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TAX MEASURES TO COMBAT BRAIN DRAIN: (IN) COMPATIBILITY ISSUES WITH DOUBLE TAX CONVENTIONS AND A POTENTIAL WAY FORWARD

This article analyzes the interaction between domestic tax legislation applied to avoid or combat a brain drain and the OECD and the UN model tax conventions, the two main models used by states in tax treaty negotiations. After it is demonstrated that brain drain taxes are incompatible with the current tax treaty network, the author presents alternatives that could be included in the model tax conventions, and consequently in tax treaties, to establish the compatibility of the measures, as well as a justification for the adoption of these alternatives in tax treaties involving developing countries.

Key words: *Brain drain. – Taxation of emigrants. – Tax treaties. – Right to development. – Tax benefits.*

1. INTRODUCTION

Since the migration of highly-skilled labor intensified after the Second World War, a discussion arose regarding the effects that such migration would have on the state of emigration. At first, it was thought that the emigration state would be worse off due to the emigration of highly-educated/highly-skilled citizens, so the term brain drain was coined in literature.[1] It was also argued that this process would have even

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[1] According to Dumitru (2012, 9 n. 3) the term *brain drain* was created in the 1960s by British tabloids to refer to the emigration of British scientists to the United States.

direr consequences in cases where the highly-skilled/educated individuals moved from a developing country to a developed country, so states and scholars started to analyze how to deter this occurrence or to at least compensate these less developed countries.

Amongst the ideas ventilated, there were proposals for the taxation of the emigrating persons by their former residence states (Bhagwati, Dellalfar 1972, 1–28; Bhagwati, Dellalfar 1973, 94–101) or for the establishment of restrictions on emigration.[2] Both ideas were met by considerable criticism. Regarding the establishment of a tax on emigrants, it was stated that the taxation would not be feasible and enforceable for developing countries (Oldman, Pomp 1975, 752), that the responsibility for the eventual adverse effects of migrations should not be on the emigrating person (Sager 2014, 573–576), that the migration is the consequence of a problem (Sampson 2013, 162–163) and that the migration can also be beneficial for the emigration state (McAusland, Kuhn 2006, 15–17; Agrawal, Kapur, McHale 2008, 1; Kumar 1967; Commander, Kangasniemi, Winters 2004; Hewitt 2007, 15–39). As for the restriction on the individual's emigration, it is argued that it is a morally questionable choice (Blake 2015, Part II). Ultimately, the proposals were never adopted on a wide scale,[3] albeit discussed in considerable detail at the academic level.

The increase in cross-border mobility since the 1990s has renewed the discussion, with an additional idea that states should not punish the individuals for deciding to emigrate; they should rather provide incentives for individuals to stay. Moreover, even though initially the issue had been framed mainly from the perspective of the less developed countries, more attention started being paid also to migrations between and within developed countries, with

legislators taking action to try to discourage migration of the highly-skilled/educated migrants to more developed regions of countries or to other developed countries.[4]

Despite the recent advances in the study of the topic, discussions are focused mainly on whether countries should be able to tax former

[2] According to Brock (2015, 73–74), states could establish that individuals that complete their studies, with or without a scholarship or loan, in a public or private university, must provide compulsory services to that state for a period of time.

[3] Bhagwati, Dellalfar (1972, 26) mention a tax applied by the Soviet Union on Soviet Jews who wished to emigrate to Israel, but by its characteristics it was an exit tax, not a tax like the one they proposed.

[4] On that issue see the recent tax exemption regime instituted by Poland as well as measures taken by states in the United States to provide tax benefits for graduates that remain in the state. The analysis from the perspective of developed countries is in line with the origin of the discussion during the brain drain of European scientists to the United States after the Second World War.

residents and how this can be done, with little regard to the consequences of potential taxation in the tax relations between states that have signed a convention to avoid the double taxation of income.[5] In that sense, it needs to be assessed whether the potential taxation prescribed in the domestic legislation of the emigrant's country would not be limited by a double tax convention signed by the emigration state. To do so, first it is necessary to define whether such taxes would be under the scope of the convention, the article that would be applicable, and the allocation rule in place. Furthermore, considering that the tax would fall under the scope of the convention and that the taxing rights of the emigration state would be limited, it is important to consider how such taxes could also be applied in a tax treaty situation.

This is the objective of this article, to assess whether the potential domestic prescription of the taxation of income earned abroad by immigrants who used to live in a country would be in line with double tax conventions based on the Organization for Economic Cooperation and Development (OECD) and United Nations (UN) model tax conventions. Moreover, in the event that such taxation is considered in contravention of the current international rules on avoiding double taxation, as prescribed by the model tax conventions, it will be discussed whether it is possible, and feasible, to reconcile these two systems, as well as how to perform this reconciliation.

Therefore, instead of focusing on whether countries should adopt tax measures to avoid brain drain or on analyzing measures that have already been adopted by specific states and their possible effects, this article will consider a scenario in which states have made the decision in their domestic legislation to either establish barriers for emigration, such as the imposition of a tax on future earnings, or to provide a beneficial tax treatment for individuals who decide to remain in their home states. From this starting point, the author will analyze whether these rules are in line with the current international framework of double tax conventions. After the (in)compatibility of the measures has been assessed, the author will look at the possible amendments that could be made to model tax conventions so that states that wish to enforce their domestic rules on curbing the brain drain are not restricted by international tax treaties.

2. THE BRAIN DRAIN CONUNDRUM

As mentioned above, this work will not focus on whether the levying of taxes on highly-skilled/educated individuals who have

[5] As notable exceptions in this matter, see Brauner (2010) and Stevenson (2016).

emigrated is the right manner in which to deal with brain drain or not;[6] whether it is better to provide positive reinforcements via tax breaks to individuals who remain or through any other eventual alternatives that exist for their emigration states. The assumption of this article is that the individuals' home state has already analyzed the best manner to deal with the brain drain, and that it is then necessary to verify whether the option adopted in the domestic legislation is in line with its model tax conventions. Before performing this analysis, it is crucial to understand the reasons why states see brain drain as an issue and want to avoid it or at least to guarantee taxing rights over the income of the emigrating person.

2.1 Emigration as a Problem: Brain Drain

One of the first reasons used to support methods to combat brain drain is that brain drain leads to a loss of revenue and welfare in developing countries (Bhagwati, Dellalfar 1972, 1–3; Bhagwati, Dellalfar 1973, 95; Brock 2015, 38). It is also argued that brain drain leads to a shortage of skilled labor in the emigration country (Lister 2017, 78) and this shortage can lead to further problems, especially in case of developing countries, where the number of highly-skilled/educated people is already scarce. It is also assumed that the emigration is a loss of the investment made by the developing country in the individual (Lister 2017, 78; Brauner 2010, 229), so this should be avoided. Furthermore, brain drain may be viewed as a subsidy from developing countries, which financed the education of the individuals, to the state to which the individual will emigrate (Freitas, Levatino, Pécoud 2012, 3; Altbach 2013, 42; Kuehn 2007, 1854), and may hamper the spillover effect and the development of institution-building assets, as studies have shown that higher educated people are more pro-democracy, so when they leave the country the local support for democracy may also diminish (Brock 2015, 40).

2.2 Emigration as Beneficial: Brain Gain/Brain Circulation

On the other hand, it is argued that the migration of highly skilled/educated individuals leads to a brain grain, with the circulation of knowledge, with diaspora effects (OECD 2008; Hewitt 2007, 15–39). Additionally, it is argued that the possibility of leaving provides incentives for individuals to acquire further skills, the income they send back is substantial, and if they return they might bring with them progressive ideas and enhanced human capital (Brock 2015, 40–41; Patterson 2007, 12; McAusland, Kuhn 2006, 19–20; Haupt, Janeba 2004, 21; Agrawal, Kapur, McHale 2008, 1–4). It is also said that countries export citizens,

[6] For a better understanding of some of the factors that might contribute to the brain drain in developing countries, see Docquier, Lohest, Marfouk (2007).

just like they export goods, and the idea of a loss assumes that the brain would be used at home, which is not always the case (Kumar 1967, 2079).

