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Tax Treaties as a Network Product

Tsilly Dagan

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INTRODUCTION

The international network of tax treaties is extensive and thriving. Their copiousness is often presented as living proof not only of their success but also of their desirability. This article, however, argues that the treaties project, which focuses on alleviating double taxation through the allocation of tax revenues, is a missed opportunity. Indeed, the network design of the treaties project could have served as a platform for establishing a standard for a more just and efficient international tax regime. Instead, the treaties became an effective mechanism for bolstering developed countries' market dominance, thereby impeding global justice. At the same time, the treaties were not as successful in actually honing in on the inconsistencies between the tax systems of different countries and instead often increased the ability of taxpayers to avoid taxes by using tax planning. In focusing on the allocation of tax revenues, this project

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has been a step in the wrong direction, to the point that it has arguably become a part of the problems associated with the decentralized regime of international taxation, rather than offering a solution to those problems. Specifically, the tax treaties network has helped developed countries set a standard that regressively allocates tax revenues to their own benefit.

A different standard could have established an international tax regime that is both more just and efficient. A standard that better curtails arbitrage opportunities, fosters transparency, and limits free-riding and its imposition of negative externalities on neighboring countries could cut transaction costs and decrease market failures, thereby reducing the inefficiencies of the international tax market. Such a standard could promote efficiency as well as improve the justice of the international tax regime.

An international tax standard is a network product.[1] Similar to telecommunication networks—where the value of a telephone or a fax machine purchased increases with every added user—such a standard becomes more attractive the greater the number of users that apply it.[2] Beyond promoting mutual interests through cooperation, it provides an inherent incentive for users to join and stay in an existing network. If other consumers are using, for example, a certain word processing software, or a system of automatic bank machines, there is an incentive for new users to use it. By joining or staying in a network, users benefit from compatibility with other users. The benefits of compatibility with other countries' tax systems facilitate conversion, as

1. The first use of network theory for the analysis of international taxation appeared in scholarship by Eduardo A. Baistrocchi. Baistrocchi uses a dynamic theory, explaining what he describes as "the creeping convergence of the BRIC world" with the international tax regime, through a two-sided platform network theory. *See* Eduardo A. Baistrocchi, *The International Tax Regime and the BRIC World: Elements for a Theory*, 33 OXFORD J. LEGAL STUD. 733, 733 (2013).

2. Michael L. Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM. ECON. REV. 424, 424 (1985).

they may outweigh preferences for features of other noncompatible systems.[3] Thus, even if certain countries prefer the characteristics of another system[4] to those of the network's standard, the fact that many other countries are using the less favored standard will often be determinative. Due to these internal incentives, a standardized regime could evolve and thrive, even in the current decentralized and competitive international tax arena, despite the absence of an official enforcing authority.

The advantages of self-enforced stability, however, are not without costs. First, once a network—such as the tax treaties network—is established, it is difficult to have its users shift to a different standard, even if it is superior. Second, initiators could exploit the network by extracting cartelistic gains against potential competitors and monopolistic rents from its consumers. Both of these problems are manifested in the international tax treaties network. It has locked in an inferior standard as well as allowed its initiators—i.e., developed countries—to disproportionately benefit from it at the expense of other users—i.e., developing countries—and, potentially, taxpayers.

Consequently, the question that arises is: Can an international tax network be developed that is based on an efficient and just standard? This article does not offer a conclusive answer to this question. Instead, it explains that an efficient and just standard can be developed if some actors that have the capacity to establish a leading group that would redefine the international tax arena and start anew with an entirely new mechanism—one that facilitates state competition rather than focuses on the allocation of tax revenues. Ideally, such a standard would create a new set of network externalities to make it worthwhile for countries to join. Introducing a new network that establishes a standard that streamlines competition could eventually allow individual countries to exit the existing treaty mechanism, but still benefit from network externalities. Several issues make the evolvement of such a standard doubtful, however, including: the

3. Pasquale Pistone, *Tax Treaties with Developing Countries: A Plea for New Allocation Rules and a Combined Legal and Economic Approach*, *in* TAX TREATIES: BUILDING BRIDGES BETWEEN LAW AND ECONOMICS 413 (Michael Lang et al. eds., 2010) (suggesting that the soft law nature of the OECD Model supports its "silent diffusion" around the world).

4. Some preferences may include a particular definition for "permanent establishment" that triggers local taxation of business income and certain bank secrecy rules, which limit the ability to collect tax information.

strong interests of developed countries in preventing tax competition, along with the fact that they seem to be the first movers (again) by initiating the Base Erosion and Profit Shifting accord (BEPS), and the collective action problems that appear to plague developing countries more than developed countries.

Part I of the article will briefly describe the current framework and problems of the international tax regime. Specifically, this Part will examine the coordination problems stemming from the international tax regime's decentralized structure, and the extensive network of tax treaties that was established in response to some of these problems. This network, which was allegedly set up to benefit all contracting countries, in practice has mostly benefited countries of residence. Part II will focus on the streamlining solution: it will explain how standardization of the main building blocks of international taxation could improve both the efficiency and justice of the international tax regime by allowing individual countries to competitively set the public goods and services they provide and their pricing. It will further explain what makes such a standard a network product, as well as illustrate how the network design of an international tax regime could help establish such a standardized solution. Finally, Part III will discuss why the current standard of tax treaties following the Organisation for Economic Co-operation and Development (OECD) model has failed to provide a just and efficient international tax network, and will consider potential ways of using the network features of the standard in order to arrive at an improved international tax regime (while at the same time sowing the seeds of its potential failure).

