being privatized. Cf. Scott Barrett, *International Cooperation and the International Commons*, 10 DUKE ENVTL. L. & POL’Y F. 131, 135–37 (1999).

136. Cf. Hasen, *supra* note 13.

137. See Jeremy Edwards, *Gains from Trade in Government Revenue and Pareto-Efficient International Taxation*, 5 TOPICS ECON. ANALYSIS & POL’Y 1 (2005); Michael Keen & David Wildasin, *Pareto-Efficient International Taxation*, 94 AMER. ECON. REV. 259 (2004).

138. See, e.g., Rosenzweig, *supra* note 13.

139. See *id.*

140. See *id.*

141. See *id.*; see also Martin A. Sullivan, *Economic Analysis: Data Show Dramatic Shift of Profits to Tax Havens*, 104 TAX NOTES 1190 (2004).

142. See OECD Report, *supra* note 1.

143. *Id.*; OECD, TOWARDS GLOBAL TAX CO-OPERATION: PROGRESS IN IDENTIFYING AND ELIMINATING HARMFUL TAX PRACTICES (2000), available at <http://www.oecd.org/dataoecd/9/61/2090192.pdf>.

144. See, e.g., Robert T. Kudrle, *The OECD’s Harmful Tax Competition Initiative and the Tax Havens: From Bombshell to Damp Squib*, 8 GLOBAL ECON. J. 1 (2008).

successful in preventing the use of low or zero tax rates, little regulation, or high legal protection as a means to attract foreign investment, however.¹⁴⁵ In fact, beyond “traditional” tax havens, more developed countries such as Luxembourg, Belgium, Portugal, and Switzerland have, at points in time, expressly objected to the provisions of the OECD anti-tax haven efforts.¹⁴⁶

To the extent that international tax is a form of Assurance Game, which has been argued,¹⁴⁷ providing information could be seen as the means by which to overcome non-cooperation.¹⁴⁸ The OECD report on tax havens was intended to have such an effect by assuring all players that tax havens were bad, such that all countries would work together to maximize returns for the entire system.¹⁴⁹ Yet, in response numerous states vigorously objected to the OECD report in general and in being described as tax havens in particular.¹⁵⁰

Why has this effort proven less than fully successful? One possibility is that tax competition is not really an Assurance Game but really more of a non-cooperative collective action game such as Chicken Game or Prisoner’s Dilemma in which countries have an incentive not to cooperate regardless of the information provided as to other countries’ intentions and actions.¹⁵¹ This does not necessarily seem to be the case, however, at least not with respect to all countries of the world. Theoretically, cooperation among countries as to collecting tax revenue would serve to increase total worldwide collected tax revenue.¹⁵² Thus, cooperation seems to be in the interest of all

145. *Id.*

146. See Allison Christians, *Hard Law, Soft Law, and International Taxation*, 25 WIS. INT’L L.J. 325, 330 (2007).

147. See Avi-Yonah, *supra* note 9.

148. See Yariv Brauner, *Integration in an Integrating World*, 2 N.Y.U. J.L. & BUS. 51 (2005).

149. See Kudrle, *supra* note 144.

150. See, e.g., John Buhl, *Isle of Man Disputes Tax Haven Label*, WORLDWIDE TAX DAILY, May 13, 2008, available at 2008 WTD 93-5; *Island Contests “Tax Haven” Tag*, BBC NEWS (July 18, 2007), <http://news.bbc.co.uk/2/hi/europe/guernsey/6905099.stm>; *The Mouse that Roared: Liechtenstein Furious at Germany over Tax Probe*, SPIEGEL ONLINE (Feb. 29, 2008, 2:27 PM) (“‘With its attack on Liechtenstein, Germany isn’t solving its problems with its taxpayers,’ Prince Alois of Liechtenstein, the principality’s head of state, said in the Liechtenstein capital of Vaduz. He added that it was questionable ‘whether such a course of action is compatible with the basic principles of the democratic state.’”).

151. See Shaviro, *supra* note 1.

152. It is possible that such a situation could represent a Suasion Game, in which one party has a dominant strategy to cooperate and the other has no dominant strategy, so it will defect unless a side payment is made. See Ring, *supra* note 84, at 136.

countries. Further, there has been, in fact, significant cooperation among the members of the OECD in eliminating collective action problems among the members.¹⁵³

Alternatively, it could be that the differing incentives of wealthier and poorer countries led different countries to “play” different versions of the game. Through this lens, an apparently cooperative or coalitional regime among the countries of the world could in fact be better represented as a non-cooperative regime as between groups of states, if those groups had diverging interests. For example, if certain countries preferred maximizing worldwide growth while others needed to focus on maintaining minimum revenue needs,¹⁵⁴ or there were any other disparity in regional or developmental level interests among countries,¹⁵⁵ the analysis of international tax as a single form of collective action game would need to be questioned.

B. International Tax as a Weaker Link Game

Returning to the emergence of the modern international tax regime, at the time, all parties (at least those deemed worthy to participate in the debate) agreed that some system for the amelioration of double taxation was preferable to the status quo.¹⁵⁶ The methodology being proposed, however, split sharply along lines of economic interest. Great Britain and the Netherlands, as large creditor countries, strongly favored a residence-based model, while France and Italy, as large debtor nations, strongly favored a source-based model.¹⁵⁷ Under traditional notions of power-based international relations,¹⁵⁸ the position of Great Britain and the Netherlands should have won easily, and yet this did not occur. The clearest answer as to why the dominant economic powers did not prevail was the role that the United States played in adopting the foreign tax credit.¹⁵⁹ The harder issue is why—why would the United States, an emerging capital exporter, adopt a source-based method which primarily favored capital importers?

153. See OECD Report, *supra* note 1.

154. See Rosenzweig, *supra* note 13.

155. See, e.g., Kenneth L. Sokoloff & Eric M. Zolt, *Inequality and Taxation: Evidence from the Americas on How Inequality May Influence Tax Institutions*, 59 TAX L. REV. 167 (2006); see also KATHARINA HOLZINGER, TRANSNATIONAL COMMON GOODS: STRATEGIC CONSTELLATIONS, COLLECTIVE ACTION PROBLEMS, AND MULTI-LEVEL PROVISION 100 (2008) (“Small countries are in a much better position in tax competition than large ones.”).

156. See *supra* Part II.A.

157. See Christians, *supra* note 16, at 651–53.

158. Cf. Ring, *supra* note 84, at 97–104.

159. See *supra* Part II.A.

One explanation that has been proffered is that the dominant work of T.S. Adams as the proponent of source-based taxation and foreign tax credits imposed his will on the process and eventually overwhelmed the opposition.¹⁶⁰ Although this theory may partly explain the result (and may completely explain it in the domestic political context), it does not seem to provide the entire story.¹⁶¹ Notwithstanding arguments that were made at the time that the credit would benefit the United States in the long run as it encouraged U.S. business to expand abroad, the credit was primarily justified out of a sense of “fairness” to U.S. taxpayers engaged in international business.¹⁶² In fact, rather than being perceived as a net benefit to the United States, “[a]s Edwin Seligman remarked, ‘[T]he United States is making a present of the revenue to other countries.’ In so doing, the U.S. unilaterally renounced a potentially important bargaining chip in convincing other nations to forego taxing their residents on U.S. source income.”¹⁶³ Assuming this to be the case, the unilateral adoption of the foreign tax credit has proven puzzling under many traditional analyses.

Looking at the foreign tax credit debate in light of the divergent group incentives of wealthier and poorer countries, however, the result becomes less surprising than first glance would suggest. Although the United States was an emerging creditor nation, it adopted a position that favored debtor nations, which eventually took hold as the default position of most countries of the world, meaning that almost every country—including poorer, debtor countries—adopted some form of double taxation relief. For those countries which preferred residence-based taxation, this was still possible by entering into bilateral tax treaties. Since the creditor nations agreed that they preferred residence taxation, treaties among these nations became commonplace, and even became standardized through organizations such as the OECD.

By unilaterally adopting a source-based regime, the United States contributed to a regime in which all countries could agree on some form of double taxation relief, which likely would not have occurred had the capital-exporting countries merely agreed amongst themselves to adopt residence taxation. Why would the United States care what form of double taxation relief was adopted by debtor countries such as

160. See, e.g., Graetz & O’Hear, *supra* note 109, at 1027; Stephen E. Shay et al., David R. Tillinghast Lecture, “*What’s Source Got to Do with It?*” *Source Rules and U.S. International Taxation*, 56 TAX L. REV. 81, 89 (2002).

161. See Reuven S. Avi-Yonah, *Commentary*, 53 TAX L. REV. 167 (2000).

162. See, e.g., Karen Nelson Moore, *Foreign Tax Credit for Foreign Taxes Paid in Lieu of Income Taxes: An Evaluation of the Rationale and a Reform Proposal*, 7 AM. J. TAX POL’Y 207 (1988).

163. Graetz & O’Hear, *supra* note 109, at 1045–46.

Italy? Was the United States merely short-sighted or beneficent in doing so? Could there have been a rational reason to give this “present” to the poorer countries of the world? By revisiting this decision as a form of a Weaker-Link public goods game, the answer could be yes.

For example, rather than an Assurance Game among all of the countries of the world, collective action problems in international tax may be an Assurance Game among the “in-group” members but a less cooperative game, such as a Prisoner’s Dilemma, as between the “in-group” and “out-group” members. In such a case, the solutions appropriate to resolve the game among the in-group members will necessarily fail as between the in-group and out-group members, since the relevant games have distinct optimal responses.¹⁶⁴ All that would be necessary for this to occur would be for the worst-case scenario to be much worse for some countries than others. In such a situation, the “sucker” payoff changes order for some players, transforming the terms of the game itself from a more cooperative one to a less cooperative one.¹⁶⁵

Perhaps more importantly, in such a case the more vigorously the solution to the in-group game is pursued, the more entrenched the non-cooperative dynamic in the game between group members can become. If international tax were purely an additive public goods game, this dynamic would not necessarily be troubling, however. Rather, the countries with aligned interests would simply cooperate with each other while those that did not have aligned interests would not cooperate. The problem arises when the collective action problem at issue is really a form of Weaker-Link game. In such a case, the cooperating countries do care that some countries do not cooperate, since the total payoff from cooperation can be dragged down. In this way, no amount of cooperation among the cooperating group of countries can resolve the collective action problem so long as there remain non-cooperative parties.

This is precisely the case in international tax.¹⁶⁶ So long as any countries do not cooperate by agreeing to international norms regarding taxation, taxpayers in the cooperating countries can simply move capital, labor, or both to such jurisdictions to avoid or minimize taxes. In other words, it only takes one non-cooperating country in the world to undermine a cooperative dynamic among the other countries of the

164. See Heckathorn, *supra* note 74; Oliver, *supra* note 74; *supra* Part I.A.

165. See Heckathorn, *supra* note 74 and accompanying text.

166. See HOLZINGER, *supra* note 155, at 93 (“Coordinated capital income taxation is a weakest-link common good.”).

world, at least in part.¹⁶⁷ From this perspective, then, it could make sense that the United States would rather adopt a position on which both the Netherlands and Italy could agree, rather than one to which only the Netherlands agreed, even if that alternative were more appealing to the United States from an absolute standpoint.