If it is believed that in the long-term the emigration fosters the development of the emigration state, countries should be drafting legislation to further incentivize the emigration of highly-skilled/educated individuals. However, despite this new line of research, it is still assumed that the probability of a brain drain is more likely (Lien, Wang 2005, 160), so discussions focus on what developing countries can do to restrict or limit this emigration.

2.3. Possible responses to Brain Drain

Based on the assumption that brain drain has a negative impact on a country's economy, proposals have been made on measures that could be adopted to curb this phenomenon. These proposals make use of the tax system in different manners, increasing the cost of a person's move by levying a tax or by providing incentives for the individual to stay in their residence state, and these possibilities will be studied below.

3. TAXES AS A BRAIN DRAIN DETERRENCE

One of the most prominent proposals on how countries should deal with brain drain is the Bhagwati tax, proposed in the 1970s by Jagdish Bhagwati. According to Bhagwati's original proposal, emigrants should have to pay a tax in their new residence state, to compensate the losses of the emigration states. This tax, which was viewed as payment to the developing country for allowing the individual to move abroad, would also reduce the incentive for individuals to move abroad (Bhagwati, Dellalfar 1973, 95).[7]

According to Bhagwati, the tax should be levied after immigration, on the income effectively earned, as opposed to prior to the emigration on expected income, and the tax should be collected by the developed country that received the emigrant.[8] The tax would be a surcharge, in the sense that emigrants would then be subject to a higher tax liability than other residents of this state. Bhagwati favored the idea that the collection should occur during the whole life of the emigrant, but since this would most likely not be accepted by the developed countries, he proposed that

[7] When analyzing the Bhagwati tax, John Douglas Wilson stated that such tax is desirable and that it could be a voluntary tax (Wilson 2011; Wilson 2008; Wilson 2005). Furthermore, it is argued that a brain drain tax can increase the welfare of the remaining residents (Scalera 2012, 447–467).

[8] Later, recognizing the issues with the collection by developed countries, Bhagwati focused on the tax being collected by developing countries.

the developing countries should be able to tax their former citizens for up to 10 years after emigration (Bhagwati, Dellalfar 1973, 96).

Regarding eventual obstacles to the collection, in the domestic legislation of developed countries, Bhagwati argued that the laws could be changed to accommodate this taxation. Also, he argued that the administration of the money and transfer to the developing countries should be done by the United Nations (Bhagwati, Dellalfar 1973, 95–96).

The proposal has been subject to considerable critics and a tax like the one proposed by Bhagwati has not been widely implemented, despite some of its characteristics being similar to those of an exit tax.

3.1. Brain Drain Taxes and the Model Tax Conventions

Now that we have briefly explained the issue of brain drain/gain and the proposal to limit (by means of income tax) the alleged losses that states suffer when skilled individuals emigrate, it is time to assess whether this tax would be in line with the OECD and the UN model tax conventions on double taxation and the double tax treaties using these models as a reference.

As the brain drain/gain issue focuses on the migration of individuals, in this analysis we will take a closer look at the taxation of individuals in model tax conventions, whether running their own business or working as an employee. Thus, in this section we will assess the compatibility of taxes such as the Bhagwati tax in light of articles 7, 15 and 21 of the OECD and the UN model tax conventions, as well as former Article 14 of the OECD Model Tax Convention and articles 12A and 14 of the UN Model Tax Convention. Articles concerning the receipt of passive income and the alienation of assets will not be covered, as the brain drain/gain debate focuses on the taxation of income that is earned by the emigrant when performing an economic activity. The provisions on pensions will not be dealt with for the same reason, while the article dealing with artistes and sportspersons is beyond the scope of this paper due to its special nature, which already modifies the treatment granted to entertainment activities when compared to other economic activities.

For that matter, we will consider the situation of John Doe, who emigrates from State A to State B, becoming a tax resident of the latter. The tie-breaker rule of Article 4(2) will be applied in the event that John Doe is also considered a tax resident of State A, according to this state's domestic rules.

3.1.1. Brain Drain Tax and its (In)Compatibility with the OECD Model Tax Convention

3.1.1.1. John Doe Earns Business Profits

The OECD Model Tax Convention prescribes, in Article 7, that profits from an enterprise of a contracting state[9] are taxed solely in that State, unless the enterprise carries on business in the other contracting state through a permanent establishment therein. The term business, as prescribed since the deletion of Article 14 in 2000, also includes the performance of personal services and of other independent activities.[10]

Analyzing John Doe's situation considering Article 7, it becomes clear that the profits that he makes by providing services, for instance, as a doctor,[11] will be taxed only in his state of residence. The question then becomes where will John Doe be resident based on Article 4 of a double tax treaty based on the OECD Model Tax Convention.

If following emigration John Doe is a resident solely of State B, State A will not be able to tax any income earned by John Doe, unless he maintains a permanent establishment in his former state of residence and the profits are attributed to the permanent establishment. As the discussions on brain drain/gain focus on taxing the emigrating person on their worldwide income, irrespective of where it was earned, this possibility will not be analyzed in this paper. The focus is, ultimately, on the compatibility of a brain drain tax with the general rule of Article 7, taxation exclusively in the enterprise's state of residence.

Thus, it becomes clear that a domestic tax for emigrants on the income earned after they moved would generally not stand the compatibility test with Article 7, since the emigrant does not commonly maintain resident status in the emigration states.[12] So, in our example, based on Article 7, only State B would be entitled to tax the profits earned by John Doe after emigration; i.e. taxation of this income by State A,

[9] The definitions of enterprise and enterprise of a contracting state are given n articles 3(1)(c) and 3(1)(d) of the 2017 OECD Model Tax Convention: "(...) c) the term 'enterprise' applies to the carrying on of any business; d) the terms 'enterprise of a contracting State' and 'enterprise of the other Contracting State' mean respectively an enterprise carried on by a resident of a Contracting State and an enterprise carried on by a resident of the other Contracting State".

[10] As expressed in Article 3(1)(h) of the 2017 OECD Model Tax Convention "(...) h) the term 'business' includes the performance of professional services and of other activities of an independent character".

[11] Doctors are one of the examples normally examined in regard to the brain drain debate, especially the cases of African doctors who emigrate (Kuehn 2007, 1853–1855; Patterson 2007, 9)

[12] In some states, such as Brazil, emigrant can declare that they are not a resident anymore even shortly before he leaves the country.

John Doe's former state of residence, would be restricted by the model conventions and double tax conventions that contain a similar provision on taxation of business profits.

The situation could be different if State A still considered John Doe a resident according to its own domestic law. In line with Article 4 of the OECD Model Tax Convention, John Doe could be viewed, for treaty purposes, as a dual resident taxpayer, and the recourse would have to be made based on the tie-breaker rule of Article 4(2). If John Doe were deemed to be a resident in State B, the situation would have the same outcome as the one explained above: he would not be considered a resident of State A for treaty purposes and this state would only be able to tax his income if this income were linked to a permanent establishment therein.