I. THE PROBLEMS OF THE INTERNATIONAL TAXATION REGIME

In the decentralized international tax market, each country makes its own tax rules. Consequently, there tends to be great divergence across countries in the specifics of their systems. Despite considerable conversion between the policies of different countries,[5] the differences between the various international tax systems remain substantial, and not only in regards to tax rates. Specifically, regimes diverge in the details of their very basic

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5. *See* REUVEN S. AVI-YONAH, INTERNATIONAL TAX AS INTERNATIONAL LAW: AN ANALYSIS OF THE INTERNATIONAL TAX REGIME 1 (2007) (arguing that there seems to be a remarkable degree of convergence between the rules of different countries).

building blocks: in their definitions of the different sources of income; in their criteria for determining the geographical location of certain types of income; in their systems of alleviating double taxation; in the ways they determine the residency of individuals and corporations; in the deductions they allow and the taxes they withhold; in how and whether they characterize an entity as opaque or transparent for tax purposes; and in the rules they use to determine the price of transactions (their transfer pricing rules), timing issues, and exemptions. Finally, each country applies different standards for both the collection and storage of information, as well as varying standards of enforcement.[6]

Therefore, it is hardly surprising that the international tax market is notorious for the diversity of problems arising from its decentralized nature: double taxation (the uncoordinated result of two jurisdictions imposing tax on the same economic activity); tax avoidance (as a result of taxpayers' jurisdiction shopping);

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6. David H. Rosenbloom, *The David R. Tillinghast Lecture International Tax Arbitrage and the "International Tax System,"* 53 TAX L. REV. 137, 139 (2000). According to Rosenbloom:

> The choices are plentiful, even if choices serving purposes other than the direct tax purpose are disregarded. It would be amazing if there was greater uniformity across national boundaries—if countries generally defined "resident" in the same way, or "corporation," or "stock." In fact, it is fairly amazing that the taxing jurisdictions of the world, with their diverse political and economic systems, have reached a point of sufficient understanding in matters of law and taxation that the concepts of "residence," "corporation," and "stock" are generally comprehensible almost everywhere.

Id. at 139. For some comparative examples, see *id.* at 138–40.

tax arbitrage (the result of legislative gaps between jurisdictions);[7] and tax evasion (often fostered by the lack of transparency of information between jurisdictions).[8] All of these issues work to undermine the efficiency of the global tax market by creating barriers to free trade, generating free-riding opportunities, and enabling both taxpayers and states to impose negative externalities on other states and their residents.

In addition, justice is also impaired in the international tax market. To begin with, tax competition, as well as the gaps and frictions between jurisdictions, undermine the ability of states to collect tax revenues, which are used to finance their public goods and services and pay for the welfare state. Compounding this are the disturbing inequality gaps that exist between developed and developing countries, which the current allocation of tax revenues among countries fails to relieve.

The international tax system could, therefore, certainly use a standard. The urgency of this need was summarized neatly in the recent BEPS Action Plan:[9]

> Taxation is at the core of countries' sovereignty, but the interaction of domestic tax rules in some cases leads to gaps and frictions. When designing their domestic tax rules, sovereign states may not sufficiently take into account the effect of other countries' rules. The interaction of independent sets of rules enforced by sovereign countries creates frictions, including potential double taxation for corporations operating in several countries. It also creates gaps, in cases where corporate income is not taxed at all, either by the country of source or the country of residence, or is only taxed at nominal rates. In the domestic

7. *See id.* at 142; Diane M. Ring, *One Nation Among Many: Policy Implications of Cross-Border Tax Arbitrage*, 44 B.C. L. REV. 79, 80 (2002); Daniel Shaviro, *Money on the Table?: Responding to Cross-Border Tax Arbitrage*, 3 CHI. J. INT'L L. 317 (2002). Consider, for example, a transaction that is regarded as a leasing transaction in one country (thus providing depreciation deductions to the lessor) but a loan financing the purchase of an asset in another country (thus providing a depreciation deduction in that other country to the lessee/debtor).

8. Steven Dean, *The Incomplete Global Market for Tax Information*, 49 B.C. L. REV. 605, 605 (2008).

9. The BEPS efforts—a large-scale accord initiated by the G20, and taken up by the OECD to curtail states' tax base erosion through tax avoidance by multinationals, which was seriously undermining states' ability to collect tax revenues—were launched with the publication of this action plan, where the OECD described the goals of its two-year ambitious project.

> context, coherence is usually achieved through a principle of matching—a payment that is deductible by the payer is generally taxable in the hands of the recipient, unless explicitly exempted. There is no similar principle of coherence at the international level, which leaves plenty of room for arbitrage by taxpayers.[10]

A standard could prevent, or at least ameliorate, these gaps and frictions and hence curtail arbitrage opportunities.

Many initiatives have been pursued over the years to promote cooperation among states to alleviate the problems of decentralization, but none were more successful than the international network of treaties for the prevention of double taxation—the treaties project. More than three thousand treaties were signed based on a common standard, the OECD Model Tax Convention, which was created by and for developed countries, and focuses primarily on the allocation of tax revenues among them.[11] To a certain extent, the treaties network set a standard for both the negotiation of such treaties between contracting states and the international tax regime, as many of the cross-border transactions are governed by tax treaties.[12] The common language and structure of the tax treaties made them user-friendly for taxpayers worldwide. These tax treaties reduced the costs of researching the tax laws that govern investments in foreign jurisdictions, coordinated certain tax terms,[13] and set certain agreed upon tie-breaking rules (i.e., for determining the residency of dual-resident taxpayers). In so doing, the treaties system increased taxpayers' level of certainty in dealing with unfamiliar foreign tax

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10. ORG. FOR ECON. CO-OPERATION & DEV. [OECD], ACTION PLAN ON BASE EROSION AND PROFIT SHIFTING 9 (2013) [hereinafter BEPS ACTION PLAN].

11. For an analysis of the effects of tax treaties, see Tsilly Dagan, *The Tax Treaties Myth*, 32 N.Y.U. J. INT'L L. & POL. 939 (2000).