Looking at international tax from this perspective, both the successes and disappointments of the current regime can make more sense. As discussed in more detail above, the default norm among countries that arose over the last century is for countries of residence to defer to countries of source in imposing tax.¹⁶⁸ This norm arose across all countries precisely because it benefited capital-importing countries (i.e., countries of source) while also reaching consensus, which benefited all countries. At the same time, individual countries could enter into bilateral tax treaties to shift the default between them to a more residence-based model. Most capital-exporting countries have in fact entered into such tax treaties with each other, which makes sense since residence-based taxation is preferable for such countries. This has been noted as a basis for the claim that such treaties have risen to the level of international law.¹⁶⁹

What has received less attention in this vein of analysis is that very few, if any, treaties based on the residence model have been entered into between capital-importing countries and capital-exporting countries, and those that have been tend to be interpreted differently than those between similarly situated countries.¹⁷⁰ In fact, the United States has entered into tax treaties with virtually no primarily capital-importing countries.¹⁷¹ Further, the United States has not entered into

167. See, e.g., Roin, *supra* note 15; Schön, *supra* note 19; Tanzi, *supra* note 34. This may not be the case in all areas, however. For example, some have contended that financial services could not move outside of a handful of countries and thus only those countries would have to agree to form an optimal response. See Ilan Benshalom, *The Quest to Tax Financial Income in a Global Economy: Emerging to an Allocation Phase*, 28 VA. TAX REV. 165 (2008).

168. See *supra* Part II.A.

169. See Avi-Yonah, *supra* note 134.

170. See Baistrocchi, *supra* note 36.

171. See Christians, *supra* note 16. The few exceptions have been treaties with former colonies of capital-exporting countries such as Great Britain and the Netherlands that were inherited upon the colonies' independence. See STAFF OF JOINT COMM. ON TAXATION, 110TH CONG., PRESENT LAW AND ANALYSIS RELATING TO SELECTED INTERNATIONAL TAX ISSUES 65 (Comm. Print 2007). Interestingly, the United States unilaterally withdrew from one such treaty, that with the Netherlands Antilles, and there have been substantial calls to withdraw from others. See Craig M. Boise & Andrew P. Morriss, *Change, Dependency, and Regime Plasticity in Offshore Financial Intermediation: The Saga of the Netherlands Antilles*, 45 TEX. INT'L L.J. 377, 382 (2009).

any tax treaties with countries of sub-Saharan Africa (with the exception of then-apartheid South Africa).¹⁷² The primary culprit pointed to for this has been the insistence of such countries on “tax sparing” or similar provisions, which would undercut the residence-based preferences of the United States.¹⁷³ In effect, capital-importing countries conditioned the entering into of a tax treaty on changing the default from a more residence-based model to a more source-based model.¹⁷⁴ As would be expected, this effectively meant that few such treaties would be entered into, and the ones that were entered into would not stay in effect for long.¹⁷⁵

The history of tax treaties, rather than being a sign of the evolving cooperative nature of international tax, could more appropriately be seen as a function of the tension between the incentives of wealthier and poorer countries in the international tax regime. By “joining” the international tax regime, smaller countries with less-developed infrastructure or other means to attract foreign capital investment would always be at a comparative disadvantage to more developed countries. Rather than accept this consequence, countries broke into two competing sub-groups among which treaties were entered into but between which very few, if any, tax treaties were concluded. In other words, no one solution will work for all the countries involved.¹⁷⁶ If international tax serves as a form of Weaker-Link game where the payoffs for the cooperating parties are influenced by the non-cooperating ones, this group dynamic could be considered harmful to the system as a whole, leading to calls for action such as the modern anti-tax-competition movement.

172. See Karen B. Brown, *Missing Africa: Should U.S. International Tax Rules Accommodate Investment in Developing Countries?*, 23 U. PA. J. INT’L ECON. L. 45 (2002).

173. See *id.* at 77–80; see also Damian Laurey, Note, *Reexamining U.S. Tax Sparing Policy with Developing Countries: The Merits of Falling in Line with International Norms*, 20 VA. TAX REV. 467 (2000).

174. See, e.g., Paul R. McDaniel, *The U.S. Tax Treatment of Foreign Source Income Earned in Developing Countries: A Policy Analysis*, 35 GEO. WASH. INT’L L. REV. 265 (2003).

175. See Deborah Toaze, *Tax Sparing: Good Intentions, Unintended Results*, 49 CAN. TAX J. 879 (2001). Disagreement about tax sparing has caused problems with U.S. negotiations toward a treaty with Brazil, for example. Daniel Hora do Paço & H. David Rosenbloom, *Thoughts on the Brazil-U.S. Tax Treaty Negotiations*, 56 TAX NOTES INT’L 517 (2009).

176. See Musgrave, *supra* note 21, at 176.

III. SOLVING THE COLLECTIVE ACTION OF INTERNATIONAL TAX: THE ROLE OF LAW

Assuming that the international tax regime is correctly described as a form of Weaker-Link public goods game, the issue becomes what can be done when different players in a single collective action game have differing incentives and thus play the game differently. In such a case, traditional solutions to resolving collective action problems could prove less than helpful. At such a point, alternative solutions must be considered.

The relevance to the legal literature thus becomes to what extent law can play a role in recognizing these differing payoffs so as to transmute a non-cooperative dynamic into a cooperative one, and conversely to what extent existing law can unintentionally convert what might otherwise be a cooperative dynamic into a non-cooperative one.

A. Resolving Collective Action through Enforcement

Under economic theory, two parties acting rationally, with full information and absent transactions costs, in a one-time transaction will always reach a utility-maximizing price point in their interactions, since neither party would agree to undertake the transaction otherwise.¹⁷⁷ This has been referred to as “Pareto optimal equilibrium” since the system is stable and no changes would be welfare maximizing for either party.¹⁷⁸

Once this is broadened to a repeated set of interactions, however, this assumption does not necessarily hold. Rather, depending on the specific facts and circumstances, two parties may engage in a set of transactions that could potentially lead to several different equilibrium points. This is the concept of “Nash equilibrium”—that for every set of interactions there is at least one point in which no unilateral action by either party will change the resulting transaction point between the parties.¹⁷⁹ Nash equilibrium is thus a stable set; once two parties are in Nash equilibrium they will remain at that equilibrium point absent some external change, since both parties acting rationally, with full information and no transaction costs, have no other rational unilateral

177. See Thomas S. Ulen, *Rational Choice and the Economic Analysis of Law*, 19 LAW & SOC. INQUIRY 487, 496 (1994) (“One of the most important lessons of modern microeconomic theory is that voluntary exchange is mutually beneficial.”).

178. See, e.g., Herbert Hovenkamp, *Rationality in Law & Economics*, 60 GEO. WASH. L. REV. 293, 300 (1992).

179. See, e.g., Paul G. Mahoney & Chris William Sanchirico, *Norms, Repeated Games, and the Role of Law*, 91 CALIF. L. REV. 1281, 1316 (2003).

choice but to act consistently with the choices leading to the equilibrium point.¹⁸⁰

The problem is that, in certain circumstances, a set of interactions between two parties can result in multiple Nash equilibria, or more than one point in which the parties could potentially reach a stable situation acting rationally with full information and no transaction costs.¹⁸¹ What is not necessarily true is that all Nash equilibrium points are equal; just because two parties are in Nash equilibrium does not necessarily mean that the system is optimal.¹⁸² Since there may be multiple Nash equilibria, it is possible that one equilibrium point may be Pareto-superior to another, and thus the parties should prefer to move to the Pareto-superior outcome. Because the parties are at Nash equilibrium, however, neither has an incentive to change their behavior unilaterally so as to achieve the jointly preferred situation. The result is a suboptimal equilibrium state, even with all parties operating under full rationality with full information and no transaction costs.

What alternatives would be available? Under a law and economics approach to such a suboptimal situation, one option would be for the law to impose additional costs on the suboptimal scenario and thus change the payoff functions, giving each party an incentive to unilaterally act in accordance with the Pareto-superior result.¹⁸³ Thus, in the Chicken Game described above, assume that it was possible for the government to impose a criminal fine of 3 on driving straight. As a result of the exogenous legal regime change, the payoffs change to the following:

180. See *id.* at 1316.

181. See *id.* (“In a repeated prisoner’s dilemma, so long as the discount factor is not too close to zero, there are infinitely many Nash equilibria.”).

182. See Tom Ginsburg & Richard H. McAdams, *Adjudicating in Anarchy: An Expressive Theory of International Dispute Resolution*, 45 WM. & MARY L. REV. 1229, 1263 (2004) (“When there are multiple equilibria, the payoffs are, by definition, insufficient to determine fully the outcome the players will reach.”).

183. See, e.g., Robert Cooter, *Expressive Law and Economics*, 27 J. LEGAL STUD. 585 (1998); Frank Lovett, *A Positivist Account of the Rule of Law*, 27 LAW & SOC. INQUIRY 41 (2002).

		B	
		Swerve	Straight
A	Swerve	3, 3	1, (4-3)
	Straight	(4-3), 1	(0-3), (0-3)

Under this game, both A and B would always have an incentive to swerve. If A were to drive straight, the best-case scenario would become 1 (rather than 4) while the worst-case scenario would become -3, as opposed to payoffs of 3 or 1 if A swerves. The same is true for B. As a result, the dominant strategy becomes swerve/swerve and the system is optimal.

The problem with this approach of law and economics (i.e., to internalize costs through exogenous legal regimes as a means of changing equilibrium) is that it assumes a closed system in which one set of legal rules applies equally to both parties. In the cross-border setting, however, there is no single, supranational governmental body which can impose cooperation by sanctioning non-cooperative behavior. Rather, each country must attempt to adopt its own laws as a means to encourage cooperation with other countries.

As a result, even if one jurisdiction desired to affect behavior by changing the payoffs, it could do so with respect to the person or business subject to its authority, but not necessarily with respect to all the relevant players in the system. Thus, increasing the cost of suboptimal choices for some of the participants and not others can result in a Pareto-inferior result.

Assume a Chicken Game in which only A is subject to the penalty of 3 for staying straight. The payoffs would look as follows:

		B	
		Swerve	Straight
A	Swerve	3, 3	1, 4
	Straight	(4-3), 1	(0-3), 0

Under this set of payoffs, A would always choose to swerve while B would always choose to stay straight. Thus, rather than move the result to the optimal welfare-maximizing result (a total of 6), imposing the penalty on one actor and not the other would serve only to choose

as between the two previously dominant Nash equilibria, and choose the one that is detrimental to the player subject to the laws.

This is precisely the case in international tax law. The modern trend among wealthier countries has been to punish tax havens or the taxpayers investing in them as a means to overcome tax competition. This has proven less than totally effective, however.¹⁸⁴ Thought of in terms of game theory, this result can make sense. When a country punishes one of its own taxpayers for investing in a tax haven, it reduces the payoffs to that taxpayer but does not punish taxpayers from other countries. What results, therefore, is not a move to the Pareto-superior state, but rather a move to the worst case for the country's own taxpayer and a shift of benefits to taxpayers from other jurisdictions.¹⁸⁵ Absent complete harmonization of the international tax laws of every country of the world, punishment will always have this effect to one degree or another. As a result, punishment will not be effective to overcome the collective action dynamic plaguing the international tax regime.¹⁸⁶

B. Providing Public Goods without Enforcement: Voluntary Contributions and Structural Solutions

As discussed above, there are times when punishment can be ineffective. An alternative solution would be a negotiated agreement. For example, this is the classic solution to the Prisoners Dilemma—if the two prisoners are in the same room neither is afraid of defection by the other. There are times when cooperation can prove ineffective, however, especially as the number of players increases. Thus, treaties tend to be less effective in multi-party situations than in bilateral ones, in part because getting more parties to agree has higher transaction costs and in part because the presence of multiple parties raises the benefit of “holding out” from the agreement to extract rents.¹⁸⁷ This is particularly troubling in Weaker-Link or Weakest-Link games, where the payoffs to all parties are influenced by the least-contributing party.

184. See, e.g., Anthony D. Toderò, Note, *The Stop Tax Haven Abuse Act: A Unilateral Solution to a Multilateral Problem*, 19 MINN. J. INT'L L. 241 (2010).