If, on the other hand, John Doe were deemed a resident in State A, then State A would be entitled to levy income tax on the income earned by John Doe after his emigration. Thus, in the case of a residence-residence conflict resolved in favor of the former residence state, a brain drain tax instituted by this state would not infringe the provisions of the double tax convention. On this matter, it is also important to stress that if John Doe were deemed to be a resident of one of the contracting states, the other state would not be able to claim residence taxing rights based on the second sentence of Article 4(1). This outcome would not be affected by Article 1(3), the savings clause introduced in the 2017 OECD Model Tax Convention, because for treaty purposes John Doe would no longer be a resident of the other state, despite still being a resident of this state for domestic law purposes.[13] A third possibility for a brain drain tax to be in line with a double tax treaty based on the OECD Model Tax Convention would be if the tiebreaker rule did not resolve the residence-residence conflict of the individual, so both states would still be viewed, for treaty purposes, as John Doe's residence state.

Therefore, it remains clear that a brain drain tax can be in line with a tax treaty only in extremely limited situations, i.e. if a residence-residence conflict were resolved in favor of the emigration state or if the residence-residence conflict were not resolved and, as a result, the former resident was still considered, also for treaty purposes, a resident of the emigration state.

Naturally, this domestic brain drain tax could also be applied in cases where the states have not signed a double tax convention, but this does not affect the discussion on the compatibility of a brain drain tax with the model tax conventions and the double tax treaties based on them. Consequently, it can be affirmed that even if a brain drain tax were established by the domestic legislation, it would ultimately be applied in

[13] OECD, 2017 Model Tax Convention, Commentaries on Article 1, para. 21.

restricted situations, residence conflicts where the emigration state is considered John Doe's residence state, unresolved residence-residence conflict situations, and non-treaty situations. Even if it is considered that developing countries are, with a few exceptions,[14] conservative in the signing tax treaties, having a more modest tax treaty network, these cases still seem more an exception than the rule.

On that matter, despite the arguments that can be put forward in favor of the taxation of brain drain, and the fact that such taxation could occur only for a short period of one's lifetime, it remains clear that such taxation, except on the specific cases mentioned above, would be a clear violation of a treaty obligation, and that an eventual valid reasoning for a tax cannot supersede the express wording of a legal obligation as the one assumed under a double tax treaty.

It is interesting to note that in the original proposal Bhagwati suggested that the taxes should be collected by the developed country, but this idea was criticized based on eventual restrictions that the domestic laws of these states might establish on the tax collection on behalf of a foreign tax authority. Although the criticism is valid, as domestic legislations can indeed hamper the intended tax collection, it are incomplete, as the states' international obligations are not considered. As a matter of fact, such structure is the only one in line with Article 7 of the OECD Model Tax Convention since its inception in 1963, if considered that the residence state of the person for treaty purposes is the state to which they emigrated.

Nonetheless, it should be added that even if taxation is done by the developed country, complying in this sense with the wording of Article 7, such taxation could still run foul to treaty obligations, especially if the tax is levied as a surcharge, as originally proposed by Bhagwati. Such a surcharge tax would be in direct conflict with the non-discrimination provision of Article 24(1), because in that case State B would be taxing nationals of State A who are residents in the former, thus in the same circumstance as its own residents, in a more burdensome manner.

Ultimately, the establishment of a brain drain tax based on the proposals made since the 1970s would not produce any effects in treaty situations in which emigrants are carrying on their business as entrepreneurs in the developed country, as such taxation is not allowed based on Article 7 of the OECD Model Tax Convention and double tax treaties modeled after this provision.

3.1.1.2. John Doe Earns Income from Independent Personal Services

If the double tax treaty between State A and State B did not contain provisions on the taxation of income from independent personal services;

[14] e.g. India, which has a broad tax treaty network.

complying with the 2000 OECD Model Tax Convention, this income would be taxed under the scope of Article 7. Hence, the outcome would be the same as prescribed in the previous section, i.e. the treaty restriction on the taxation of income by the emigration state. Nonetheless, one may wonder whether this outcome would be different in treaties that still contain former Article 14 of the OECD Model, such as most treaties signed by developing countries. On that matter, it is important to note that the outcome would not be affected by former Article 14 of the OECD Model Tax Convention.

As expressed by the OECD when arguing for the removal of the provision, it is unclear whether there were any differences between the concepts of permanent establishment and fixed base (OECD 2000). And even if it is argued that the fixed base concept is broader, allowing for the easier establishment of a fixed base when compared with the permanent establishment, this eventual difference would have no bearing on the current situation, as State A is not intending to exercise taxing rights as a source state, but rather as a residence state, based on the fact that the highly educated/skilled individual emigrated.

In the case of John Doe, the emigration state would only be able to assert taxing rights via a brain drain tax if it was deemed to be, for treaty purposes, the residence state of John Doe. On that matter, the possibility for a brain drain tax to be compatible with a double tax convention would be, once again, the situation of a residence-residence conflict resolved in favor of the emigration state or an unresolved residence-residence in which the individual remained, also for treaty purposes, a resident of the emigration state.[15] Hence, the prohibition of brain drain taxation also holds true for double tax conventions containing former Article 14 of the OECD Model Tax Convention.

3.1.1.3. John Doe Earns Income from Employment

The discussions on brain drain usually focus on this specific situation, in which the emigrant is hired by a foreign employer to carry out his activities in a dependent manner, i.e. as an employee of the company. Despite the prevalence of this view, there has hardly been any consistent analysis of the compatibility of the brain drain taxation and Article 15 of the 2017 OECD Model Tax Convention.

According to Article 15, remuneration derived by a resident of a contracting state related to employment is taxable only in that state, unless the employment is exercised in the other contracting state. In that sense, similar to Article 7, the Convention recognizes the primacy of the residence state of the person to levy a tax on their income, unless the

[15] The latter possibility is further clarified by recourse to Article 1(3) introduced in the 2017 Update to the OECD Model Tax Convention.

person is present in the source for a considerable amount of time (more than 183 days) or their employer is a resident in the source state, or the remuneration is borne by a PE in the source state.[16]

The wording of the provision is clear, therefore there is no possibility to construe a theory in which the emigration state, the former residence state of the emigrant, would have taxing rights over the income from employment earned after emigration, unless the employment activities were being conducted therein. In the commentaries there is also no mention of such interpretation by any state, corroborating the idea that apart from the pleas in academic literature for the taxation of brain drain, the issue has not been thoroughly considered by the countries themselves. The situation would naturally be different if the emigration state was, for treaty purposes, still the residence state of the emigrating person, since in that situation Article 15, which focuses on taxation by the residence state of the income earner, would allow for the taxation of the person in the emigration state.

Hence, like the situation involving the potential taxation of business profits and income from independent personal services earned after emigration, the taxation of the income from employment earned after emigration is also not in line with the OECD Model Tax Convention, save in the specific situations already mentioned (residence-residence conflict resolved in favor of emigration state or unresolved conflict which allows the emigration state to still be seen, for treaty matters, as the emigrant's state of residence). Thus, a brain drain tax levied on income earned by John Doe after emigration would have limited applicability in tax treaty situations.

3.1.1.4. John Doe Earns "Other Income"

In cases where the income earned by the emigrating person does not fall under the scope of more specific provisions, such as the ones dealing with the taxation of business profits, independent personal services and employment, it will fall under the scope of Article 21, a catch all clause that also focuses on allocating taxing rights, in an exclusive manner, to the state of residence of the income earner, save in case where the income is earned through a permanent establishment located in the source state.[17]

Thus, in the case of John Doe, just as it happens when the income is under the scope of articles 7, 14 or 15, unless he was considered, for treaty purposes, as a resident of the emigration state, this state would not be able to levy a brain drain tax on the income he earned after emigration.

[16] OECD, 2017 Model Tax Convention, Article 15.

[17] OECD, 2017 OECD Model Tax Convention, Article 21.

3.1.1.5. Concluding Remarks on Relation of Brain Drain Taxes and the OECD Model Tax Convention

Taking the aforementioned into consideration, it is clear that irrespective of the existence of a brain drain tax in a country's domestic legislation, this tax would only apply to really limited situations: (i) dual treaty residence with the tie-breaker rule deeming the taxpayer to be a resident solely of the emigration state; (ii) unresolved dual residence conflict, so the taxpayer is still viewed, also for treaty purposes, as a resident of the emigration state; and (iii) non-treaty situations.