12. *See* AVI-YONAH, *supra* note 5; *e.g.*, Baistrocchi, *supra* note 1; Yariv Brauner, *An International Tax Regime in Crystallization*, 56 TAX L. REV. 259 (2003). *But see* Rosenbloom, *supra* note 6, at 164–65 (stressing the electivity of tax treaties); Alex Easson, *Do We Still Need Tax Treaties?*, 54 BULL. INT'L. FISCAL DOC. 619 (2000).

13. For example, see the arm's-length mechanism. *See* Eduardo A. Baistrocchi, *The Structure of the Asymmetric Tax Treaty Network: Theory and Implications*, BEPRESS LEGAL REPOSITORY (2006), http://law.bepress.com/cgi/viewcontent.cgi?article=9408&context=expresso.

authorities, making it popular among states interested in attracting taxpayers and their economic activities.[14] It also created some (very limited) mechanisms for the exchange of information.[15] But the treaties' main claim to fame has been their mechanisms for the prevention of double taxation through the allocation of tax jurisdiction—and, accordingly, the allocation of tax revenues—among the contracting states.[16] With its slogan of "double-taxation prevention," the treaties' standard provided reassurance for investors in foreign countries and acted as a stamp of approval for states regarding compatibility, signifying their membership in "the treaty club."[17] In practice, however, the treaties were not really necessary for alleviating the classic double taxation problems (i.e., those deriving from the fact that residence and host countries tax the same income). In any event, double taxation likely would have been avoided had countries been left to pursue their unilateral interests.[18]

The standard adopted by the tax treaties network, although widespread and arguably successful, is controversial in terms of its distributive consequences. Rather than offering any significantly greater degree of double taxation relief, the tax treaties often simply replicate the mechanism that participating countries use unilaterally to alleviate double taxation with one notable difference: the treaties usually allocate the tax revenues more to the benefit of residence countries than host countries.[19] For equal negotiating partner-countries, this was not a concern. The uniformity of the tax treaties saves transaction costs for investors, without entailing any significant loss of tax revenues for such contracting states.[20] As a result, developed countries (signing treaties with either like-kind countries or with developing countries who are predominantly source countries) had no reason to not join and then remain in the network of treaties. As expected in cases of network products, the more countries joined

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14. *See* Dagan, *supra* note 11, at 980–83; Kim Brooks & Richard Krever, *The Troubling Role of Tax Treaties, in* TAX DESIGN ISSUES WORLDWIDE 51 (Geerten M.M. Michielse & Victor Thuronyi eds., 2015).

15. Dagan, *supra* note 11.

16. *Id.*

17. For a detailed explanation, see *id.*

18. *Id.*

19. *Id.*

20. *Id.*

the network, the more popular it became[21]—due to the growing prevalence of the treaties' standard. The case for developing countries is different, however, since, in interacting with developing countries, developed countries are predominantly residence countries, and the treaties' standard results in a regressive allocation of tax revenues between developed and developing countries. Thus, developing countries had to pay a price in tax revenues in order to join the tax treaties network.[22]

Yet, as with other network products, states—even developing states—are incentivized to join and stay in the network because the other states increasingly apply the same standard. In fact, developing countries joined the network, despite the possibility of suffering a net loss of tax revenues as a consequence.[23] This behavior of developing countries can be explained by their incentive to "join the club" and enjoy the compatibility of mechanisms that offer network-type advantages of the tax treaties system. Staying out of the network could mean that investors will bypass the nonjoining countries in favor of countries within the network, simply because the treaties offer the taxpayer-consumer the simplicity and security of a familiar standard.[24] This nicely exemplifies how the network structure of tax treaties can foster cooperation in situations where countries would not otherwise be incentivized to do so.[25]

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21. *See* Baistrocchi, *supra* note 13.

22. *See* Dagan, *supra* note 11; International Monetary Fund [IMF], *Spillovers in International Corporate Taxation* 28–29 (IMF Policy Paper, May 9, 2014) [hereinafter IMF, *Spillovers*], http://www.imf.org/external/np/pp/eng/2014/050914.pdf; *see also* Brooks & Krever, *supra* note 14.

23. Brooks & Krever, *supra* note 14.

24. Baistrocchi, *supra* note 13 (offering a convincing explanation for the strategic incentive of developing states to join the network as deriving from their concern that their competitors will join the treaties network, and thereby win the tax competition).

25. It is intriguing as to why developing countries have not established a competing standard—one that would be more generous toward their own needs. The answer may be found in the asymmetries between developed and developing countries in terms of their ability to cooperate (and thus their ability to collectively promote a standard that serves their joint interests). There are two reasons to support developing countries' inferiority regarding cooperation. First, OECD countries have a longer tradition of cooperation, and thus each of them is at a greater risk of reputation costs upon defection (which is probably what enabled them to create the network platform in the first place). Second, countries of residence, like the OECD countries, tend to compete

Notwithstanding these cooperation-promoting advantages, the standard established in the tax treaties, with its particular focus on allocating tax revenues, has not proven to be very effective. In fact, it may have even been counterproductive. This article proposes that the reason for the lack of effectiveness is that this standard fails to create an adequately robust regime, thus allowing for too many gaps and frictions between the various systems. The level of conversion of international taxation definitions and concepts this standard offers seems to be insufficient for reducing arbitrage opportunities.[26] It is also not helpful in streamlining the collection and dissemination of information, and accordingly, in facilitating better enforcement of the rules of international taxation.[27] Looking at the current state of the coordination of terms, enforcement, and transparency, treaties simply fail to achieve these goals.[28] In fact, in many cases it is

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among themselves for residents, who are much less mobile and easier to detect, rather than capital, which tends to be the source of competition among developing countries. Thus, competition among OECD countries may not be as fierce, and the costs of cooperation may be lower. *See* Michael Lang & Jeffrey P. Owens, *The Role of Tax Treaties in Facilitating Development and Protecting the Tax Base* 34 (WU Int'l Taxation Research Paper Series, No. 2014-03, 2014), http://ssrn.com/abstract=2398438 (explaining that "[r]esearch has suggested that the only way developing countries may avoid signing tax treaties is if they act as a group, but the lack of such consensus brings them into a situation where they have to create their own treaty network in order to become attractive for foreign investment . . . .").