185. See David E. Wildasin, *Interjurisdictional Capital Mobility: Fiscal Externality and a Corrective Subsidy*, 25 J. URB. ECON. 193 (1989).

186. See Rixen, *supra* note 18; see also May Elsayyad, *Bargaining over Tax Information Exchange* (Max Planck Inst. for Tax Law and Pub. Fin., Working Paper No. 2012-02, 2012), available at <http://ssrn.com/abstract=2012593> (empirical analysis finding, *inter alia*, defensive measures do not correlate with increased information exchange); cf. Rosenzweig, *supra* note 13.

187. See, e.g., Curtis A. Bradley & Mitu Gulati, *Withdrawing from International Custom*, 120 YALE L.J. 202, 249-51 (2010).

Thus, not only will there be an incentive for countries to hold out, but knowledge of that incentive would then prevent the otherwise cooperative countries from signing the treaty in the first place, since a treaty without all the parties would be useless to the signatories.

Assuming a situation arises where using the law to internalize externalities is not available due to the limits of extraterritorial application of domestic law and using treaties to overcome collective action is not available due to the holdout problem, alternatives must be considered. Under game theory, one way to overcome a suboptimal equilibrium occurring due to the presence of an uncompensated positive externality would be to create an offsetting negative externality, or vice versa.¹⁸⁸ In this manner, the incentive not to cooperate with each other would be offset, since any lost benefit due to the negative externality would be compensated for through the increased positive externality. Consequently, it would be possible for a country or sub-group of countries to enact laws that create offsetting positive externalities as means to increase the incentives to cooperation among the otherwise non-cooperative countries.

Perhaps the most promising for international tax is what the economics literature refers to as a “lottery” mechanism,¹⁸⁹ although it probably could more properly be thought of as a structural rather than negotiated solution. A “lottery” works to provide a superior amount of public good by creating offsetting negative externalities from joining the regime to offset the existing positive externalities built into the public goods dilemma. Put more simply, the mechanism builds a side-payment-type reward into the structure of the regime itself, making it more appealing for nonmembers to join. This is not a particularly surprising intuition. After all, who would not want a lottery ticket that could be worth a million dollars? What the game theory literature has established, however, is that not only can such a structural solution be beneficial for the non-contributing party, but also can be beneficial for all the parties by increasing cooperation and thus the amount of public good available. In this manner, the use of a structural solution in a world without compulsion will, in almost all circumstances, be Pareto-superior to a world absent a structural solution—if not provide an optimal amount of the public good.¹⁹⁰

188. See, e.g., John Morgan, *Financing Public Goods by Means of Lotteries*, 67 REV. ECON. STUD. 761 (2000).

189. See *id.* at 761.

190. See *id.* at 777; Brian Duncan, *Pumpkin Pies and Public Goods: The Raffle Fundraising Strategy*, 111 PUB. CHOICE 49 (2002); Andreas Lange, John A. List & Michael K. Price, *Using Lotteries to Finance Public Goods: Theory and Experimental Evidence*, 48 INT'L ECON. REV. 901 (2007); J. Atsu Amegashie & Gordon M. Myers,

This can be the case only under a number of somewhat strict conditions, however. First, the side payment must be funded out of the contributions towards the public good.¹⁹¹ This restriction makes it necessary for a minimum number of players to contribute before the lottery can be undertaken. Given this condition, nobody would be the first to contribute if there were a chance the lottery might not happen. The way to overcome this is to make contributions refundable, subject to the failure to raise the minimum amount of contributions, which mitigates the disincentive for any one player to be the first mover.¹⁹²

The next condition is that the side payment must result in an increasing negative externality as more members join.¹⁹³ This is slightly less intuitive, but makes more sense upon closer inspection. Assume every time a player joins the pool, the existing players earn a benefit of five dollars from the increased public good. The problem is that the new player is not compensated for this benefit so has no incentive to join. By adding a fixed prize of one hundred dollars with each member having an equal chance of winning, every time a new player joins the pool the other players have a smaller chance of winning the prize. If the size of the prize increased every time a new player joined, however, the smaller chance to win due to the new players would be offset by the increased prize, meaning the original players would not have a lower expected benefit from winning. Absent this increasing negative externality, new members would lose their incentive to join. A fixed prize must be adopted, therefore, for the mechanism to work.

Working within these conditions, however, the economics literature has established that a structural solution can almost always result in a Pareto-superior amount of public good as compared to voluntary contributions alone.¹⁹⁴ Assuming a single world government with power to compel all states to harmonize their tax laws is not feasible, and that punishment by individual states is not sufficient, a structural solution should be taken into consideration as a viable alternative to increase the amount of cooperation in the international tax regime. The crucial aspect of building a structural solution in the real world of international tax, however, is to craft an institution that meets the conditions established in the game theory literature. This is the

Financing Public Goods via Lotteries (Feb. 5, 2003) (unpublished manuscript), available at http://www.uoguelph.ca/~jamegash/Public_Goods.pdf.

191. See Morgan, *supra* note 188, at 762–64.

192. See, e.g., Michael A. Spencer et al., *Rebate Rules in Threshold Public Good Provision*, 93 J. PUB. ECON. 798, 805–06 (2009).

193. See Morgan, *supra* note 188, at 768–69.

194. See sources cited *supra* notes 189–91; cf. Akira Maeda, *Optimal Lottery Design for Public Financing*, 118 ECON. J. 1698 (2008).

ultimate lesson of the legal aspect of collective action problems—that law can serve to shape incentive structures, not just respond to them, and thus potentially transmute a non-cooperative dynamic into a cooperative one.

IV. BUILDING AN EFFECTIVE STRUCTURAL SOLUTION: THE NON-TREATY INTERNATIONAL TAX COOPERATION PROCESS

Even if a structural solution could lead to a theoretically superior state to pure competition in a collective action setting, this does not necessarily mean that such a solution is a realistic option in the international tax regime. Since actual side payments presumably are unavailable in the international tax regime—or else they would be perceived in the real world—how could a structural solution be available? This requires returning to the bifurcated nature of the public good of uncollected worldwide tax revenue, that is that international tax constitutes both broad principles (i.e., arm’s-length versus formulary apportionment) and specific disputes (\$1,000,000 versus \$3,000,000) which comprise two aspects of a single public good—unaccounted for tax base. Since the public good consists of both baseline and disputed tax benefits, a regime for each can be crafted separately with an eye towards maximizing the total worldwide revenue. In other words, disputed tax benefits can be segregated and allocated in a manner so as to overcome the collective action problem.

A. *Why Tax Treaty Arbitration Will Not Work*

Dispute resolution has played an important, and growing, role in the international tax regime. Over the last decade in particular, dispute resolution has begun to take a prominent place in international tax policy, being introduced into treaties and even making its way into the OECD model treaty.¹⁹⁵ Not surprisingly, then, it makes sense that some have called for binding arbitration to become the international norm binding on all countries. Given the group dynamics plaguing the international tax regime discussed above, it would not be surprising that such calls have met resistance.¹⁹⁶

The first dispute resolution mechanism adopted in the international tax regime was the mutual agreement procedure (or “MAP”). MAP arose from the need to resolve disputes between treaty signatories over

195. See Christians, *supra* note 118, at 653.

196. See, e.g., Michael J. McIntyre, *Comments on the OECD Proposal for Secret and Mandatory Arbitration of International Tax Disputes*, 7 FLA. TAX REV. 622 (2006).

differing interpretations or applications of a treaty in a particular circumstance.¹⁹⁷ Thus, for example, assume a taxpayer operates a business in both the United States and the United Kingdom. In operating that business, widgets are produced in the United States and “sold” to the United Kingdom for resale to consumers there. To determine the amount of profits within the United States and within the United Kingdom, some means of dividing the total revenue from the business must be adopted. The methodology adopted by most treaties is the arm’s-length standard, that is, at what price would the United States business have sold the widgets to an unrelated third party? Although both parties agree arm’s-length is the standard, they apply it differently and, unsurprisingly, in a manner more favorable to themselves. How is this dispute to be resolved?

The MAP was created to resolve precisely these types of disputes. Under the MAP, the “competent authorit[ies]” of each jurisdiction are to meet and attempt to negotiate a solution for the situation at hand.¹⁹⁸ This relies primarily on the assumption of expertise in the administrative bodies responsible for tax matters. Thus, the theory goes, if the issue is a technical tax matter of dispute among a handful of experts, then getting the handful of experts in the room together would make sense. The traditional MAP has no formal enforcement mechanism, no formal timeframe, no formal standards upon which to rule, and no particular preference towards resolution over conflict.¹⁹⁹ Rather, the MAP is intended to serve as a mechanism to raise issues of dispute between the competent authorities in the signatory countries so they can resolve the issues as they see fit. Of course, this means that the relevant countries must have already agreed to the baseline rules in the first place.²⁰⁰ Even in this situation, however, the MAP has proven less than successful in resolving most tax treaty disputes.

As might be expected, the MAP—although successful at times—proved less than helpful in cases where countries encountered genuine policy disputes over the interpretation of a treaty. As more difficult and contentious issues began to arise, and as taxpayers grew increasingly mobile across borders and more sophisticated in structuring their cross-border transactions, the MAP began to face significant challenges. Cases before the MAP started to drag on without resolution, and potentially even worse, competent authorities began “horse-trading” in

197. See Hugh J. Ault, *Reflections on the Role of the OECD in Developing International Tax Norms*, 34 BROOK. J. INT’L L. 757, 773 (2009).

198. *Id.*

199. See *id.* at 774–76.

200. See, e.g., Ehab Farah, *Mandatory Arbitration of International Tax Disputes: A Solution in Search of a Problem*, 9 FLA. TAX REV. 703, 708 (2009).

the MAP, effectively trading off taxpayers rather than reaching some coherent solution to the underlying disputes at issue.²⁰¹

In light of the limitations of MAP, calls for arbitration as a means to resolve treaty disputes began to grow.²⁰² The first steps in this direction were not robust, however, to say the least. In its original incarnation, voluntary treaty-based arbitration was proposed to resolve disputes where the competent authorities could not otherwise reach resolution; put differently, arbitration was merely an alternative choice for the competent authorities rather than a mandatory dispute resolution mechanism.²⁰³

As would be expected, non-mandatory arbitration became a little-used alternative to treaty dispute resolution. After all, if the competent authorities could agree on jointly calling for arbitration, it is likely they could agree on the underlying dispute in the first place, obviating the need for arbitration. Conversely, if the two competent authorities felt strongly about the correctness of their position, why would they agree to arbitration in which they could lose? Calls for mandatory arbitration as the means to resolve international tax disputes arose in response.²⁰⁴

Mandatory arbitration was not quite as drastic as it sounds, however, as it still was built on the foundation of the MAP. More specifically, mandatory arbitration provisions provided for the use of arbitration to resolve disputes only after the MAP had been fully

201. See, e.g., Hugh J. Ault, *Improving the Resolution of International Tax Disputes*, 7 FLA. TAX REV. 137, 139 (2005).

202. See OECD Report, *supra* note 1; Ault *supra* note 197.

203. For example, a representative non-mandatory arbitration provision would read: If any difficulty or doubt arising as to the interpretation or application of the Convention cannot be resolved by the competent authorities pursuant to the preceding paragraphs of this Article, the case may, if both competent authorities and the taxpayer agree, be submitted for arbitration, provided that the taxpayer agrees in writing to be bound by the decision of the arbitration board. The decision of the arbitration board in a particular case shall be binding on both States with respect to that case:

If any difficulty or doubt arising as to the interpretation or application of the Convention cannot be resolved by the competent authorities pursuant to the preceding paragraphs of this Article, the case may, if both competent authorities and the taxpayer agree, be submitted for arbitration, provided that the taxpayer agrees in writing to be bound by the decision of the arbitration board. The decision of the arbitration board in a particular case shall be binding on both States with respect to that case.