It is worthwhile noting that any attempt to justify such taxation by reference to the taxation of unrealized capital gains, which is allegedly permitted by the double tax convention, as described in the commentaries on Article 13,[18] would be vague, as there is an important difference between these cases: while in the taxation of unrealized capital gains there is an actual profit which has been created in the residence state, although it was not yet monetized, in case of the brain drain taxation the tax base will only be created in the future, i.e. at the moment of emigration the taxpayer has not yet earned the income that the residence state wants to tax.

Therefore, it remains clear that the taxation of brain drain, as suggested by Bhagwati and subsequent authors, is not in line with the provisions of the OECD Model Tax Convention, save in very specific circumstances. This means that if the emigration state adopted these provisions in its double tax treaties, the establishment of a brain drain tax in domestic law will barely produce significant effects internationally, which naturally is not the desired result for the implementing country.

3.1.2. Brain Drain Tax and its (In)Compatibility with the UN Model Tax Convention

If, instead of adopting the OECD Model Tax Convention as the basis for its double tax treaties, the states base their negotiations on the UN Model Tax Convention, it remains to be seen whether the outcome would be similar to the one explained above, i.e. brain drain taxes would be severely restricted in face of the double tax treaties.

To reach a conclusion on the issue, we will analyze articles 7, 14 and 15 and 21 of the UN Model Tax Convention, as done in the case of the OECD Model Tax Convention, as well as recently-introduced Article 12A, which deals with the taxation of technical services, since the business carried out by the emigrating person could also fall under the scope of this provision.

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[18] OECD, 2017 OECD Model Tax Convention, Commentaries on Article 13, paras. 8–10.

3.1.2.1. John Doe Earns Business Profits

Article 7 of the UN Model Tax Convention is based on Article 7 of the OECD Model Tax Convention, so it is not surprising that they adopt a similar position regarding the taxation of business profits, i.e. exclusive taxation in the residence state, save if there is a permanent establishment in the source state and the income was earned through a permanent establishment. However, expanding the possibilities for taxation at source, which is exactly the reason why the UN Model Tax Convention was created, Article 7 stipulates that if the income is linked to sales in the other state, of the same or similar goods or merchandise sold by the permanent establishment, or arises from business activities carried on in the other state that are similar to the activities carried out by the permanent establishment, the income will also be taxed at this other state.

Note that, similar to what occurred when analyzing Article 7 of the OECD Model Tax Convention, even though Article 7 of the UN Model Tax Convention would allow the developing country to tax a larger share of the income than Article 7 of the OECD Model Tax Convention, it would still not allow the emigration state to tax income earned by former residents after emigration. That is because the paradigm in international taxation always viewed the developing country as the source state, and the UN Model Tax Convention expands the taxing rights of source states.

In brain drain tax matters, taxation is not based on income being earned in the developing country, but rather by being earned by a person who decided to emigrate. Normally the source of the income will be on the immigration state, which would also be the person's residence state. Thus, as a rule, Article 7 of the UN Model Tax Convention does not allow for the levying of a brain drain tax. The sole exception to this rule occurs, as explained above, if the emigration state is still viewed as the residence state of the emigrating person for treaty purposes, be it by reference to the tiebreaker rule of Article 4(2) resolving the residence-residence conflict in favor of the emigration state or by the lack of a solution by this provision and the continuous view of the emigrating person as a resident, for treaty purposes, of the emigration state. As mentioned above, the latter is further clarified by the existence of a savings clause like Article 1(3) of the 2017 UN Model Tax Convention, which guarantees that the residence state of the individual is not limited on taxing its own residents, save in specific situations which do not include the one at hand, i.e. no solution for dual residence conflict. If this occurs, a brain drain tax would indeed be in line with Article 7 of the UN Model Tax Convention.

The issues concerning whether the new residence state or the former will levy the tax and eventual constitutional restraints to this levying is not affected by the choice for Article 7 of the UN Model Tax Convention, as this is a matter of domestic law. But as mentioned above, the choice for taxation by the new residence state, which could then transfer the income to the former residence state, would comply with the wording of Article 7 if the new residence state is viewed as the residence state of the person for treaty purposes.

Therefore, in the case of John Doe, State A would still not be able to levy a domestic brain drain tax if State A and State B signed a double tax treaty in line with the UN Model Tax Convention, irrespective of the fact that the UN Model Tax Convention has broader taxing rights than the OECD Model Tax Convention

3.1.2.2. John Doe earns Income from Independent Personal Services

Differently from the OECD, the UN Model Convention maintained Article 14. Similar to the situation concerning Article 7, Article 14 focuses on income being taxed only in the residence state of the income earner, save if specific circumstances occur, i.e. the person has a fixed base regularly available in the other state or spends more than 183-days in such state. In that sense, the presence of the second test broadens the possibility of taxation of income at source when compared to the OECD Model Tax Convention.

The crux of the issue is indeed that this provision allows for taxation at source when economic activities are developed therein. In the case of a brain drain tax, which disregards the place where income was earned and focuses solely on the fact that the person emigrated from the state, Article 14 does not leave any leeway for the emigration state to tax the future income earned by the emigrant.

Hence, as has been a constant regarding the discussions of brain drain taxation and their interaction with double tax treaties, such provision only allows for brain drain taxation if the emigration state is, for treaty purposes, the residence state of the emigrant. As seen before in this article, this would only occur in case there was a residence-residence conflict that were resolved in favor of the emigration state or unsolved.

Considering that normally the emigrant will become a resident of the state which he moved and will have at least most of his personal or economic relations attached to this state, it remains clear that in only a handful of cases a brain drain tax would be allowed, with Article 14 generally restricting the taxation by the emigration state.

In the case of John Doe, if he ceases to be a resident of State A due to the emigration, this state loses the right to levy a tax on his income from independent personal services. But if for some reason he retains residence in State A while also establishing residence in a different state, it would be necessary to check the facts and circumstances to assess where he is a resident for tax treaty purposes. If he is deemed to be a resident of State B, State A would not be entitled to levy a brain drain tax in treaty situations. On the contrary, if he is deemed to be a treaty resident of State A, either by application of the tiebreaker rule or if there is no decision on the matter so that he remains, for domestic law and treaty purposes, a resident of State A[19], the latter would be entitled to levy a brain drain tax over his income from independent personal services after emigration. Once again, it seems that such taxation would be the exception rather than a rule.

3.1.2.3. John Doe earns Income from Employment

Article 15 of the 2017 UN Model Tax Convention is an exact reproduction of Article 15 of the 2017 OECD Model Tax Convention, so the conclusions presented above are also valid at this point [20]. On that sense, taking the specific case of John Doe in consideration, income he earns after emigration shall be taxable solely in State B, save if the activities are done in State A for more than 183 days, or he is paid by an enterprise resident in State A or the payment is borne by a permanent established located in this state. In any case, taxation would occur because State A would be the source state of the income, not due to the levying of a brain drain tax.

As mentioned above, a brain drain tax would only be in line with the taxation of income from employment as prescribed in model tax conventions if State A is still viewed as the residence state of John Doe for treaty purposes. The possibilities of this happening are scarce, i.e. dual residence situation in which State A is still considered to be his residence state, be it because the tie-breaker rule decides in favor of this state or because the dual residence conflict is not resolved.