26. Under the treaty regime, there are still numerous tax planning opportunities. For example, different countries still employ different definitions for sources of income (i.e., interest versus dividends), entities (i.e., partnership versus limited corporation), allowable deductions, or timing of income.

27. *See* Dean, *supra* note 8 (criticizing the treaty based incomplete market in tax information).

28. *See* Easson, *supra* note 12, at 620. According to Easson:

> The creation of a network of tax treaties has been a remarkable achievement, and the OECD Model Convention, which is largely responsible for establishing an almost universally accepted international tax regime, must by any standards be considered a major success. Nevertheless, there is a growing perception that the current international tax regime has serious weaknesses. As Reuven Avi-Yonah has remarked, "the miracle is flawed." And, almost ten years ago, Richard Vann argued that the OECD Model had become increasingly inefficient, inflexible and irrelevant: in his words, "adoption of

the treaty network that facilitates tax arbitrage, and thus tax avoidance, through treaty shopping—where taxpayers use entities located in treaty countries in order to channel income to tax havens.[29] More significantly, the current standard is counterproductive in promoting a just and efficient tax regime because it regressively distributes tax revenues by favoring developed countries.[30] Even if this standard were to be improved to enable states to effectively impose their tax laws and thereby redistribute income domestically, the standard's regressivity towards developing countries would still raise serious doubts about its normative desirability.[31]

In sum, the tax treaties network, which is the basis of the current international tax regime, suffers from critical efficiency and justice problems. The transaction costs, enforcement challenges, arbitrage opportunities, and domestic and global injustices imposed by (or not prevented by) the current standard, all seem to collectively burden both participating states and taxpayers.

II. A DIFFERENT STANDARD FOR THE INTERNATIONAL TAX MARKET

As the deficiencies of the current international tax regime indicate, the market of international taxation could benefit from a better standard. The BEPS Action Plan is also clear on this issue:

> Inaction in this area would likely result in some governments losing corporate tax revenue, the emergence of competing sets of international standards, and the replacement of the current consensus-based framework by unilateral measures, which

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> the OECD Model as the solution to international tax problems is a concept whose time has come – and gone." As John Avery Jones stated in his 1997 David R. Tillinghast Lecture, the disadvantage of the treaty route is that it is self-perpetuating: "treaties are a one-way street; they lead only to more treaties."

Id. at 620.

29. For an example, see IMF, *Spillovers*, *supra* note 22, at 2.

30. *See, e.g.*, Dagan, *supra* note 11; Brooks & Krever, *supra* note 14.

31. For a discussion of the issues of global justice such allocation entails, see Tsilly Dagan, *International Tax Policy: Between Competition and Cooperation* (forthcoming 2017).

> could lead to global tax chaos marked by the massive re-emergence of double taxation. In fact, if the Action Plan fails to develop effective solutions in a timely manner, some countries may be persuaded to take unilateral action for protecting their tax base, resulting in avoidable uncertainty and unrelieved double taxation.[32]

Specifically, there is a need for more standardization in the international tax regime, which would streamline the system by regulating the basic building blocks of international taxation and facilitating enforcement. As a general matter, a standardized international tax regime—i.e., one that sets the rules of the game by determining who, what, where, when, and how much taxes are owed—could potentially reduce transaction costs and curtail negative externalities and free riding. Thus, a carefully designed standard could increase the efficiency of the international tax market.[33]

Significantly, standardization could enhance the regime, irrespective of the harmonization versus tax competition controversy. Whereas harmonization is aimed at curtailing tax competition so that countries can collect enough taxes to fund their welfare state, the standard this article envisions would streamline the tax regime and allow each country to freely (and efficiently) determine its own tax rates and packages of public services—thereby facilitating fiscal competition, while minimizing the costs of that competition. A standardized international tax regime would not (or at least not necessarily) set a barrier to tax competition. On the contrary, the new standard could—indeed should—organize the rules of the competing jurisdictions to foster more efficient competition among them and would direct its focus on the quality of public services provided and the "price"[34] paid for them. Countries would still be able to offer a variety of

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32. *See, e.g.*, BEPS ACTION PLAN, *supra* note 10, at 10–11.

33. The exact contours of this standard are debatable. *See, e.g.*, Shaviro, *supra* note 7, at 22–23 (stressing the lack of a consensus and clear reference point akin to international trade, and suggesting that an international tax organization will—in lieu of creating a worldwide tax base uniformity—aim at coordinating cooperation where transaction costs impede mutually advantageous policies, such as eliminating cross-border tax arbitrages, and reining in countries' occasional inclination to adopt narrow definitions of foreign source income—in order to reduce credits for foreign taxes and information gathering).

34. For example, the level of taxes.

"baskets" of public services for different prices. Hence, even a standardized international tax market could conceivably leave plenty of room for heterogeneity.

A streamlining standard—as opposed to a harmonizing regime—could better determine source and residency rules. It could also set a uniform formula for determining transfer prices, incorporate anti-abuse arrangements, and coordinate the rules on flow-through and opaque entities. Detailed mechanisms and technological compatibility could be set for the collection and dissemination of information among enforcement agencies[35] and could facilitate mutual assistance. Moreover, a standard adopted by a large enough number of states could reduce market inefficiencies, transaction costs, and negative externalities, and increase transparency. Such a standard would lower the costs for taxpayers contemplating investing in foreign countries, as it would require less investment in deciphering the rules of foreign jurisdictions. This standard would also limit arbitrage opportunities by narrowing the gaps between the rules of different jurisdictions. This would reduce taxpayers' incentive to invest in tax planning, and would prevent them from free riding on the public services of certain jurisdictions, while also evading their taxes. Standardization would also counter externalities by preventing countries from using creative definitions to enable foreign investors to free ride in their home jurisdictions. Lastly, sharing information and standardizing its modes of storage globally would enable states to be more effective in collecting taxes. Overall, therefore, a standardized regime would lead to greater efficiency in the international taxation market and lower transaction costs for both taxpayers and enforcement agencies, as well as prevent market failures, such as lack of transparency and negative externalities.