Revised Protocol Amending the Convention between the United States and Canada with Respect to Taxes on Income and on Capital Signed at Washington on September 26, 1980, as Amended by the Protocols Signed on June 14, 1983 and March 28, 1984, U.S.-Can., art. 14, Aug. 31, 1994, available at <http://www.irs.gov/pub/irs-trty/canada.pdf>.

204. See Park, *supra* note 41.

exhausted and both competent authorities conceded no compromise was possible.²⁰⁵

Mandatory arbitration addressed two perceived problems with MAP and non-mandatory arbitration: (1) the need for finality for taxpayers so as to remove disincentives to cross-border transactions; and (2) the desire to avoid horse-trading and other instrumentalist solutions to inherently policy disputes.

On the other hand, the rise of mandatory arbitration directly presents the more mundane, although potentially more crucial, issues to the front and center of the arbitration debate: who would pick the arbitrators? Would the proceedings be public or confidential? Would they be binding at all, and if so, on whom (the taxpayer(s), the contracting states, or both sets of parties)? Who would pay for the costs of arbitration? What law would be appropriate for the arbitrators to apply in arbitration? Would arbitration be binding on the domestic courts of the signatory states?²⁰⁶ And perhaps most importantly—how would arbitration be enforced if a state refused to comply?²⁰⁷

What becomes apparent upon inspection is that the real problem plaguing arbitration is that it is adopted in treaties, where it is unlikely to be needed, and not with non-treaty member countries, where it is arguably more important.²⁰⁸ Consequently, building an arbitration system on top of the modern treaty system necessarily suffers from the same flaws of the treaty system itself; at best, it only resolves problems among states which already agree on the baseline rules.²⁰⁹

205. For example, a representative mandatory arbitration provision would read:

Where, pursuant to a mutual agreement procedure under this Article, the competent authorities have endeavored but are unable to reach a complete agreement in a case, the case shall be resolved through arbitration conducted in the manner prescribed by, and subject to, the requirements of paragraph 6 and any rules or procedures agreed upon by the Contracting States

Protocol Amending the Convention between the United States of America and the Federal Republic of Germany for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital and to Certain Other Taxes Signed on 29th August 1989, U.S.-Ger., art. XIII, June 1, 2006, *available at* <http://www.irs.gov/pub/irs-trty/germanprot06.pdf>.

206. *See* Ault, *supra* note 197 (describing some of the unresolved questions in mandatory arbitration clauses).

207. *See generally, e.g.*, Farah, *supra* note 200.

208. Thus, it is possible that both the current treaty based arbitration system is inefficient *and* imposing treaty arbitration on countries which have not entered into tax treaties would be inefficient as well. *See* Barbara Koremenos, *If Only Half of International Agreements Have Dispute Resolution Provisions, Which Half Needs Explaining?*, 36 J. LEGAL STUD. 189 (2007).

209. *See, e.g.*, Dean, *supra* note 41, at 146. The same problem presents itself with respect to proposals for a multilateral treaty or international organization based

Accordingly, treaty-based arbitration is focused on resolving disputes over the application of rules to facts; this is necessarily the case since signatory states must have already signed a tax treaty for treaty-based arbitration to apply, meaning that there is no dispute over the rules themselves but only the application of these rules. In international tax disputes between states which have not entered into a tax treaty, the disputes tend to be over which rule or rules should apply to a particular transaction or taxpayer, rather than a dispute over whether a particular set of facts falls within an agreed upon rule.

For example, one area in which treaty-based arbitration has been held up as a useful dispute-resolution mechanism is the area of transfer pricing. The issue of transfer pricing between states that have signed a treaty typically turns on how to calculate the price charged between the related parties in the two states. Thus, there may be a dispute over what comparables exist, the profit factor to be used, or the intent of the taxpayers, but not over whether transfer pricing is the appropriate mechanism to use to allocate taxing authority between the states. To the extent the states have already agreed to shift to a more residence-based model of allocating the taxing power, it makes sense that a dispute over the details might arise. To the extent one state insists on source method taxation while the other insists on residence method, however, debating about which factors should be relevant in transfer pricing would be futile, if not counterproductive.

B. Why a WTO Model Will Not Work

An alternative form of dispute resolution that is often pointed to as a model for international tax is the one adopted and utilized in the World Trade Organization (WTO), generally referred to as the Dispute Settlement Understanding (DSU).²¹⁰ Under the DSU, any member state can file a complaint with the WTO if they believe that another state has violated the obligations under the treaty.²¹¹ The WTO then empanels an ad hoc Dispute Settlement Body (DSB) consisting of three experts from a pre-existing list of eligible experts.²¹² The parties may dispute a

upon administrative agreement, although they could well be successful in increasing cooperation among those countries which have already entered into tax treaties with each other. *See, e.g.*, SAWYER, *supra* note 14, at 105–09, 167–75 (proposing a World Tax Organization based on multilateral Advance Pricing Agreements).

210. *See, e.g.*, SAWYER, *supra* note 14, at 82–84.

211. However, states are first encouraged to negotiate and resolve the dispute between themselves. *See* Brian Manning & Srividhya Ragavan, *The Dispute Settlement Process of the WTO: A Normative Structure to Achieve Utilitarian Objectives*, 79 UMKC L. REV. 1, 3–4 (2010).

212. *Id.*

particular arbitrator, but in general the arbitrators are chosen from this list. The parties are permitted to submit briefs and facts to the DSB, which then takes them into consideration in determining whether the member has violated its obligations under the WTO. If the DSB so determines, the violating member has a period of time to remedy the violation and inform the DSB of the remedy. If the remedy is deemed satisfactory, then the matter is closed. If the resolution is deemed unsatisfactory, however, the DSB issues a ruling finding the member state not in compliance.²¹³

At that time the losing member state has the right to petition to the Appellate Body, a permanent appellate body within the WTO. Findings of fact are generally unreviewable in the Appellate Body, but issues of treaty interpretation and legal obligations under the treaty are reviewable. If the Appellate Body also finds that the member state has violated the obligations of the WTO, the complaining member state is authorized to impose retaliatory tariffs without itself being in violation of the WTO.²¹⁴

There have been multiple successes and also some limitations with the WTO model described above. First, it has proven remarkably stable and successful in resolving disputes among members, especially among similarly situated countries. For example, famous cases have arisen in the WTO regarding shrimp farming regulation²¹⁵ and income tax subsidies for exports.²¹⁶ Although neither shrimp farming regulation nor income tax rules were explicitly covered by the treaty, the DSU eventually ruled that each was an improper restriction on trade, and eventually all parties conformed to the rulings of the DSU, through the Appellate Body procedures.²¹⁷

213. See, e.g., Daniel H. Erskine, *Resolving Trade Disputes: The Mechanisms of GATT/WTO Dispute Resolution*, 2 SANTA CLARA J. INT'L L. 40, 73 (2004).

214. See, e.g., Jide Nzelibe, *The Case against Reforming the WTO Enforcement Mechanism*, 2008 U. ILL. L. REV. 319, 325.

215. See, e.g., Gregory C. Shaffer & Mark A. Pollack, *Hard vs. Soft Law: Alternatives, Complements, and Antagonists in International Governance*, 94 MINN. L. REV. 706, 752 (2010).

216. See Colleen Klanchnik, Note, *United States-European Union Dispute on Foreign Source Income, Export Activity, and the Extraterritorial Income Exclusion Act*, 33 HOFSTRA L. REV. 331, 359–61 (2004).

217. See, e.g., Lisa M. Nadal, *EU-U.S. Battle Over Subsidies Continues*, 115 TAX NOTES 224 (2007); Dominic A. Gentile, Note, *International Trade and the Environment: What Is the Role of the WTO?*, 20 FORDHAM ENVTL. L. REV. 197, 215–16 (2009) (describing the Appellate Body ruling of United States compliance with the Shrimp-Turtle decision). The United States eventually complied with the income tax ruling by repealing the offending provision and replacing it with a generally available production credit. See American Jobs Creation Act of 2004, Pub. L. No. 108-357, § 101, 118 Stat. 1418, 1423–24 (2004).

Second, the DSU has provided a forum for emerging economies such as China, Mexico, and Brazil to enforce their rights against more powerful countries such as the United States.²¹⁸ Some have criticized the DSU for effectively excluding smaller developing countries from effective protection, but for the most part it has been considered a success.²¹⁹

Why then is the DSU not a sufficient model for international tax? Primarily because of the underlying enforcement mechanism of the WTO, that is, permissible trade retaliation. The idea behind trade retaliation is that a full trade war would harm both countries and the non-complying country only benefits from cheating if it is the only one doing so. Once the other country retaliates, both countries are worse off than if both cooperated. As a result, the threat of permissible retaliation is often sufficient to encourage compliance.

This is not the case in international tax. The problem in international tax is that states want to impose taxes to raise revenue to pay for public goods.²²⁰ In international trade the benefit is increased economic growth due to lower barriers to trade between countries. Thus, the issue in tax is primarily one of public goods, while the benefit in trade is primarily one of private benefits. Consequently, a model of “punishment” does not work well in international tax.

Assume two countries—Country A and Country B—both have different tax rules, each of which maximizes the benefit to the country acting alone but less so than if they worked together. Under the DSU model, Country A could bring a claim against Country B as being non-cooperative. If Country B refuses to change its behavior, Country A would be permitted to impose a tax on Country B. The problem is that Country A has no jurisdiction over Country B or its taxpayers, so the only penalty it could impose would be to tax its own taxpayers who invest in Country B.²²¹ This would result in Country A taxpayers either

218. See Hansel T. Pham, *Developing Countries and the WTO: The Need for More Mediation in the DSU*, 9 HARV. NEGOT. L. REV. 331, 349–50 (2004); see also, e.g., Peter M. Gerhart & Archana Seema Kella, *Power and Preferences: Developing Countries and the Role of the WTO Appellate Body*, 30 N.C. J. INT’L L. & COM. REG. 515 (2005).

219. See, e.g., Chad P. Bown & Bernard M. Hoekman, *WTO Dispute Settlement and the Missing Developing Country Cases: Engaging the Private Sector*, 8 J. INT’L ECON. L. 861 (2005).

220. See, e.g., Hasen, *supra* note 13, at 1397–99.

221. Another option would be to tax the investments of Country B taxpayers located in Country A. While a possibility, this is less than ideal because it would deter foreign direct investment from Country B in Country A, assuming there are other countries with similar investment opportunities, which would effectively punish the recipients of this foreign direct investment rather than the taxpayers exploiting the tax competition, thus reaching the proper target. In other words, making investment from

being disadvantaged as compared to other investors in Country B or moving out of Country B to earn less beneficial economic returns on a pre-tax basis. Either way, the “retaliation” primarily hurts Country A through lower tax revenue, lower economic growth, higher taxes for its own taxpayers, or some combination thereof. As a result, retaliation as a tool of enforcement does not make as much sense for international tax as it does for international trade. Since retaliation as enforcement is the linchpin to the DSU model of dispute resolution, it is not a fit for international tax.

Further, as with tax treaty-based arbitration, the DSU is primarily aimed at resolving disputes over application of the already agreed upon baseline rules to facts rather than disputes over which rule should apply, again because the disputants will have already signed on to the treaty. Thus, for example, a dispute could arise as to whether a ban on the importation of shrimp from countries which do not use special nets is an impermissible restraint on trade, but not over whether protectionist restraints on trade generally are permissible under the treaty. In other words, since all member countries agree on the baseline, the DSU can focus on specific disputes within that framework.