3.1.2.4. John Doe earns "Other Income"

Article 21 of the 2017 UN Model Tax Convention adopts the same general rule of Article 21 of the 2017 OECD Model Tax Convention, i.e. items of income not dealt with in the distributive rules shall be taxable only at the residence state of the income earner.[21] However, this provision expands on the approach adopted by the OECD, dealing on Article 21(2) also with independent personal services performed from a fixed base and adding a provision that allocates taxing rights to source states as regards income arising in that state.

Despite the broader prescription of source taxing rights, like the situation with Article 7 of the 2017 UN Model Tax Convention, Article 21 has no different bearing on matters of compatibility of brain drain

[19] The latter possibility is reinforced by the introduction of a provision such as Article 1(3) of the UN Model Tax Convention in the double tax treaty between the parties.

[20] See section 3.1.1.3.

[21] United Nations, 2017 UN Model Tax Convention, Article 21(1).

taxes with model tax conventions than Article 21 of the 2017 OECD Model Tax Convention. That is why, once again, the focus of the UN model tax convention is to grant more taxing rights to the source state, but in the case of brain drain taxes the states want to assert taxing rights over income earned by former residents, irrespective of where the income was sourced.

Therefore, to assess whether a brain drain tax would be in line with Article 21 of the 2017 UN Model Tax Convention, we need to ascertain where the emigrating person is a resident. In our example, if John Doe is a treaty resident of State A, Article 21 would determine that this state can tax the income earned abroad after emigrating. But if he is a treaty resident of State B, the levying of a brain drain tax in treaty situations would run foul to the international obligations assumed by the signing of the tax treaty. Once again, considering that John Doe moved to State B, the only chance for the levying of a brain drain tax by State A would be if there was a dual residence conflict resolved in favor of State A, or if there was no solution to the conflict and, as a result, John Doe would still be a resident of State A for treaty purposes.

3.1.2.5. John Doe Earns Income from Technical Services

While in the OECD Model Tax Convention technical services fall within the scope of the business profits article, since 2017 there has been a specific provision in the UN Model Tax Convention dealing with the issue. This provision answers the call of developing countries to detach the taxation of technical services from the permanent establishment concept.[22] In that matter, the article prescribes that fees for technical services arising in a state and paid to a resident of the other contracting state, may be taxed in the latter.[23] This is a rather unusual wording, as typically model tax conventions use the “may be taxed” formula to establish that the source state may tax.

To eliminate any controversy in regard to where fees for technical services arise, the article determines that fees for technical services arise in the state in which the payer of the fees is resident or in the state in which the payer of the fees has a permanent establishment or fixed base, and the fees are borne by this permanent establishment or fixed base.[24] This sourcing rule is complemented by another one which states that fees for technical services are not deemed to arise in a state in the case where the payer is a resident of that state, and carries on business in the other

[22] In practice some developing countries where already avoiding the need for the existence of a permanent establishment by inserting fees for technical services under the scope of the royalties article.

[23] United Nations, 2017 UN Model Tax Convention, Article 12A(1).

[24] United Nations, 2017 UN Model Tax Convention, Article 12A(5).

contracting state through a permanent establishment, or performs independent personal services through a fixed base, and the fees are borne by the permanent establishment or fixed base.[25]

The provision also clarifies that fees for technical services may be taxed in the contracting state in which they arise, but if the beneficial owner is a resident of the other contracting state the tax levied at the source state will not exceed a certain percentage of the gross amount of the fees paid.[26] The beneficial ownership concept is the also adopted on the articles on dividends, interest and royalties. Moreover, this provision establishes the relationship between Article 12A and other provisions of the 2017 UN Model Tax Convention. In that sense, it can be ascertained that in case of a potential conflict between Article 12A and Article 14, the former will apply if there is no fixed base in the source state, while the latter will apply if the income is linked to a fixed base in the source, as expressly provided on Article 12A(4).

The provisions of articles 8, 16 and 17, on the other hand, prevail over Article 12A, which means that even if the income from shipping, director's fees and remuneration of top level managerial officials, the earnings of artistes and sportspersons could be classified as fees for technical services, as defined on Article 12A(3), the rules prescribed on articles 8, 16 and 17 would apply, i.e. there would be no restriction for the taxation of the income at source, which is a different outcome than the one prescribed by Article 12A, which limits taxation to a percentage (to be agreed by the contracting parties) of the gross amount of the fees paid. If, however, the payments are not under the scope of articles 8, 16 and 17, Article 12A still determines the taxation of the income at source, albeit in a limited manner.

The article also provides a treaty definition of the term *fees for technical services*, stating that it entails any payment for services of a managerial, technical or consultancy nature, unless the payment is made: (i) to an employee of the payer; (ii) for teaching in or by an educational institution; or (iii) by an individual for services for the personal use of an individual.[27] Unfortunately, there is no definition of the terms managerial, technical or consultancy, with the commentaries recognizing that these terms may overlap.[28] On a positive note, the definition of fees for technical services does not make any mention of domestic law of states, which means that the provision intends to establish an autonomous definition of the term, which is a more beneficial approach to avoid conflicts of

[25] United Nations, 2017 UN Model Tax Convention, Article 12A(6).

[26] United Nations, 2017 UN Model Tax Convention, Article 12A(2).

[27] United Nations, 2017 UN Model Tax Convention, Article 12A(3).

[28] United Nations, 2017 UN Model Tax Convention, Commentaries on Article 12A, para. 67.

interpretation and subsequent recourse to the domestic law of states based on Article 3(2).

The shared allocation of taxing rights, with a limit on the amount to be taxed at source, is not applicable if the beneficial owner of the fees for technical services, while resident of a contracting state, does business in the other contracting state though a permanent establishment or performs independent personal services in the other state, through a fixed base, and the fees are effectively connected to the fixed base or permanent establishment, or with business activities of the same or similar kind as the ones carried through the permanent establishment or fixed base.[29] If this occurs the situation will fall under the scope of Article 7 (business profits) or Article 14 (independent personal services), following the regulation prescribed in these articles. As a shortcoming of this provision, one that can lead to considerable discussion between the states, there is no definition of the expression "effectively connected".

Finally, the article states that when, due to a special relationship between the payer and the beneficial owner of the fees or between both and another person, the amount paid as a fee for technical services is not at arm's length, the article applies only to the arm's length amount, with the excess part remaining taxable according to the laws of each contracting state and considering the provisions of the double tax treaty.[30] On that matter, the commentaries on the provision clarify that the expression "special relationship" covers not only situations of direct and indirect control, but also relationships by blood or marriage.[31] Moreover, it is important to stress that this is the same treatment granted on the articles regarding excessive royalties and excessive interest.

Applying these provisions to the case of John Doe, it can be said that after emigrating from State A he could be taxed on fees for technical services in the state in which the fees arise, i.e. where the payer of the services is a resident or where there is a permanent establishment or fixed base connected to the obligation to pay the fees and which bears the costs of the fees, or in his residence state. Considering this, as expressed above, brain drain taxes are not based on the idea of the business being developed in a state, but rather on the fact that they are earned by a former resident, it remains clear that the state does not intend to ascertain its taxing rights as a source state, reason why this possibility will not be analyzed in the present work.[32]

[29] United Nations, 2017 UN Model Tax Convention, Article 12A(4).

[30] United Nations, 2017 UN Model Tax Convention, Article 12A(7).

[31] United Nations, 2017 UN Model Tax Convention, Commentaries on Article 12A, para. 130.

[32] It it important to note that if this were the case, State A, as the source state, would be able to levy a tax based on Article 12A.