Since a standardized international tax regime would allow states to more effectively impose and collect taxes, competition among states for residents and investors would be based on the prices that best reflect the level and quality of their public goods and services. Justice would also be promoted by a standardized regime. Currently, the taxpayers who benefit most from the decentralized regime, and the ample planning opportunities it of-

35. *See, e.g.*, Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects,* 86 CAL. L. REV. 479 (1998).

fers, are capital owners who can most easily engage in tax planning to minimize their combined global tax burden. Other taxpayers (e.g., labor), who cannot take advantage of the arbitrage opportunities as their sources of income, are usually more tightly connected to a certain location and their tax liability is, consequently, easily enforced. Most importantly, an improved standard could prevent the regressive redistribution produced by the current standard by either applying a fairer allocation of tax revenues between residence and host countries or, preferably, by simply facilitating tax competition, which could promote both efficiency and justice.[36]

But could such a standard emerge in the current decentralized international tax regime? There are some valid reasons to believe that it could, the most prominent being that this standard would be a network product. As such, it would bear the unique quality of facilitating conversion, even given differing domestic preferences. Furthermore, as is characteristic of any network product, its value would increase with both the increase in the number of its users and extent of its use. Accordingly, once it has been established, such a network would tend to spread and reinforce itself because, the more countries that join it, the more valuable it becomes. One way to develop such a standard is through cooperation. The BEPS Action Plan assumes consensus is critical in this regard.[37] However, although cooperation can certainly

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36. *See* Tsilly Dagan, *Just Harmonization*, 42 U.B.C. L. REV. 331 (2010); Dagan, *supra* note 31.

37. BEPS ACTION PLAN, *supra* note 10, at 1. The BEPS Action Plan states:

> In fact, if the Action Plan fails to develop effective solutions in a timely manner, some countries may be persuaded to take unilateral action for protecting their tax base, resulting in avoidable uncertainty and unrelieved double taxation. It is therefore critical that governments achieve consensus on actions that would deal with the above weaknesses. As the G20 Leaders pointed out, "Despite the challenges we all face domestically, we have agreed that multilateralism is of even greater importance in the current climate, and remains our best asset to resolve the global economy's difficulties[.]"

Id. (citation omitted).

help achieve a viable standard, it is important to note that competition between differing standards may also lead to the emergence of a dominant and viable one.[38]

As the BEPS Action Plan indicates, at least for countries suffering from the problems of tax arbitrage, free riding, and poor enforcement, there is good reason to establish such a standardized regime, which, if adopted, would render significant benefits for those states.[39] Even if individual countries have specific rule preferences, the network effect of the standard—namely, offering members' compatibility with other systems—could offset the advantages of other rules. Thus, it is quite feasible that a critical mass of participating states would consolidate to establish such a standard, which would subsequently gain prevalence due to the network effect. Of course, disputes among the initiators are likely, and there is always a potential for the evolvement of competing standards.[40] The challenge of negotiating a joint standard

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38. *See* Stanley M. Besen & Joseph Farrell, *Choosing How to Compete: Strategies and Tactics in Standardization*, J. ECON. PERSP., Spring 1994, at 117.

39. *See* BEPS ACTION PLAN, *supra* note 10, at 13. According to the BEPS Action Plan:

> New international standards must be designed to ensure the coherence of corporate income taxation at the international level. BEPS issues may arise directly from the existence of loopholes, as well as gaps, frictions or mismatches in the interaction of countries' domestic tax laws. These types of issues generally have not been dealt with by OECD standards or bilateral treaty provisions. There is a need to complement existing standards that are designed to prevent double taxation with instruments that prevent double non-taxation in areas previously not covered by international standards and that address cases of no or low taxation associated with practices that artificially segregate taxable income from the activities that generate it. Moreover, governments must continue to work together to tackle harmful tax practices and aggressive tax planning.

Id.

40. Thus, for example, an EU-initiated standard may challenge that offered by the OECD.

is significant, but the payoffs are considerable, since the standard that would end up winning would most likely take over the entire market.[41]

But what would make such an international tax standard a network product—i.e., why would its value to its users increase as more countries adopt it?[42] When tax rules are more standardized, less opportunities for tax arbitrage exist because taxpayers that operate in countries that apply the standard will not be able to "maneuver" between different definitions in a way that best serves their interests. Hence, the more standardized the rules, the more limited the opportunities for taxpayers to impose negative externalities through free riding on the public services of a home jurisdiction by not paying its taxes. Moreover, enforcement efforts would become more targeted and directed at investments in countries not applying the standard. A standardized regime

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41. For an analysis of the decision of market players to compete for a standard versus competing within a standard, see, e.g., Besen & Farrell, *supra* note 38, at 120. According to Besen and Farrell:

> A fundamental question for firms facing horizontal competition in a network market, therefore, is whether inter-technology competition to become the standard (competition "for the market") will be more or less profitable than the ordinary intra-technology competition to be expected ("within the market") if rivals' products are compatible . . . . Where firms are symmetric, these payoffs will depend on two main factors: the skewness of returns and the sharpness of the available competitive tactics in the two forms of competition. The more skewed are the returns, the harder the firms will fight; and the sharper the available tactics the more the fighting will dissipate profits . . . . There is no general answer to the question of whether firms will prefer competition for the potentially enormous prizes under inter-technology competition, or the more conventional competition that occurs when there are common standards. Indeed, the same firms may choose different strategies in different situations. For example, Phillips and Sony agreed on a compact disk standard and licensed their technology to competitors so as to avoid repeating the VHS/Betamax standards battle, but are now entering just such a contest to determine the new digital audio format.

Id. (citation omitted).