C. Building a Non-Treaty Based International Tax Cooperation Mechanism

Simply because the institutions of tax treaty arbitration and WTO dispute settlement are not perfect fits for the resolution of tax disputes among non-treaty members does not mean that nothing can be learned from them. Rather, a regime geared specifically to non-treaty partners could incorporate relevant aspects of both tax treaty arbitration and WTO dispute resolution, while modifying them to apply to the unique incentives applicable to non-treaty members. The primary difference would be that such a regime would not be a creature of treaty—either bilateral or multilateral. Rather, the purpose of the regime would be to create a forum to resolve disputes among states which have not entered into treaties with each other. Put differently, the intent of the regime would be to divide disputed tax benefits in a way to entice currently non-cooperative countries to agree to certain baseline rules, thus increasing cooperative benefits more generally. This could be accomplished in any of a number of ways, but perhaps the simplest would be for wealthy countries such as the United States to unilaterally

Country B taxpayers leave for a third country does not hurt Country B but does hurt Country A. This would also reduce worldwide efficiency by distorting investment location decisions across borders.

create a forum for the resolution of disputes with non-treaty members. Doing so would obviate the need for a treaty to be signed between countries before specific disputes could be resolved between them.

Why would the United States want to do this, however? As an initial matter, there is little upfront cost to the United States to take such an action. Since the regime would not be a standing entity there would be no need for any permanent membership, staff, or operating budget. Rather, it could be set up more like a default set of rules to be adopted on a case-by-case basis by ad hoc arbitration panels in which the parties would share the costs of the particular arbitration case.

In this respect, the tax cooperation mechanism would more closely resemble the rules for arbitration of the United Nations Commission on International Trade Law (UNCITRAL) than the WTO DSU or tax treaty arbitration, in that it would serve as a model of default rules available to be adopted voluntarily by parties on a case-by-case basis rather than a standing arbitral institution.²²² For example, the presence of the UNCITRAL rules as a default mechanism made it possible for the United States and Iran to agree on forming the Iran-United States Claims Tribunal to resolve disputes arising from the 1979 Iran Hostage Crisis.²²³ Although this tribunal was ad hoc, and was not brought before the institution of the UNCITRAL, the presence of the rules made it possible for the tribunal to resolve quickly a remarkable number of cases between two otherwise non-cooperative countries.²²⁴

This benefit is furthered by the presence of the Global Forum on Transparency, which could provide an ideal host institution for such a mechanism as it has already begun to engage in the process of increasing tax information among OECD member and non-member countries.²²⁵ In this manner, the non-treaty based cooperation mechanism could supplement existing tax cooperation institutions by

222. See, e.g., John D. Franchini, *International Arbitration under UNCITRAL Arbitration Rules: A Contractual Provision for Improvement*, 62 *FORDHAM L. REV.* 2223, 2226–28 (1994).

223. *Id.* at 2231.

224. Charles N. Brower, Comment, *The Lessons of the Iran-United States Claims Tribunal: How May They Be Applied in the Case of Iraq?*, 32 *VA. J. INT'L L.* 421, 421 (1992) (“[T]he Iran-United States Claims Tribunal . . . has achieved a near miracle. In just ten years it has resolved about 95% of all of the claims submitted to it . . .”).

225. See OECD, *GLOBAL FORUM ON TRANSPARENCY AND EXCHANGE OF INFORMATION FOR TAX PURPOSES, LAUNCH OF A PEER REVIEW PROCESS, TERMS OF REFERENCE TO MONITOR AND REVIEW PROGRESS TOWARDS TRANSPARENCY AND EXCHANGE OF INFORMATION FOR TAX PURPOSES* (2010), available at <http://www.oecd.org/dataoecd/37/42/44824681.pdf>.

integrating with them but also adding countries which otherwise would not have an incentive to participate.

Further, unlike the history of the WTO and its multiple negotiation rounds,²²⁶ there would be no upfront negotiation or other similar costs with non-treaty partners as these rules could be adopted unilaterally. Similarly, unlike bilateral investment treaties or other negotiated cooperation mechanisms, no existing tax treaties would need to be renegotiated or amended to accommodate them since these alternative rules would not be applicable to disputes with treaty partners.²²⁷ Taken together, there would be virtually no upfront transaction costs to the United States in adopting a non-treaty tax cooperation mechanism.

Perhaps more importantly, as discussed in more detail below, there would be no net cost in terms of policy to the United States. If the tax cooperation mechanism were not attractive to non-treaty members, there would be no cost to the United States since no cases would be brought. Even if a case were brought before the mechanism, if it were properly structured, resolution of the case would result in a net benefit to the United States from the increased cooperation which otherwise would not have occurred.

Merely establishing a non-treaty tax cooperation mechanism by itself does not prove particularly useful, however, since it would be difficult to imagine why non-treaty member states which could not agree on entering into a treaty with the United States would agree to submit disputes to the mechanism; after all, one state would have to lose. The mechanism only works if it can serve to increase the amount of cooperativeness in the international tax regime from currently existing levels. As discussed in Part III above, this is precisely what a “lottery” mechanism in the economics literature is intended to do to overcome inefficiencies in the public goods context.²²⁸ Thus, in effect, the mechanism would need to act like such a structural solution to create incentives towards increased cooperation among states that are presently non-cooperative. Accordingly, the mechanism would have to contain certain conditions sufficient for the structural solution.

The cooperation mechanism could achieve these goals by providing for two crucial characteristics: first, it would require countries to agree to bind themselves to decisions *ex ante* with respect to disputes with any other country with which it has not entered into a

226. Anu Bradford, *When the WTO Works, and How It Fails*, 51 VA. J. INT'L L. 1, 49 (2010).

227. See, e.g., Eyal Benvenisti & George W. Downs, *The Empire's New Clothes: Political Economy and the Fragmentation of International Law*, 60 STAN. L. REV. 595 (2007).

228. See *supra* Part III.B.

tax treaty but has accepted certain baseline rules and, second, it would require that there be a presumption in favor of poorer countries in resolving particular disputes. These two characteristics effectively achieve the same goals as the structural solutions of building in a negative externality to serve as a form of side payment.²²⁹

By combining these two requirements, both wealthier countries that have already entered into treaties with other wealthier countries and poorer countries that have not entered into such treaties would have an incentive to engage in the mechanism. To the extent international tax is a form of Weaker-Link game, wealthier countries would disproportionately benefit from even minimal amounts of cooperation from the least cooperative states, meaning any incremental cooperation agreed to by poorer countries will inure primarily to their benefit. The trade-off would be for such countries to agree to sacrifice particular disputes with countries with which they do not have tax treaties. For example, if a wealthy and a poor country disagree over how to divide a particular item of income, say the royalties on Google's search algorithm software, one trade-off would be for the poorer country to share all of its information about the income with the rich country in exchange for the wealthy country using the poorer country's proposed allocation.²³⁰

By using a rule of decision in this manner, the system is able to allocate benefits in the form of winning disputes to poorer countries in such a manner as to offset the externality they generate to wealthier countries by agreeing to any baseline rules. Conversely, since wealthier countries would not be able to collect any disputed tax benefits with countries with which they don't have existing treaties, there is no net cost to wealthier countries as compared to the current regime.

The benefit of building the negative externality into a dispute resolution mechanism is that it limits the costs to disputed tax benefits only, which means any increase in benefits from cooperation more generally would remain and would primarily benefit wealthier countries. In other words, there must be some baseline principles of cooperation agreed to by the parties which would not be subject to resolution through the mechanism, while those matters properly subject to dispute resolution would be brought before the mechanism.

So what would be the baseline benefits of cooperation? Many would argue that the ideal baseline would be the acceptance by all countries of the "single tax" principle, which provides that all income

229. See Duncan, *supra* note 190, at 56 (finding fixed prize lotteries and expected prize lotteries equivalent under certain conditions).

230. See *infra* Part IV.D for a detailed example.

should be subject to tax once and only once.²³¹ More specifically, poorer countries would agree as a condition of bringing a case before a panel to waive their sovereign right to claim taxing authority over a particular item of income if exercising that authority would result in some income escaping taxation altogether. Of course, this may be the ideal for the wealthiest countries of the world, but may not be as attractive to the poorest, nor may it even be normative from a first principles perspective.

The strength of the non-treaty dispute-resolution proposal, however, is that even if achieving worldwide agreement on a broad overarching goal such as the single tax principle is not possible or even desirable as a starting point, improvements to the international tax regime could be possible with much more realistic goals.²³² More specifically, the United States has numerous cooperative goals which it has already identified as in its interest—the tax treaty rules. For example, baseline rules could include such provisions from treaties as harmonizing the tax definition of corporate residency,²³³ anti-base erosion rules,²³⁴ and anti-abuse rules such as limitations on benefits (which ensure that taxpayers really operate in the country in which they are claiming tax benefits)²³⁵ among others.

One of the easiest and most straightforward baseline rules would be robust, complete information exchange.²³⁶ This baseline rule could, in effect, replicate the cooperative information sharing regime found in tax treaties including not only information sharing provisions, but also the MAP which would allow the competent authorities of both countries to sit down and discuss all of the information relevant to a particular taxpayer.²³⁷ This is a much broader concept than that embodied in

231. Reuven S. Avi-Yonah, *International Taxation of Electronic Commerce*, 52 TAX L. REV. 507, 517 (1997).

232. In fact, agreement to *any* baseline principle that would provide more than an insubstantial benefit to countries such as the United States would be sufficient. *See infra* Appendix A.

233. *See, e.g.*, United States Model Income Tax Convention, art. 4, Nov. 15, 2006 [hereinafter Model Income Tax Convention], *available at* <http://www.irs.gov/pub/irs-trty/model006.pdf>; Mitchell A. Kane & Edward B. Rock, *Corporate Taxation and International Charter Competition*, 106 MICH. L. REV. 1229, 1232 (2008).

234. *See* Model Income Tax Convention, *supra* note 233, at art. 22(2)(e)(ii).

235. *See id.* at art 22(2)(c), (e)(1).

236. *Cf.* Steven A. Dean, *The Incomplete Global Market for Tax Information*, 49 B.C. L. REV. 605, 605–12, 657–72 (2008).

237. *See, e.g.*, William L. Burke, *Tax Information Reporting and Compliance in the Cross-Border Context*, 27 VA. TAX REV. 399, 427–33 (2007).

current information projects such as TIEAs,²³⁸ in which a country agrees to disclose the information it has on hand about a particular taxpayer over a particular issue by request of the other country on a case-by-case basis, and only to the extent it does not otherwise violate the internal law of the country and does not require any independent investigation.²³⁹ By contrast, this proposed information exchange would require cooperatively disclosing all the information necessary to recreate the taxpayer's income so that a reasoned and informed decision could be made as to how to impose tax on the income while avoiding both double taxation and double non-taxation, much along the lines proposed by the Global Forum on Transparency and Exchange of Information for Tax Purposes.²⁴⁰

For example, returning to the Andorra example, robust information exchange would require not only disclosing how much royalty income is reported to Andorra, upon what basis this amount was calculated, and what tax rate Andorra imposes on it, but also whether the taxpayer offsets that income with deductible payments out of Andorra to other low-tax countries.²⁴¹ This would effectively replicate the so-called "base erosion" rules recently added by the United States to many of its treaties,²⁴² which otherwise would not apply to investments in non-treaty countries. In this manner, the United States would benefit from effectively applying for the first time a form of its anti-base erosion rules to an investment through a non-treaty country, likely more than offsetting the tax revenue lost by agreeing to Andorra's transfer price of \$4,000,000 in that specific case.²⁴³

238. See, e.g., Martin A. Sullivan, *Economic Analysis: U.S. Citizens Hide Hundreds of Billions in Cayman Accounts*, 103 TAX NOTES 956 (2004) (contrasting TIEAs with complete information exchange regimes); see also Brown, *supra* note 16; Cantley, *supra* note 18.