Therefore, based on Article 12A, State A would only be able to levy a brain drain tax if it were still viewed as John Doe's residence state. As expressed on previous sections of this article, this would only happen if based on State A's and State B's domestic law John Doe is still viewed as a resident, according to the factors referred to in Article 4(1) of the double tax treaty between the states, and if the dual residence issue is subject to the tiebreaker rule, with the matter being resolved in favor of State A being the residence state, or if no decision was reached and John Doe is still viewed, for treaty purposes, as a resident of State A. In the latter case, if the treaty contains a provision like Article 1(3) of the 2017 UN Model Tax Convention it would be clear that State A would be entitled to levy its brain drain tax, but even if the provision were not present, this state would still be able to levy a brain drain tax, as the convention has not established any restriction on the domestic law taxation by State A as this state is still considered to John Doe's residence state.

3.1.2.6. Concluding Remarks on Relation of Brain Drain Taxes and the UN Model Tax Convention

Similar to the situation involving the OECD Model Tax Convention, as a rule, the signing of a double tax treaty based on the UN Model Tax Convention severely hampers the application of brain drain taxes. The differences between the OECD and the UN model tax conventions, with more taxing rights being attributed to source states in the latter, including the addition of a specific provision on fees for technical services, have no bearing on the discussion of the compatibility of brain drain taxes with double tax treaties.

This outcome is not surprising, since the focus of the UN Model Tax Convention is on allowing more taxation at the source and the discussion on brain drain taxes does not focus on taxation based on the source criterion, but rather on taxation by the emigration state. As the emigration state intends to exercise worldwide taxing rights over the income of individuals who have migrated, the only manner in which this can be achieved in a treaty situation is if the emigration state is still viewed, for treaty purposes, as the residence state of the emigrating person.

In the example above, regarding the taxation of John Doe by State A, this would mean that this state would still need to be considered John Doe's residence state to be able to levy a brain drain tax on him. For domestic law purposes that is not a problem, as the state itself determines who is viewed as a resident, but the issue is more complex when the states concerned have signed a double tax convention. This is because the tax treaty purports to determine the sole residence state of the individual, and chances are that since John Doe has moved to State B and is currently living there, this state will also treat him as a resident under its domestic law, triggering a dual residence conflict. In that case, Article 4(2) would be applied to determine his treaty residence.

As it currently stands, Article 4(2) determines residence first based on where the individual has a permanent home. As John Doe emigrated from State A, chances are that he would only have a permanent home in State B, which would mean that the conflict would be resolved in favor of State B and the brain drain tax instituted by State A would not apply in the situation. If he maintains a permanent home in state A as well, it would be necessary to investigate his center of vital interests, where his personal and economic relations are. Once again, it is more likely that it would be in State B, but here it is possible that his center of vital interests, specially his personal relations, would still be in State A.

In case it was not possible to determine his center of vital interests, or if John Doe does not have a permanent home in either state, then the tiebreaker rule would determine that his residence state is where he has his habitual abode, i.e. where he is regularly. Once more it is more likely that the conflict would be resolved in favor of State B. If he has a habitual abode in both states or in neither of them, he would be deemed a resident only of the state of which he is a national. This is the first test which most likely will favor State A, although this is not certain. Ultimately, if he were a resident of both states or neither of them, states would have to solve the matter by recourse to a mutual agreement procedure. Therefore, as it can be seen, the chances are greater that John Doe would indeed be considered a treaty resident solely of State B, which would bar the levying of a brain drain tax by State A.

In a nutshell, by moving to State B, based on Article 4(1) John Doe would most likely be viewed solely as a resident of this state, which would mean that State A would not be allowed to levy a brain drain tax. Even if, for domestic law purposes, John Doe were still considered a resident of State A, the recourse to the tiebreaker rule of the double tax treaty between State A and State B would probably determine that John Doe is a resident of State B, with the result being, once again, that the levying of a brain drain tax by State A would not be in accordance with the double tax treaty.

If, on the other hand, John Doe were regarded as a resident of State A, the brain drain tax would be compatible with the double tax treaty. There are two possibilities for John Doe to be viewed as a resident of State A: (i) the analysis of the facts and circumstances of the case determine that he should be deemed a resident of State A, which, as demonstrated above, is not the most likely outcome; and (ii) the residence conflict is not solved by recourse to Article 4(2) and John Doe is still considered a resident of State A and State B for domestic law and treaty purposes.

In the latter case, considering that, as demonstrated above, the articles of the conventions regarding business profits, independent personal services, employment income, fees for technical services and other income favor taxation by the residence state of the income earner, without establishing any restriction on taxation of these types of income by the residence state of the individual, State A would have no problem to levy its brain drain tax. This is corroborated by Article 1(3), the savings clause, recently introduced into the UN Model Tax Convention. But even if the double tax treaty between State A and State B does not contain such provision, State A would still be allowed to levy the brain drain tax, since the treaty would not prohibit such a tax.

Therefore, as it has been argued throughout this article, the possibilities for a brain drain tax to be compatible with double tax treaties are slim, and it cannot be considered that such tax would ultimately be widely used or generate significant revenue for the tax authorities of developing countries.

4. TAXES AS INCENTIVES TO AVOID BRAIN DRAIN

Apart from the institution of a brain drain tax, a state can also reduce the brain drain risk by adopting positive measures, ones that provide incentives for taxpayers to stay or to move to a country. In this section, we will study both possibilities and analyze whether they would be in line with the double tax conventions.

4.1. Taxes as Incentives to Retain Individuals

Just as taxes can act as a deterrent to the migration of individuals, they can also be used to provide individuals a better off situation, by means of credits or a reduced tax burden. One of the approaches is to discard the income tax levied on the population that might migrate, as done by Poland and studied further in another article of this journal, as well as by certain states in the United States, such as Mississippi.

In this sense, the government provides a tax exemption for certain categories of taxpayers, be it young taxpayers as in Poland and the United States, or individuals that earn a certain amount of income, if they remain living in the state. This is a trade-off in which the state ultimately ends up giving up on the tax income that could be collected in exchange for the maintenance of these individuals that are believed to help the state's economy of the state in the long term.

As regards the compatibility of such measures with the double tax conventions signed by states, there is no question that, considering that the benefit is granted to a resident of a contracting state, the situation would be under the scope of such convention as prescribed in Article 1(1) coupled with articles 2(1), 3(1)(a) and 4(1). Furthermore, the tax exemption would not infringe the double tax treaty, as treaties allocate taxing rights between states, they do not stipulate that a state is obliged to tax the income, irrespective of the type of income earned (business profits, independent personal services, employment income, other income). Moreover, it is worth noting that the articles studied above do not put any restriction on taxation by the residence state (apart from Article 23A and B, which prescribe an exemption or credit for taxes paid abroad).

If the resident individual only earned income in their residence state the situation would be even more clear-cut, as in that case this would be the sole state entitled to tax the income.

The fact that the state would not be restricted in its right to tax the resident individual does not mean that there would be no risk that the double tax treaties signed by the states could lead to questions on the tax treatment granted to these individuals. However, in that case the focus would not be on the distributive rules, but rather on the non-discrimination rule contained in Article 24(1). As provided on Article 24(1), "Nationals of a Contracting State shall not be subjected in the other Contracting State to any taxation or any requirement connected therewith which is other or more burdensome than the taxation and connected requirements to which nationals of that other State in the same circumstances, in particular with respect to residence, are or may be subjected. This provision shall, notwithstanding the provisions of Article 1, also apply to persons who are not residents of one or both of the Contracting States."

Considering the example of John Doe, if instead of emigrating to State B he would remain a resident of State A and receive a tax exemption on his income, the nationals of State B that are residents in State A could request the same tax treatment of John Doe on the basis of Article 24(1) of the double tax treaty between State A and State B. Thus, to comply with its treaty obligations, State A might have to extend this beneficial tax treatment to all nationals of the states with which it has signed double tax treaties, leading to a greater loss of tax revenue, i.e. the measure might be counterproductive, since one of the concerns about brain drain was precisely the loss of tax revenue.