42. *See* Katz & Shapiro*, supra* note 2.

would also increase transparency: as more countries share their information, more information will be collected by each country, and if the collected information is standardized, it will be disseminated more efficiently. In addition, generally, the costs of enforcement will decline as more countries join the network.[43] Lastly, a uniform standard would significantly simplify international taxation, enabling taxpayers and their tax advisors to easily acquire expertise on how foreign jurisdictions operate, and would help reduce transaction costs of investing overseas. A standardized international tax system would lower the costs of planning and making cross-border investments between participating jurisdictions. It would also decrease the risk of double taxation for unaware taxpayers by eliminating the trap of overlapping rules between different jurisdictions, for example, when two different states both regard the same item of income as being produced within their respective jurisdiction. Thus, a standardized regime would serve both the interests of states that seek to limit tax planning and taxpayers who do not engage in it.

Not all taxpayers and states, however, would benefit from a standardized regime. Some might lose out because they take advantage of the current system's arbitrage, avoidance, and evasion opportunities. With the increase in the number of countries adopting the standard, the loopholes and arbitrage opportunities would both diminish and become more conspicuous. Gradually, regimes not applying the standard would be red flagged. Home countries would then be able to concentrate their enforcement efforts on their residents investing in these jurisdictions and on the activities of residents of such red-flagged jurisdictions within their borders.

Thus, a standardized international tax regime might not be in the interests of countries (call them for our purposes "tax havens") that reap extra benefits by offering taxpayers planning and arbitrage opportunities and weak enforcement. If, for example, a country could enable foreign investors to reduce their tax burdens in their home countries—by offering differing definitions,[44] collecting and finding creative ways to pay back taxes

43. The same enforcement mechanisms—investigators, computing services and programs, databases, etc.,—can serve a larger number of states, thus reducing the costs for each country.

44. Thus, for example, differing definitions of corporate residency may establish foreign residency, differing definitions of debt and equity can transform

that would be credited in countries of residence,[45] or refusing to share information with other countries—it might attract more investments and more residents (or simply collect greater "toll charges" for its tax-haven services). The incentive for such countries to refrain from joining the network, therefore, increases as more countries join; as the number of countries that choose not to join declines, competing *against* the standard becomes more rewarding than competing *within* it. Thus, while some countries would benefit by adopting the standard, others could benefit by avoiding the standard. Consequently, a parallel regime of nonnetwork countries that thrive on assisting tax avoiders could be expected to emerge. Whether the standard or the nonstandard norm prevails is a big question. But, assuming there is a critical mass of countries who join the standard, they could use the fact that other countries do not use it to their advantage: the fact that a taxpayer resides or invests in a nonstandard country could help them flag out potential tax avoiders, and thus single out "lemons."

An effective network would ideally be able to distinguish between "good" and "bad" regimes based simply on whether or not they apply the standard. Arguably, countries with an incentive to exit the network are more likely to be tax havens. Thus, an effective network could curtail free riding and arbitrage opportunities simply by effectively punishing the residents and investors in nonnetwork countries. For example, some punishments could include: imposing differing tax rates; disallowing their taxes for credit purposes; blacklisting investors and residents of nonnetwork countries; and scrutinizing the tax returns of their

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dividend income into interest and vice versa, differing definitions of what constitutes royalties and what are the products of a sale of intellectual property may convert regular income into capital gains, differences in definitions can cause a transaction to be viewed as a sale of property in one country and as a lease in another, and differing definitions of what constitutes a corporation and a partnership can allow for the flow through of income and deductions. For more detailed examples of tax planning opportunities, see Rosenbloom, *supra* note 6; Edward D. Kleinbard, *Stateless Income*, 11 FLA. TAX REV. 699, 706 (2011); Tsilly Dagan, Pay as You Wish: Globalization, Forum Shopping, and Distributive Justice (June 10, 2014) (unpublished manuscript), http://ssrn.com/abstract=2457212.

45. For some examples, see Charles I. Kingson, *The David Tillinghast Lecture Taxing the Future*, 51 TAX L. REV. 641 (1996).

residents and investors. Under such a scenario, at least theoretically, and assuming that a critical mass of countries adopt a streamlining standard for international taxation, the prospects of its expansion and sustainability are quite promising.[46] But a question nonetheless exists: Why has the tax treaties network not evolved to provide such a solution?

III. CAN A BETTER STANDARD EVOLVE?

Despite the potential for the emergence of a desirable international tax standard through mass adoption of the tax treaties network mechanism, such a standard did not evolve, and the network's product is far from ideal. This article suggests that the reason for the inadequacy of the current standard is that the current network suffers from problems that are typical of network industries: it facilitates cartel building and creates a barrier to the emergence of competing, and potentially better, networks.

A. Cartel Building

One of the greatest assets of network structures is their stability, due to their ability to provide incentives for members to cooperate. These incentives, however, are also the source of a central problem of network structures: the emergence of cartels and the extraction of monopolistic rents.[47] The benefits of the network—the "treaty club"—not only incentivize states to join the network, but also serve as an effective sanction against defectors. Thus, even when a network's standard confers excessive benefits on the network originators,[48] latecomers might nevertheless adopt it for the simple reason that operating outside of the network might be even more costly.

The network's power to facilitate cartel building can explain both the extra benefits enjoyed by developed countries and the

46. *See* Baistrocchi, *supra* note 1 (describing the evolution of the current tax treaties regime and the incentive it arguably provided for Brazil, Russia, India, China, and South Africa ("BRICS") to join).

47. Tyler Cowen, *Law as a Public Good: The Economics of Anarchy*, 8 ECON. & PHIL. 249, 253, 255 (1992) ("The same factors that allow anarchy to be stable may also allow the . . . agencies to exercise monopoly power to collude . . . competing legal systems are either unstable or collapse into a monopoly agency or network.").