239. E.g., Dean, *supra* note 236, at 608 ("The primary tool for gathering extraterritorial tax information is bilateral tax information exchange. . . . This system has proven woefully inadequate."); Richard K. Gordon, *On the Use and Abuse of Standards for Law: Global Governance and Offshore Financial Centers*, 88 N.C. L. REV. 501, 530-31 (2010).

240. See *supra* note 225 and accompanying text. This approach has also been the basis of recent information sharing agreements among the members of the OECD and G20. See OECD, CONVENTION ON MUTUAL ADMINISTRATIVE ASSISTANCE IN TAX MATTERS (2011), available at <http://www.oecd.org/dataoecd/63/49/48980598.pdf>. But see Kristen A. Parillo, *Group Criticizes OECD Global Forum Peer Review Process*, 134 TAX NOTES 1504 (2012) (summarizing report of Tax Justice Network criticizing the Global Forum on Transparency Peer Review Process).

241. See *supra* Part I.

242. See generally *U.S.-Italy Income Tax Treaty*, *U.S.-France Protocol Enter into Force*, 21 J. INT'L TAX'N 18 (2010).

243. See, e.g., Dale Pinto, "Conservative" and "Radical" Alternatives for Taxing E-Commerce (pt. 2), 17 J. INT'L TAX'N 38 (2006).

Similarly, the United States could ask to apply other anti-tax-competition treaty rules to be used as the baseline rule in particular disputes such as the ownership provisions of limitation on benefits clauses.²⁴⁴

By using these baseline rules, the United States could effectively replicate some of the benefits of a tax treaty with a non-treaty member, just on a case-by-case basis. The United States would effectively cede the right to tax a particular item of income to the other country—much in the same manner it does when it agrees to lower rates of withholding in a tax treaty—in exchange for cooperation over specific issues, particularly anti-abuse provisions found in tax treaties. By doing so only on a case-by-case basis, however, the United States would not forego the ability to use withholding taxes to capture revenue when payments leave the United States to such countries in general. Rather, it would effectively cede source base tax only when it receives base assurances from the other country that the income is truly going to the other country for some real business reason and not solely to avoid U.S. taxes, much as it does for payments to treaty member countries.

The mechanism to effectuate this would be a rebuttable presumption: that in cases where the poorer country agrees to be bound by a particular baseline rule requested by the wealthier country, the poorer country should win the hearing over the particular item of income at issue.²⁴⁵ By adopting this rule of decision, the mechanism increases the chances that a poorer country would win and that a wealthier country would lose over the specific item of income at issue. From a risk-adjusted present value standpoint, this is similar to an increasing negative externality as more non-member countries join the pool, precisely because it is the poorer countries which currently have an incentive not to join the present treaty-based residence model of international tax.²⁴⁶ In other words, if a country has not entered into a tax treaty with the United States, every issue can potentially be a

244. See, e.g., Stafford Smiley, *2010 Treaty Developments*, 37 CORP. TAX'N 31, 31–34 (2010) (summarizing anti-treaty shopping provisions added to treaties with Malta and New Zealand and the proposed treaty with Hungary). *But see* Kristen A. Parillo, *Senator Puts Hold on Pending Tax Treaties*, 134 TAX NOTES 276 (2012).

245. In this manner, the arbitrator would act more like a referee than a true arbitrator, not acting as a finder of fact and applying the law to the facts, but rather determining whether the poorer country has abided by the agreed upon baseline rule and, if so, ruling in favor of the poorer country. Cf. Diarmuid F. O'Scannlain, *The Role of the Federal Judge under the Constitution: Some Perspectives from the Ninth Circuit*, 33 HARV. J.L. & PUB. POL'Y 963, 965–66 (2010).

246. Using the presumption creates the equivalent of an expected lottery with an increasing negative externality, which has been demonstrated to be Pareto-superior to a partly cooperative and partly non-cooperative public goods equilibrium. See Duncan, *supra* note 190.

dispute, with no clear winner. Even then, it still is presumably not in the interest of the country to enter into a tax treaty, since they have not done so.²⁴⁷ But if the United States adds the “lottery ticket” of actually winning disputes before the arbiter, without signing a tax treaty that forfeits its tax base, the terms of the deal become much more attractive. In exchange, the United States would receive some of the cooperative benefits it enjoys with treaty members without having to give away all the benefits of the treaty to a non-reciprocal state.²⁴⁸

Note that the crucial aspect of this proposal is that it applies only as between countries which have not already entered into a tax treaty. For countries which have entered into a tax treaty, the treaty-based dispute-resolution mechanics—whether MAP, voluntary arbitration, or mandatory arbitration—would remain the exclusive avenue for redress. In this manner, the non-treaty tax cooperation mechanism would in no way impact the incentives or payoffs for wealthier countries to interact with each other,²⁴⁹ nor would it impact the ability of such countries to enter into other, more cooperative agreements, if they so desire.²⁵⁰ Further, assuming the benefits of tax treaty cooperation between wealthy countries are based primarily on the shifting to a more residence based model and the reciprocal benefits deriving therefrom,²⁵¹ there would be little to no incentive for existing treaty partners to terminate their treaties solely to opt into this new, less reciprocal mechanism either.

By limiting the mechanism to non-treaty-based parties, the mechanism applies the presumption in favor of poorer countries only with respect to those disputes with countries with which the wealthier country would have had no cooperation otherwise. By doing so, the wealthier country receives the real benefit of the concession to the baseline rule as the price for admission, which is strictly greater than what it had before, while giving up revenue from disputes that would never have been raised otherwise, effectively giving up nothing.²⁵²

247. The most likely reason is that tax treaties favor residence over source taxation. See Avi-Yonah, *supra* note 134, at 484–86.

248. See, e.g., Alvin C. Warren, Jr., *Income Tax Discrimination against International Commerce*, 54 TAX L. REV. 131, 135–36 (2001) (“The principle of reciprocity is manifest in the mutual reduction of source-country withholding taxes on investment income to the same level in the tax treaties.”).

249. See *infra* Appendix A.

250. See SAWYER, *supra* note 14, at 28–49; Benshalom, *supra* note 167.

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

252. See *infra* Appendix A.

Since joining the mechanism under these conditions would be strictly superior to the current regime,²⁵³ all countries—even wealthy countries—would have an incentive to bring cases before the mechanism even with a presumption in favor of poorer countries. This is the crucial aspect of the mechanism as a unique solution to the international tax conundrum described above: by taking into account the incentives of both wealthier and poorer countries, as was done in 1918,²⁵⁴ a new international mechanism can be structured to maximize cooperation among both groups of countries.

Taking as a given that the contribution to the public good of international tax is the willingness to be bound to adverse conclusions of the mechanism and the prize is the chance of winning, two additional features of the mechanism arise. First, it must function as a form of “final offer” or “baseball” arbitration in which each side of a dispute provides its preference and the ad hoc panel picks one as the winner, such that the panel would have no discretion to insert its own solutions or to “split the difference” between the two proposals.²⁵⁵ Final offer arbitration is important not because of the impact on a particular dispute but rather on the incentives to all the parties *ex ante*. The theoretical benefit of final offer arbitration in general is that it creates incentives for the parties to moderate their proposals.²⁵⁶ In other words, each side wants their position to appear the most reasonable so it will be adopted by the arbitrator. Taken to its extreme, the mere presence of final offer arbitration would so moderate each side’s position that they would eventually converge and agree without the need for arbitration at all.

As applied to international tax, the presence of the mechanism changes the incentives not only of the wealthier country and the poorer country, but also of taxpayers as well. Currently, taxpayers have an incentive to exploit structural gaps between the tax laws of countries which do not have a tax treaty. For example, a taxpayer may form an entity in a non-treaty member state solely with the intent of hiding assets from the home country, knowing that the two countries have no means of sharing sufficient information to prevent this from occurring. If, however, the taxpayer knows there is a chance that both countries would submit a dispute over that taxpayer to the mechanism on the

253. See *infra* Appendix A.

254. See *supra* notes 84-88 and accompanying text.

255. See, e.g., Benjamin A. Tulis, *Final-Offer “Baseball” Arbitration: Contexts, Mechanics & Applications*, 20 SETON HALL J. SPORTS & ENT. L. 85, 86-87 (2010).

256. See, e.g., Jay A. Soled, *Transfer Tax Valuation Issues, the Game Theory, and Final Offer Arbitration: A Modest Proposal for Reform*, 39 ARIZ. L. REV. 283, 304-05 (1997).

condition that they share their information on the taxpayer, hiding assets in that jurisdiction becomes much less appealing as an initial matter.

Similarly, the willingness to bring cases before the mechanism itself serves as a signal to wealthier countries as to the basis of the tax benefits offered by such countries. If a country is willing to bring cases through the mechanism, presumably it must be because the country believes the presumption will apply and thus it will win the dispute even if it concedes the baseline rule, such as information cooperation; the taxpayer must also prefer that the case be brought assuming the benefits it receives from the poorer country would become more certain after the case is won.²⁵⁷ Given that both the poorer country and the taxpayer would like to bring a case under these conditions, it is safe to assume that countries not willing to bring cases are likely engaged in harmful tax competition.²⁵⁸ This signal would make punishment of harmful forms of tax competition, such as tax secrecy, more effective, or at least more directly targeted, as a tool for wealthier countries. Put differently, the mere presence of the non-treaty-based international tax regime could serve to make it easier and more effective for wealthier countries to adopt affirmative policy choices with respect to previously unaccounted for tax base while minimizing the risk of potential double taxation at the same time.

Lastly, the decision itself must be limited to the taxpayer or issue presented in the particular taxpayer and dispute at issue. In this manner the cost to wealthier countries would remain fixed only to those benefits at dispute in the case, while the benefits of increased cooperation would remain.²⁵⁹ In other words, a wealthy country may be willing to strike a deal in favor of a poorer country on a one-off basis, but only so long as it does not serve as the rule for all other disputes going forward; otherwise, it would have signed a tax treaty with the poorer country.

D. The Non-Treaty Tax Cooperation Mechanism at Work

Given the moving parts of the theoretical tax cooperation mechanism, a hypothetical but realistic example may be useful. Returning to the example in Part I, slightly modified, can provide a useful basis for analysis.

257. See, e.g., SAWYER, *supra* note 14, at 47–48; Rosenzweig, *supra* note 38, at 597–601.

258. See, e.g., Mitchell A. Kane, *Strategy and Cooperation in National Responses to International Tax Arbitrage*, 53 EMORY L.J. 89, 143–44 (2004).

259. See *infra* Appendix A.

Assume a U.S. corporation has active operations in multiple countries throughout the world but maintains two separate special purpose entities: an intellectual property holding company in Brazil and an internal finance company in Andorra. Under U.S. international tax law, the corporation allocates income to these companies under the arm's-length method of allocation,²⁶⁰ in other words, the Brazilian company should charge the same royalty to its U.S. parent as it would to a third party, and the Andorran finance company should charge the same interest to its parent as it would to a third party. The problem, of course, is that these companies in fact do not do any business with third parties, making any arm's-length analysis wholly artificial.²⁶¹

As a result, a dispute arises with respect to the allocation of income among these entities among the states involved. The United States accuses the U.S. parent of artificially paying higher rates to Andorra and Brazil to "shift" income to these lower tax jurisdictions.²⁶² The problem is that the United States has not entered into a tax treaty with either Andorra or Brazil, meaning that there is no way for the United States to know what amounts of transfer pricing the company is reporting to Andorra or Brazil, or even what methodology they are using to do so. Assume that the one thing all the countries do agree on is that they do not want to impose a double tax on any item of income.