There is another issue that might arise in the establishment of preferential tax treatment for certain taxpayers as means to avoid brain drain: inequity in the domestic sphere, as usually benefits to avoid brain drain are granted to individuals who are already better off than the average resident. Despite the importance of this matter, we will not delve further into its analysis since the focus of this paper is the compatibility of tax measures aimed at avoiding brain drain through double tax treaties, and this issue is a purely domestic one.

There is no issue regarding the compatibility of domestic tax exemptions with double tax treaties, as demonstrated above, save that the state that provides for the exemption might have, based on the non-discrimination clause normally contained in double tax treaties, to extend the exemption to nationals of all states with which it has signed double tax treaties. In that sense, it can already be ascertained that the provision of tax exemptions is a sounder approach to dealing with the brain drain than the institution of a brain drain tax, at least in regard to the state fulfilling its treaty obligations. Nonetheless, the adoption of a tax exemption and extension to all nationals of treaty partners resident in the state might be more detrimental to the state's finances than the restriction imposed by double tax treaties on the establishment of brain drain taxes, so states should consider this carefully.

4.2. Tax as Incentives to Attract Individuals

In addition to providing tax benefits for individuals who opt to remain in the state, it is also possible to offer a tax incentive to attract individuals to move to the state, an option which is becoming increasingly common. As an example of such a measure, the Netherlands has a 30% ruling for highly-skilled labor hired by Dutch employers.[33] According to this system, individuals who move to the Netherlands for their work and did not live within 150kms of the border for at least 16 out of the 24 months prior to moving, are entitled to a tax break on 30% of their income, i.e. 30% of the income will not be taxed for a period of 5 years, which can be renewed once.

Considering the example of John Doe, if such benefits were in place in State B, instead of being taxed by State A after his emigration or receiving a benefit to remain a resident of State A, he would receive a tax break granted by State B, as long as he moved to this state. Thus, once again, the issue would not be whether the emigration state could tax the income he earned after emigration, but rather whether State B "poaching" John Doe would be in line with the double tax treaties based on the OECD and the UN model tax conventions.

Like the incentives provided for individuals to stay in a country, tax breaks to attract individuals do not conflict with double tax treaty rules[34] as they merely determine that a state will give up taxing part of the income of certain individuals. In that sense, considering that the state

[33] Wet op de loonbelasting [Wage Tax Act] 1964.

[34] For more on the matter see section 4.1.

is not restricted by a double tax treaty in its taxing rights over this individual, it is still up to the state to determine in its domestic legislation whether the individual will effectively be taxed, so there is no conflict.[35] If the double tax treaty prescribes that only the other state can tax the individual, the tax break at hand would also be compatible (on the part that is exempt, as taxation of the remaining taxable income would indeed be restricted in such a situation), because it would also stipulate that no taxes would be levied on the individual.

This conclusion is in line with the fact that double tax treaties allocate taxable income, since it is still up to the person's residence state to determine how it will exercise its taxing rights, i.e. the double tax treaty does not stipulate the manner in which the income should be taxed, but only whether it may be taxed or not. The entire remaining taxation framework stems from domestic rules.

Nonetheless, like tax incentives to maintain individuals in a state, tax incentives to attract individuals may also need to be extended to nationals of a contracting state who decide to take up residence in the state providing the benefit, based on the non-discrimination clause of a double tax treaty (Article 24(1)). Additionally, this measure may generate discussions, from a domestic law perspective, regarding its equity.

The extension of the benefit to foreign nationals is not an issue per se, as these attraction systems, like the Dutch 30% ruling, do not consider the nationality of the person as a distinctive criterion for the receipt of the benefits. The issue concerning the equity of the system from a domestic law perspective, on the other hand, might generate considerable discussions, as the persons that can normally benefit from these attractions schemes are normally highly-skilled individuals, who already earn more than the average resident taxpayer. As mentioned in the previous section, this issue, although extremely important, is merely mentioned as a point of attention because it does not affect the compatibility of the scheme with double tax conventions, and is beyond the scope of this paper.

Overall, it is interesting that the provision of tax benefits is compatible with double tax treaties, but it does not resolve the problem that countries face when opting for a brain drain tax, i.e. it does not burb the loss of tax revenue. On the contrary, the provision of tax breaks for individuals who remain residents or who become residents may lead to an even higher loss of tax revenue than the one caused by the brain drain, as these breaks are also applied to persons who would already remain

[35] Although these measures do not conflict with tax treaties, one can question the behavior of developed countries that adopt such measures, as they can lead to the increasse in brain drain from other states, as argued by Assaf Razin (2017, 13–15). Altbach (2013, 41) is more contentious, stating that developed countries are robbing developing countries of their brains and this will significantly damage the latter.

residents or would move to the state, i.e. these persons' behavior is not affected by the tax break, as intended by the legislators, but they still benefit from the tax incentive.

Therefore, considering the revenue-collecting goal of the brain drain taxes, it is important to assess how these taxes can become compatible with double tax treaties.

5. ESTABLISHING THE COMPATIBILITY OF BRAIN DRAIN TAXES WITH DOUBLE TAX TREATIES

As it has been presented in this paper, the adoption of a brain drain tax presents a challenge to states that have signed double tax treaties, as such a tax cannot be applied in a treaty setting save in specific situations: (i) residence-residence conflict solved in favor of the emigration state, or (ii) unresolved residence-residence conflict. Furthermore, the network effect of tax treaties, normally seen as a positive trait (as it is generally accepted that the more tax treaties a country has signed, the better), leads to greater restriction on the adoption of a brain drain tax in a treaty situation, which is certainly not the idea that countries have when instating brain drain taxes. Thus, the question remains how to make brain drain taxes compatible with double tax treaties.

On that matter, the issue can be tackled by: (i) substituting the residence criterion with the citizenship criterion; (ii) amending the residence article; or (iii) modifying the treaties' distributive rules to allow the emigration state to tax future earnings of the emigrant.

5.1. Substituting the Residence Criterion with the Citizenship Criterion

As mentioned before, double tax treaties modeled after the OECD and the UN model tax conventions are applicable to persons who are residents of one or both contracting states, as prescribed by Article 1(1). In this sense, establishing the residence of the person becomes paramount in determining whether the person falls within the scope of the double tax treaty. A person that decides to emigrate will normally not remain a resident of the emigration state, and even if that occurs, the person will most likely also be a resident of the state to which they have moved and recourse to the tiebreaker rule would probably establish that, for treaty purposes, the person is a resident of the latter state. As a result, considering the distributive rules of the treaty, the emigration state would not be allowed to levy a brain drain tax on this individual.

Considering that a brain drain tax should apply also when the state has a double tax treaty in place, it would be possible to establish, like the

United States currently does, that the double tax treaty does not affect the taxation of its citizens by a contracting state.[36] The focus on the citizenship status of the individual, rather than only on the individual's residence, would solve any incompatibility between brain drain taxes and the tax convention at hand.

Although the adoption of citizenship-based taxation is possible, one should remind that currently the United States is the only country of the world that taxes on the basis of citizenship, so the adoption of this criterion would entail not only a significant amendment of double tax treaties but also of state's domestic legislation. Furthermore, there is a great risk that developing countries, which are believed to suffer more from the brain drain and would thus be more eager to establish a brain drain tax, would not be able to apply and enforce such a measure. The failed experience of the Philippines related to the adoption of a citizenship criterion for taxation shows that the solution may not be as straightforward as it seems.

Therefore, even though such an amendment would resolve the incompatibility issue between brain drain taxes and double tax treaties, it does not seem to be a feasible option for most states, especially the least developed ones that suffer greatly from brain drain and are in the weaker negotiating position when signing double tax treaties.