48. Another situation imposes excessively high costs on newer participants.

fact that developing countries join and remain in the network, despite the limited benefits they derive from the specific arrangements and the excessive prices they must pay in tax revenues.[49] If successful, this may also be the mechanism that enables states to impose monopolistically high taxes on their taxpayers, who lack any realistic opportunity to opt for a nonnetwork tax jurisdiction.[50]

In other words, the tax treaties regime allows residence countries—the network originators—to extract cartelistic profits. This correlates with the first-mover advantage that is characteristic of networks, where the first to establish its product as a standard reaps a considerable gain.[51] The fact that the tax treaties model was designed by and for developed countries gave them such a first-mover advantage. Whether the standard was thus purposely designed or provided them with considerable benefits coincidentally is beside the point. What is significant is that once the path of lowering hosts' tax revenues at source (hence, allowing countries of residence to collect higher taxes) was embarked on, there was little chance of developed countries turning back. The first developed countries to join the network enjoyed the gains of simplification and reduction of transaction costs. The uniform standard they created offered network externalities for all states using the standard by further reducing the transaction costs of negotiating the treaties, and in simplifying the interaction with foreign tax jurisdictions for residents and investors involved in cross-border transactions. Once the network dominated the international tax market, developed countries were able to extract monopolistic rents from developing countries joining the system. Unlike developed countries, developing countries have had to pay a price in lost tax revenues in order to join the treaty club.[52] Hence, their gain from the network, if any, is much smaller comparatively than developed countries. Although developing countries might be expected to

49. *See* Baistrocchi, *supra* note 13.

50. If, for example, the new BEPS treaty mechanism is successful in enforcing a "single tax" regime, countries may be able to raise their tax rates.

51. Lemley & McGowan, *supra* note 35, at 495.

52. In reality, the seemingly symmetrical structure pushed source countries to surrender tax revenues, allegedly for increased cross-border investments resulting from the prevention of double taxation. Since double taxation would have probably been prevented, even in the absence of tax treaties, such reduction in tax revenues is a sheer loss for countries of source. For an elaborate explanation of this argument, see Dagan, *supra* note 11.

avoid the network (or at least not join it), they apparently find this hard to do because of their fear of being left out of the treaty club. The alternative of operating outside of the network could conceivably cost them more than using it; that is, if foreign investors prefer investing in a treaty country to investment in a non-treaty country—the developing country may lose much desired foreign investments.

B. The Lock-In Effect

It is quite clear why an individual country might have difficulty exiting a network if residents and investors prefer treaty to non-treaty countries. An individual country that takes an independent position and refuses to sign model-style treaties is singled out, which could cause investors to choose investing in other, more conformist countries. Thus, while host countries might have preferred a different solution—one that would either promote cross-border investments or distribute tax revenues in a way that is more beneficial to them—taking an independent position would impose significant costs on that country. But, since tax treaties—though extremely popular—are far from flawless (i.e., incomplete scopes, partial solutions, and problematic distributive results), why has a competing standard not evolved?

Arguably, the current standard would be easy to fix, either by updating the tax treaties' model and having states revise their treaties accordingly, *or* by establishing a competing—and improved—standard. A better standard would cover more basis in terms of streamlining the regulated regimes and adopt terms that treat states more equally. Although either updating or establishing a new standard could be a viable solution, the network structure of treaties creates inherent barriers to such change. In particular, the lock-in effect of networks makes a spontaneous shift to an alternative standard unlikely. The costs involved in converting the entire treaty network to the new standard are high, and the interests involved are such that the current powerful supporters of the standard will be reluctant to change. The recent alteration to the OECD Model opened the door for non-OECD countries to contribute their insights on the model's desirable orientation, and could represent a shift away from the current standard.[53] Turning around the huge and quite stable ship that is the treaties network to pursue new goals, however, would be very hard to do,[54] especially given that the dominant members would strive to preserve their favorable position.[55]

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53. As Yariv Brauner describes it,

> the emerging economies—particularly China, India, and Brazil—have taken a more active role in the shaping of the international tax regime, despite not being OECD members. This has resulted in a reversal of the trend towards maximizing residence taxation mentioned above. Recent years have been marked by the OECD's attempts to increasingly permit source taxation. There is some controversy over the exact drivers, motivations, and magnitude of this reversal of trend, yet there should be little debate about its direction and the importance of the actions by the abovementioned countries to effectuate it.

Yariv Brauner, *What the BEPS*?, 16 FLA. TAX REV. 55, 64 (2014).

54. Richard J. Vann, *A Model Tax Treaty for the Asian-Pacific Region?*, 45 BULL. INT'L FISC. DOC. 99, 103 (1991). Richard J. Vann is pessimistic about this option:

> Although it is possible to refine the actual terms of the OECD Model and to elaborate the commentary so as to cover new cases as they arise, the time has passed for radical revision within the current bilateral framework. In a sense the opportunity to go in another direction was lost before the 1963 draft appeared. The failure to adopt any new approach to international tax after the Second World War (compared to trade law and the international monetary system) meant that effectively the solution adopted after the First World War continued by default. In other words the OECD Model is the culmination of 50 years of development, rather than a new departure.

Id.

55. As an example, see the explicit statement in BEPS Action Plan, which notes:

> In the changing international tax environment, a number of countries have expressed a concern about how international standards on which bilateral tax treaties are based allocate taxing rights between source and residence States. This Ac-

Establishing a competing network—anchored on a more comprehensive standard that curtails tax arbitrage opportunities, facilitates transparency, and, optimally, more justly distributes tax revenues among countries[56]—might also be impossible because successful networks have a tendency to crowd out novel standards, even if improved. Competing standards have, in fact, been proposed in the past, the most famous being the U.N. Model treaty, which treats developing countries more favorably than the OECD Model does.[57] The new BEPS Action Plan and reports seem to make a considerable effort in preventing tax planning but not in reallocating the tax revenues arising from the treaty network. These proposals, however, failed to gain as much support as the OECD standard.[58] Once again, an explanation could be the lock-in effect: when a dominant network exists, there is an inclination to join and stay in it—to prefer it over other, less dominant, even if evolving networks, at least until a critical mass of states join the latter.[59]

> tion Plan is focused on addressing BEPS. While actions to address BEPS will restore both source and residence taxation in a number of cases where cross-border income would otherwise go untaxed or would be taxed at very low rates, these actions are not directly aimed at changing the existing international standards on the allocation of taxing rights on cross-border income.