More specifically, assume that the U.S. parent earns \$10,000,000 in gross revenue from worldwide sales, but then claims to the United States that it pays \$3,000,000 in interest to the Andorran entity and \$4,000,000 in royalties to the Brazilian entity. Since those are both deductible in the United States, that leaves only \$3,000,000 of net income subject to U.S. tax. The United States in response argues that under an arm's length standard only \$1,000,000 of interest should have been paid to Andorra and only \$1,000,000 in royalties should have been paid to the Brazilian entity. As a result, the United States proposes to unilaterally impose tax on the additional \$5,000,000 of income, without being able to know whether this would result in double taxation or whether it would prefer to impose tax on this amount from a normative standpoint. The only reason for this is the lack of ability to coordinate with Andorra or Brazil over the income of this taxpayer.²⁶³

260. See, e.g., Drucker, *supra* note 2.

261. See, e.g., Pearson, *supra* note 46.

262. See, e.g., Drucker, *supra* note 2.

263. For these purposes, it is assumed that this could be structured to reduce or minimize withholding taxes as well as part of the overall structure. See, e.g., William G. Dodge et al., *Final Cost Sharing Regulations: Do They Solve the Intangibles Puzzle?*, 84 J. TAX'N 270, 278 (1996). For simplicity purposes, the example will only discuss net income taxes, although the analysis holds for total tax liability as well.

From the other perspective, assume Andorra has adopted an arm's-length regime that generally respects taxpayer's income allocations as a matter of course and assume further that Brazil has adopted a formulary apportionment method in which it allocates income based on independent factors such as sales or licenses of the intellectual property. Under these approaches, the company reported \$3,000,000 of interest income in Andorra which was entitled to a very low rate of tax and \$4,000,000 of royalty income in Brazil subject to a lower, but still positive, tax rate than that imposed by the United States. Lastly, assume that under a formulary apportionment method using sales or licenses \$4,000,000 is the appropriate amount of royalty income to apportion to Brazil while under an arm's length standard \$1,000,000 of royalty income is appropriate to apportion to Andorra.

As would be expected, the taxpayer disagrees with the proposal of the United States to impose tax on an additional \$5,000,000 (\$2,000,000 additional income from Andorra and \$3,000,000 from Brazil), primarily because it structured its transaction as among the United States, Andorra, and Brazil specifically to maximize its after-tax worldwide return based on the law of each country at the time the transaction was structured and believes that it fully complied with the law of each country. The proposition of the United States could result in a higher effective tax rate on the transaction, requiring a change in the structure or, even worse, could cause the taxpayer to cease operations of that transaction. In either case, the proposal of the United States could actually be less efficient from a worldwide standpoint than doing nothing, assuming the only issue is the allocation of tax base. From the perspective of the United States, however, there is no other alternative since there is no way for it to know whether the \$5,000,000 would be subject to double taxation if it imposed a tax or double non-taxation if it did not. As a result of the lack of cooperation with Andorra and Brazil, the United States cannot adopt its normative preference as to a portion of its tax base, at least not with any amount of certainty.

Now assume that the United States has previously committed to resolving disputes with non-treaty partners such as Andorra and Brazil under rules described above for the tax cooperation mechanism, including the requirement that counterparties agree to adhere to certain baseline rules. With respect to Andorra, the United States requests full information sharing with the United States. In other words, Andorra would not be permitted to use the hiding of tax information—which might be permissible under international law—as an argument to

support their side in the dispute.²⁶⁴ With respect to Brazil, the United States requests an equivalent to the limitation-on-benefits provision in its treaties as the baseline rule. In other words, the United States would concede to Brazil's transfer price if Brazil in exchange would certify that the taxpayer is owned by either U.S. or Brazilian taxpayers or has substantial business activities in Brazil.²⁶⁵

The taxpayer, not wanting the United States to impose a second tax on the \$5,000,000, petitions Andorra and Brazil to challenge the United States pursuant to the mechanism. Assume both Andorra and Brazil do so and petition that a panel be created pursuant to the mechanism to challenge the assertion by the United States to tax the \$5,000,000.

With respect to the dispute between the United States and Brazil, there are actually two disputes: first, whether to use arm's-length or formulary apportionment; second, once that is decided, upon which basis to determine the allocation. Since under any normative theory of international tax, both arm's-length and formulary apportionment could potentially achieve an appropriate result, the presumption would apply in Brazil's favor on the first issue, resulting in the panel ruling in favor of Brazil and applying formulary apportionment to the particular item of income at issue (that is, the royalty income).²⁶⁶

The next issue would be whether to utilize the location of the sales or license of the intellectual property, which are located entirely in Brazil, or some other factor such as worldwide employees or worldwide sales, which are located primarily in the United States, to calculate the formulary apportionment of the royalty. Of course the United States would prefer to use sales or employees, but there is little argument that using location of the license would violate the limitation on benefits clause of the model tax treaty. Therefore, once again, since Brazil complied with the baseline rule, the presumption would apply in favor of Brazil, and the arbitrator would rule in favor of the Brazilian apportionment. Taken together, Brazil would have a complete victory, and the United States would have to cease attempting to impose tax on

264. See, e.g., Christians, *supra* note 127; Gordon, *supra* note 239.

265. See Model Income Tax Convention, *supra* note 233, at art. 22.

266. Technically, the United States could not apply formulary apportionment if its rule was arm's length. Accordingly, the ruling would have to be that the United States adopt a particular dollar amount of royalty income to allocate to the United States which matches the amount as if it had used formulary apportionment, rather than that the United States actually adopt formulary apportionment. Since this would apply only to the item of income at issue, in this manner it would be substantially similar to agreements to divide tax base between countries which are signatories to a tax treaty pursuant to MAP competent authority provisions. See, e.g., Regina Deanehan et al., *Making Better Use of APA and MAP Programs*, 19 J. INT'L TAX'N 32 (2008).

the additional \$3,000,000 of royalty income at issue in this particular case.

In exchange, the United States would have learned that the taxpayer was not using the Brazilian company to strip income out of the United States and Brazil and into the cracks of the international tax regime, since the company must either pay out profits to people taxable in the United States or Brazil or pay Brazilian tax on substantial business activity. Either way, the United States would know that the transfer price preferred by the taxpayer was not being used for a purely abusive structure.²⁶⁷ If, however, the taxpayer had been engaged in a structured transaction such as the “Double Irish with a Dutch Sandwich” reportedly used by Google,²⁶⁸ the United States would now know about the structure, the indicia of it, how to find it in the future, and how to change its laws, if necessary, to combat it. This kind of information is valuable, to say the least, especially in the international tax context.²⁶⁹

The United States would not be obligated to use formulary apportionment for any future transaction with this taxpayer, with Brazil, or with any other country, nor would it be prohibited from asserting that a factor such as worldwide sales or employees would be proper in the future either. It would know with certainty, however, that in this particular transaction the taxpayer will use a consistent allocation for purposes of both the United States and Brazil, and it will know the information upon which the taxpayer calculated it, which could assist in future dealings with this taxpayer.²⁷⁰

With respect to Andorra, by contrast, there is not a dispute over the methodology since both jurisdictions have adopted the arm’s-length method. Rather, the dispute is over the ability of Andorra to accept the transfer price amount chosen by the taxpayer without requiring independent support, while the United States would prefer an independent transfer pricing study to be done. In this case, Andorra could not comply with the baseline rule of full and robust information

267. See generally RICHARD E. ANDERSEN, ANALYSIS OF UNITED STATES INCOME TAX TREATIES ¶ 22.01 (2011), available at 1998 WL 1038801.

268. See Jane G. Gravelle, *The Corporate Income Tax: A Persistent Policy Challenge*, 11 FLA. TAX REV. 75, 76 (2011); John Sokatch, *Transfer-Pricing with Software Allows for Effective Circumvention of Subpart F Income: Google’s “Sandwich” Costs Taxpayers Millions*, 45 INT’L LAW. 725, 725–27 (2011).

269. For example, the recent success of John Doe summons against Swiss banks arose as a result of a whistleblower tip from a Swiss banker. See Michelle M. Kwon, *Whistling Dixie about the IRS Whistleblower Program Thanks to the IRC Confidentiality Restrictions*, 29 VA. TAX REV. 447, 461 (2010).

270. This is assuming that the Brazilian position has some reasonable support for it; for example, if it used a sales factor in its formulary apportionment method.

exchange. If the rule proposed by Andorra were adopted and the United States were concerned that the taxpayer was abusing transfer pricing, it could ask Andorra to provide to the United States the transfer pricing amount the taxpayer reported to Andorra to compare with the one provided to the United States.

If the rule of Andorra were never to ask for information supporting the transfer price, however, the United States would never be able to verify the correct transfer pricing amount, meaning that at best it would have to arbitrarily choose one transfer price, which could lead to double taxation. Since the purpose of the full and robust information exchange rule was to permit the United States to confirm that the transfer pricing was not being used to evade U.S. taxes, this would violate the rule and thus the presumption would not apply.

In such a case, it would be the responsibility of Andorra to demonstrate that the transfer pricing actually proposed by the taxpayer at issue, if accepted by the United States, would in fact result in all of the income being subject to income tax in either the United States or Andorra in this particular instance, or that Andorra's approach would be substantially simpler and less expensive for it from an internal administrative standpoint,²⁷¹ meaning that adopting the position of the United States would impose a significant administrative burden on Andorra.²⁷² If proven, the panel may determine that Andorra correctly applied its transfer pricing rules and thus should still win the dispute. If not, however, the panel could rule in favor of the United States and permit it to impose tax on the \$2,000,000 excess interest. Regardless, at a minimum the United States would know whether the taxpayer was reporting all \$3,000,000 of income to Andorra, even using Andorra's approach to transfer pricing. Similarly, whichever way the panel rules in this dispute Andorra would continue to be allowed to use its transfer pricing rule for transactions going forward, and the presumption would again apply in its favor in future disputes.

Now assume instead that the transfer pricing amount reported by the taxpayer to Andorra was \$1,000,000 instead of \$3,000,000, while the amount reported as a deduction to the United States remained \$3,000,000. Since these are clearly inconsistent allocations, the benefit

271. See Michael C. Durst, *Making Transfer Pricing Work for Developing Countries*, 60 TAX NOTES INT'L 851 (2010).

272. See Dean, *supra* note 41; see also David Spencer, *International Tax Cooperation: Centrifugal vs. Centripetal Forces* (pt. 2), 21 J. INT'L TAX'N 46, 48 (2010) ("For the OECD's arm's-length transfer pricing rules to be implemented effectively, tax administrations must have that expertise. It is questionable in developed countries (and even more questionable in developing countries) whether tax administrations have such expertise.").

to the taxpayer is not simply taking advantage of lower rates in Andorra through transfer pricing or exploiting cheaper source of funds by using an internal finance company but rather solely exploiting the fact that it can report different amounts to the United States and Andorra without either knowing about it. When the United States attempts unilaterally to impose tax on the additional \$2,000,000 of interest, the incentives to both the United States and Andorra differ substantially. Of course, the taxpayer still would like the United States not to impose the additional tax. The difference is that if Andorra were to bring a challenge in the mechanism the only argument available to it would be that the taxpayer should be allowed to hide the amount of interest reported; if the United States knew that only \$1,000,000 of income was being reported to Andorra, it could impose tax on the additional \$2,000,000 without any risk of double taxation, even if it fully conformed to the Andorran transfer pricing allocation.

Thus, assuming Andorra fully disclosed its transfer pricing amount and the presumption applied, the United States would only be obligated to respect \$1,000,000 of interest deduction, freeing it to tax the additional \$2,000,000, while if the presumption were overcome both the United States and Andorra would have to use the \$3,000,000 amount. Either way, the United States would be able to tax \$3,000,000 of income without fear of double taxation. Since the only way to avoid this result would be for Andorra to refuse to disclose how much interest income was reported to it, Andorra could not do so and still maintain the presumption in its favor, meaning the United States would win the dispute once again.

Crucially, however, in no circumstance would the taxpayer be able to achieve certainty of avoiding tax on the \$2,000,000 of interest income solely by hiding the inconsistency between the United States and Andorra. Knowing this makes the benefit of hiding inconsistencies much lower to both the taxpayer and Andorra *ex ante*, thereby reducing the incentive to engage in such behavior even absent a specific case being brought before the mechanism. Conversely, it makes the availability of Andorran tax benefits other than tax secrecy, such as its transfer pricing rules, more certain to be respected by the United States and thereby worth more to U.S. taxpayers; to the extent Andorra uses these rules to attract investment, it would benefit from this increased certainty as well.

This does not resolve what to do with countries which might want to serve as bastions for information secrecy, however, such as countries which do not have the natural resources or other non-tax means of attracting capital such as Andorra. For example, if the taxpayer could not engage in tax secrecy with Andorra it might be able to do so in another country, such as Vanuatu. In such a case, however, Vanuatu

would never bring a case before the mechanism, since it would know it would always lose. This itself could also serve as a signaling device to the United States; in other words, countries that refuse to bring a case through the mechanism even with the presumption in their favor are much more likely to be engaged in the type of activity that the United States would find normatively undesirable. In such a case, it becomes more likely that the unilateral imposition of tax by the United States on the additional \$2,000,000 of interest income would be consistent with its normative tax preferences to avoid double taxation; at a minimum the United States would be able to make a more informed decision to this effect. Consequently, the United States would be able to move closer to its normative preferences just by increasing the amount of information available with respect to the previously unaccounted-for tax base.

Solely as a result of the United States unilaterally adopting the rules of the mechanism and agreeing to be bound by them, more information as to worldwide tax base would become available to the United States, meaning the United States could make a more informed decision as to its normative preferences with respect to this previously unaccounted-for tax base; whether it be a worldwide regime or a territorial regime, a capital-export neutrality or capital-ownership neutrality, more information will always make it easier to accomplish. Assuming that taxpayers are currently maximizing their worldwide after-tax returns by exploiting both “good” and “bad” international tax structures, it is also possible to claim that the increased information with respect to previously unaccounted for tax base is also welfare improving, because it permits all countries to adopt their normative preferences on income that otherwise would have escaped taxation not as an affirmative policy choice but rather solely due the interaction (or lack thereof) among sovereign taxing jurisdictions and incentives not to sign a tax treaty.²⁷³ This is true even if the decision would be to impose zero tax on such base.

What is important in this analysis is not the specific result in a specific case. Rather, what is important is that each of the United States, Brazil, and Andorra would have an incentive to commit to the mechanism. This commitment then changes the incentives for capital to seek out or “abuse” the system, knowing that the more abusive the transaction, the more likely it will lose the benefits—either before the mechanism or as a result of a country refusing to engage it—while the less abusive the transaction, the more likely it will keep those

273. This assumption helps address the “second best” problem as well. *See, e.g.,* Schön, *supra* note 19.

benefits.²⁷⁴ In other words, by having Brazil and Andorra committed to the process, the Weaker Links in the international tax regime are strengthened, increasing the overall payoffs for the system as a whole and for wealthier countries, such as the United States, in particular, notwithstanding that the United States would “lose” most if not all specific disputes brought through the mechanism.

The same analysis could apply to other potential areas of disagreement, for example dual consolidated losses (DCL), a structured transaction in which a taxpayer attempts to “double dip” by claiming a deduction in two countries for a single economic expense.²⁷⁵ The solution adopted unilaterally by the United States was to disallow a deduction to companies which were able to take a deduction for the same economic cost in another country.²⁷⁶ Assume Belize adopts a similar rule—for U.S. taxpayers with operations in Belize, a circularity problem arises. The United States disallows a deduction because it is possible to be deducted in Belize, while Belize does the same.²⁷⁷ As a result, the taxpayer cannot deduct the expense in either country, resulting in double taxation. This is not a result of a policy choice by the United States to impose higher amounts of tax on taxpayers with operations in Belize, as opposed to a treaty partner such as the United Kingdom, but rather solely a result of the inability to coordinate the independently adopted DCL rules of the United States and Belize. Of course the taxpayer would not prefer this either, since it would pay two levels of tax and ideally would like to claim the deduction in the highest-tax country. The taxpayer therefore petitions Belize to bring a claim through the mechanism; in exchange the United States requests that Belize disclose that the income taxable in Belize is not being stripped out to other countries, to which Belize agrees. Pursuant to the presumption Belize wins, the expense is deductible in the United States and taxable in Belize.

Interestingly, this is a substantially similar resolution to the DCL problem as was achieved by the United States and the United Kingdom

274. This is the primary benefit of final offer style arbitration (i.e., that it mitigates the incentive to overclaim or even causes the sides to converge). *See* Tulis, *supra* note 255, at 86–87.

275. 26 U.S.C. § 1503(d)(2)(A) (2006).

276. § 1503(d); *see also* 26 C.F.R. § 1.1503-2 (2011). This was done to prevent double deductions and not to impose double taxation or punish such taxpayers. *See, e.g.*, John R. Wilson, *Dual Consolidated Loss Regulations Have Broad Reach*, 1 J. INT'L TAX'N 78 (1990).

277. This is sometimes referred to as the “mirror rule” problem. *See, e.g.*, N.Y. STATE BAR ASS'N TAX SECTION, REPORT ON PROPOSED DUAL CONSOLIDATED LOSS REGULATIONS (2005), *in* 2005 TNT 245–14.

pursuant to the MAP process in the treaty.²⁷⁸ The difference, however, is that going forward the United States can continue to disallow losses for other taxpayers in Belize for whom it does not know if the income is escaping tax altogether. This itself provides incentives to both taxpayers and Belize to petition the mechanism any time certainty over DCL issues becomes an issue, potentially leading to a substantially similar result as arose under the U.S.-U.K. treaty (but with a non-treaty partner country). In other words, the presence of the non-treaty-based tax cooperation mechanism could substantially replicate the benefits of a treaty regime with non-treaty partners by providing incentives to all the parties to do so, without having to overcome the free rider and holdout problems of the treaty regime or engage in massive and costly case-by-case legal and diplomatic enforcement techniques.

CONCLUSION

Although the legal literature contains numerous discussions of how to build effective multinational dispute resolution mechanisms in trade, investment, security, environment, intellectual property, and other areas, there has been remarkably little written on how to build an effective multinational institution for tax purposes. Rather, the debate has tended to devolve into two competing and irreconcilable camps: those supporting worldwide harmonization based on the network of bilateral tax treaties and those invoking the right to tax sovereignty to oppose harmonization. What has been missing from the international tax debate, however, is that both sides are partially correct—the international tax regime emerged as a compromise between these two principles, not out of a sense of economic efficiency but rather as an instrumental means to invite poorer countries into the emerging world order.

Reconsidering international tax in light of this leads to a potentially surprising conclusion: the move towards institutionalizing the web of bilateral tax treaties into a single world tax authority—which has dominated the modern international tax debate—may actually be counter to its stated goal of encouraging broader worldwide tax cooperation across all nations of the world. The primary thesis of this Article is that the fundamental problem with cooperation in the modern international tax regime is precisely that it builds on the tax treaty model, thus effectively excluding non-treaty member countries from the system. Instead, this Article proposes the creation of a non-treaty-based

278. The United States was able to utilize the competent authority process of its tax treaty with the United Kingdom to negotiate a resolution to the DCL circularity problem. *See* Rosenzweig, *supra* note 38, at 594 n.76.

cooperation mechanism, not to rule on which country should be entitled to tax a particular item of income as an economic matter, but rather to focus primarily on the mission of overcoming the modern collective action problem facing the international tax regime. Building a tax cooperation mechanism specifically around the premise of incentivizing cooperation of the least cooperative states in this manner could harness the same forces that led to the emergence of the modern international tax regime in the early twentieth century to address the fiscal crisis facing the early twenty-first century, thereby making all countries better off: poorer countries through winning specific disputes and wealthier countries through increased international tax cooperation.

APPENDIX A²⁷⁹

There are n countries, and each must decide whether to join the international tax regime. Each country has an initial endowment of wealth which it can consume or contribute to join the international tax regime. Joining the regime results in two benefits. First, there is the benefit from harmonizing baseline rules and second, there is a benefit from resolving specific disputes.

Let $u_i[G, y_i]$ be country i 's utility where $y_i = w_i - k_i$ and where w_i represents country i 's initial wealth endowment and k_i represents country i 's contribution to the public good. Further, assume $w_1 > w_2 > w_3 \dots > w_n$.

Now assume:

$$G = f(G^c) + \pi G^d \quad (1)$$

where G^c is the public good from harmonizing baseline rules and πG^d is each country's share of disputed tax benefits and $\pi = 1/n$.

For all i

$$u_i[G, y_i] > u_{i+1}[G, y_{i+1}] \quad (2)$$

or in other words wealthier countries receive greater utility from harmonizing baseline rules, and

$$u_i[G_{-1}, y_i] > u_{i+1}[G, y_{i+1}] - u_{i+1}[G_{-1}, y_{i+1}] \quad (3)$$

or wealthier countries have a higher marginal utility from each new member contributing to the public good.

Efficiency demands that all countries join, such that:

$$\sum_{i=1}^n u_i[G, y_i] - \sum_{i=1}^n u_i[w_i] > \sum_{i=1}^{n-1} u_i[G_{-1}, y_i] - \sum_{i=1}^{n-1} u_i[w_i] \quad (4)$$

Nash equilibrium occurs where i^* satisfies:

$$\begin{aligned} u_{i^*}[G, y_{i^*}] > u_{i^*}[G_{-1}, w_{i^*}] \text{ and} \\ u_{i^*+1}[G_{+1}, y_{i^*+1}] < u_{i^*+1}[G, w_{i^*+1}] \end{aligned} \quad (5)$$

279. I am indebted to Scott Baker for his invaluable help in putting together this Appendix.

assuming $u_{i^*}[G_{-1}, w_{i^*}] = u_{i^*+1}[G, w_{i^*+1}]$, then:

$$u_{i^*}[G, y_{i^*}] > u_{i^*+1}[G_{+1}, y_{i^*+1}] \quad (6)$$

Subtracting $u_{i^*+1}[G, y_{i^*+1}]$ from both sides gets

$$\begin{aligned} u_{i^*}[G, y_{i^*}] - u_{i^*+1}[G, y_{i^*+1}] \\ > u_{i^*+1}[G_{+1}, y_{i^*+1}] - u_{i^*+1}[G, y_{i^*+1}] \end{aligned} \quad (7)$$

In this case, the RHS is a constant and the LHS is decreasing in i , so there is a point in which country i^* does not join even though efficiency requires that all join.

Now, change the payoff of G for country $i^* + 1$ such that $G_{i^*+1} = f(G^{c+1}) + \pi_{i^*+1}[G^{d+1} - G^d]$ and that π_{i^*+1} represents the right for the new member to win all disputes against the preexisting members. With respect to each other, preexisting members retain the same probability of winning disputes. Preexisting members therefore have the following payoff from the public good:

$$G_i = f(G^{c+1}) + \pi G^d \quad (8)$$

which is strictly greater than (1). Since each preexisting member's y remains unchanged, utility is strictly increasing in G as well. In this case, preexisting members always benefit from additional countries joining the international tax regime even if they sacrifice all disputed tax benefits to the new members. The marginal country i^* will join so long as $\pi_{i^*+1}[G^{d+1} - G^d]$ is large enough. So long as this is true for at least one country, there is a Pareto improvement.