BEPS ACTION PLAN, *supra* note 10, at 11.

56. For a suggestion that BRICS countries cooperate along these lines, see Tsilly Dagan, *BRICS: Theoretical Framework and the Potential of Cooperation*, *in* BRICS AND THE EMERGENCE OF INTERNATIONAL TAX COORDINATION 15 (Yariv Brauner & Pasquale Pistone eds., 2015).

57. For a detailed comparison between the two, see MODEL DOUBLE TAXATION CONVENTION BETWEEN DEVELOPED AND DEVELOPING COUNTRIES (U.N. DEP'T OF ECON. & SOC. AFFAIRS 2011); *see, e.g.*, Michael Lennard, *The UN Model Tax Convention as Compared with the OECD Model Tax Convention – Current Points of Difference and Recent Developments*, 15 ASIA-PAC. TAX BULL. 4, 4–11 (2009).

58. *See, e.g.*, Yariv Brauner & Pasquale Pistone, *The BRICS and the Future of International Taxation*, *in* BRICS AND THE EMERGENCE OF INTERNATIONAL TAX COORDINATION 495 (Yariv Brauner & Pasquale Pistone eds., 2015).

59. Lemley & McGowan, *supra* note 35, at 497 ("[T]he rational consumer might well choose to wait until an alternative had been adopted by others who incurred the costs of shifting to the new standard but reaped fewer benefits relative to later adopters.").

The solution, therefore, may be to redefine the parameters of the arena and start anew with an entirely new mechanism, one that provides a new set of network externalities to make it worthwhile for countries to join. Creating a new club[60] that establishes a standard tailored to a competition-enhancing mechanism could eventually enable individual countries to abandon the treaty mechanism, without paying the price of being excluded from a "club." The network externalities provided by the alternative regime may be enough to provide compatibility. This would require a well-orchestrated move or the leadership of a dominant-enough country. The recent BEPS efforts could be a step in the right direction.[61] If the BEPS were to take up this project, and assuming it is successful, the BEPS initiative could prove to be a decisive moment in the history of international taxation: as it would offer a more comprehensive standard for international tax policy. The BEPS solution, however, does not seem to be comprehensive enough to streamline the entire international tax regime, nor does the BEPS report pay special attention to considerations of justice. There is still hope, however, that Action Plan 15[62] will evolve into a comprehensive multilateral instrument. Such an instrument has the potential to develop a new and comprehensive standard.

A few words of caution, however, are in order. First, it is not at all clear whether a standardized regime could ever be established, or whether we are instead destined to endlessly engage in an unstable and chaotic international tax regime. As optimistic as one may be, the level of conflicting interests within and among states could prevent the emergence of any one single standard that is better than the shaky and unsatisfactory standard currently in place. Even if such a standard does develop,[63] it could also very well suffer—like any network product—from

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60. For example, a multilateral instrument or a uniform code to be adopted by countries that join.

61. Similarly, the Foreign Account Tax Compliance Act may have the same effect (albeit limited to reporting issues). *See* Joshua D. Blank & Ruth Mason, *Exporting FATCA* (N.Y. Univ. Cent. for Law, Econ., & Org., Working Paper No. 14-05, 2014), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2389500.

62. ORG. FOR ECON. CO-OPERATION & DEV. [OECD], DEVELOPING A MULTILATERAL INSTRUMENT TO MODIFY BILATERAL TAX TREATIES (2015).

63. For example, something along the lines of the BEPS multilateral initiative.

both cartel building and the lock-in effect.[64] The former could cause a tilted distribution of the gains reaped from the new network between first movers and latecomers; the latter may curtail the ability of the new standard to update in line with future developments in the market economy. Moreover, even if these gains are distributed justly among states, the cartelistic potential of the network might enable states to extract excessive monopolistic rents from their taxpayers.[65] The network could, thus, serve to curtail tax competition among countries, and since tax competition can restrict the ability of states to collect excessive taxes or provide unnecessary services, curbing it could impose undue burdens on taxpayers.

Accordingly, to prevent these risks, adequate attention must be devoted to making the alternative mechanism flexible enough to allow for internal updating and tweaking, and to counter inherent cartelistic inclinations (for example, by establishing an antitrust agency to monitor state conduct). Such measures, however, would require yet another level of cooperation among participating countries, the likelihood of which is hard to predict.

CONCLUSION

The decentralized structure of international taxation could greatly benefit from the creation of a network that standardizes its rules, enhances transparency, and bolsters enforcement. The network structure of a standardized international tax regime could mitigate some of the negative externalities that are generated by state competition and thereby facilitate long-term cooperation among states. Such a network could also effectively prevent defections and, therefore—in the best-case scenario—be sustainable.

The standard envisioned here offers a promising self-enforcing mechanism through the network externalities it produces. Yet, it should be noted that, like any other network, it might also suffer from the risk of cartel building, which enables the network

64. *See* Ring, *supra* note 7, at 171 n.303 (raising concerns regarding the collateral effects of cooperation among jurisdictions creating a momentum that would produce more harmonization than might otherwise be thought desirable).

65. *But see* Christians et al., *Taxation as a Global Socio-Legal Phenomenon*, 14 ILSA J. INT'L & COMP. L. 303 (2008) (suggesting that the OECD in fact restricts states in a way that prioritizes community-wide fairness in tax policy over competition among states).

originators to extract monopolistic gains from latecomers as well as taxpayers, and the lock-in effect, which obstructs the network's internal updating. This, of course, would curtail the efficiency of the network standard.