5.2. Amendments to the Residence Article

If the shift to taxation based on the citizenship criterion is considered unattainable or politically unfeasible, states still have the option of allowing for the establishing of brain drain taxes by means of amendments to the residence article of their tax treaties. On that matter, a sentence could be added to Article 4(1) determining that citizens are deemed to be perpetual residents of the state to which they are attached or that in case of emigration from one state to another the former would always be deemed to be the residence state of the emigrating person. Naturally, as an individual may live in various places during their lifetime it would be important to establish under what conditions the emigration state would still maintain taxing rights over the emigrating person, and it seems that combining such a rule with the citizenship criterion from the previous section may be a good solution.

Irrespective of which option is chosen, in both cases the amendment of the residence provision would guarantee that the emigration state would not run foul of its treaty obligations by establishing a brain drain tax.

Despite the potential desirability of such proposals, especially if it is considered that states should indeed levy brain drain taxes, it remains

[36] United States, United States Model Income Tax Convention, Article 1(4).

clear that they are still a considerable deviation from the current rules prescribed in the OECD and the UN model tax conventions, and that a similar outcome can be achieved by means of a less harsh change. Considering that brain drain taxes are not in line with double tax treaties because the emigration state is not the residence state of the emigrating person, at least for treaty purposes, and that as an exception these taxes are compatible with double tax treaties when a residence-residence conflict is solved in favor of the emigration state, the alignment of brain drain taxes to double tax treaties can be done by means of a reshuffling of the tie-breaker rules.[37]

As explained above, even in situations in which the emigration state is still viewed, for domestic law purposes, as the residence state of the emigrating individual, its taxing rights would be severely limited by double tax treaties because the tiebreaker rule would most likely be resolved in favor of the individual's new residence state. This is because the order in which the tiebreaker test is set focuses on the individual's physical link to a state (permanent home), economic and personal interests (center of vital interests), physical presence in the state (habitual abode), and ultimately the personal attachment of the individual to the state (nationality), thus the personal attachment to a state is only taken into consideration as a last resort.

However, if the tiebreaker rule were modified and the nationality test were the first criterion to be assessed, the changes that the emigration state would be able to tax its former resident would significantly increase. Note that differently from the switch to taxation based on citizenship or on deeming the emigration state as the perpetual residence of the individual, this would be a less troublesome change, as the nationality criteria is already present in the tie-breaker rule. This amendment would merely bring this criterion to the forefront of the residence-residence conflict for individuals, without establishing any different threshold for taxation. In the event that this criterion is not met, the remaining factors would still be assessed to determine where the individual is resident for treaty purposes.

5.3. New Distributive Rule in Case of Emigration

When analyzing the compatibility of a brain drain tax with the distributive rules of the OECD and the UN model tax conventions, more specifically articles 7, 12A, 14, 15 and 21, it became clear that all provisions allow for taxation of the income effectively earned by the person, giving preference to residence taxation of the income and, if certain conditions are met, allowing for source taxation too. However, a

[37] As suggested by Brauner (2010, 250), proposing to consider the individual's center of vital interests before the permanent home criterion.

brain drain tax would be levied on income earned after emigration, i.e. when the taxpayer is already a resident of another state. Consequently, based on the provisions of the model conventions, the emigration state would not have any taxing rights over this income, unless it was sourced therein.

If the option to align brain drain taxes with double tax treaties is chosen, it is necessary to modify the current structure of treaties and prescribe taxing rights to the emigration state over income that is earned after emigration. This could be achieved by adding a paragraph to each article stipulating a specific treatment for emigrating individuals, e.g. Article 7 would also prescribe that profits of an enterprise of an emigrating individual, whenever arising, may also be taxed in the emigration state, irrespective of whether the enterprise carries on business in the emigration state through a permanent establishment. Or a new article could be added to allocate taxing rights relating to emigrating individuals,[38] with emigration serving as the distinctive criterion for special tax treatment, in the same manner as income director's fees are dealt with in Article 16, and income from artistes and sportspersons in Article 17. The allocation rule would then prescribe that income earned by an emigrating individual may also be taxed by the emigration state.

6. JUSTIFICATION FOR THE AMENDMENT OF DOUBLE TAX TREATIES TO MAKE THEM COMPATIBLE WITH DOMESTIC BRAIN DRAIN TAXES

Having established the possible amendments that would make brain drain taxes compatible with double tax conventions, therefore fulfilling the objective of guaranteeing that in case the emigration state opted for a brain drain tax in its domestic law this tax would not be hindered by a double tax treaty, it is also necessary to consider how to justify these changes. As examined previously in this paper,[39] brain drain taxes are normally justified as a means to combat tax revenue losses stemming from the emigration of highly-skilled individuals. However, this is not enough per se to justify the redrafting of the allocation rules, as the same reason can be used by the individual's new residence state to argue that granting taxing rights to the emigration state is the equivalent of restricting their taxing rights over individuals that are residents in their states.

On that matter, considering that brain drain taxes are normally linked to developing countries, which are normally the ones that suffer

[38] As the 2017 UN Model Tax Convention has recently done regarding fees for technical services.

[39] See section 2.

considerably brain drain (Kuehn 2007, 1853–1855; Patterson 2007, 9), it can be argued that the amendments should be made in order to align the double tax treaties with the right to development (Souza de Man 2017; Silva 2009; Sengupta 2000).[40]

The right to development is a human right recognized by the United Nations as a right of individuals and states to participate in, contribute to and benefit from economic, social, cultural and political development.[41] Thus, it is recognized that states should have their right to development respected by other states (Souza de Man 2017, 25) and that more developed countries have the responsibility to support the development of their residents as well as residents of other states (Souza de Man 2017, 25). The Declaration on the Right to Development did not bind the states, not even the ones that adopted it,[42] so it might be argued that the right to development is not actually a right in the strict sense.

Nonetheless, since the Declaration on the Right to Development was adopted more than 30 years ago and that the United Nations has repeatedly stated that the right to development is a human right (UN, 2004, E/CN.4/Sub.2/2004/17; UN, 2001, E/CN.4/2001/WG.18/2 UN, 2000, A/RES/55/2;) with consensus being achieved in the Vienna Declaration and Programme of Action in 1993 (World Conference on Human Rights 1993), it can be argued that this right is already part of customary international law (Mansell, Scott 1994, 174; Villaroman 2001, 8; Have 2013, 3; Kunanayakam 2013, 48) and can indeed be counted on by developing countries in achieving their goal of development through the collecting of taxes (Souza de Man 2017, 31–32).

As a result, states could be considered to have the obligation to facilitate the development of all individuals and states, so developed country should assist developing countries. In fact, such assistance already exists by means of development aids, but this could also be done by allowing developing countries that are suffering brain drain to levy brain drain taxes also in treaty situations. For this to happen, the amendment of the double tax treaty is of utmost importance, as seen above.

Thus, bearing in mind that the right to development of states can be further fostered by the collection of income, if can be affirmed that by agreeing to amendments to double tax treaties with developing countries, to make the levying of brain drain taxes also possible in treaty situations, the developed countries would be respecting the right to development.

[40] The right to development has also been thoroughly discussed at the UN level (UN, 1999, E/CN.4/1999/WG.18/2).

[41] United Nations, General Assembly, Declaration on the Right to Development, A/RES/41/128, Article 1.

[42] The Declaration on the Right to Development was adopted by 148 countries, with 8 abstentions and one objection (United States).

Moreover, the decision to allow for further collection of income by developing countries is in line with the Millennium Development Goals and the Sustainable Development Goals, as the collected income can be used to further foster development. Finally, if treaty partners believe that the collection of taxes over emigrants would yield considerable funds, they could negotiate a proportional reduction of the aid possibly granted to the developing country. In this scenario the developed countries would be respecting the developing country's right to development, as well as their self-determination on how to collect income and to use it for their development.

The right to development can, thus, provide a conceptual framework for justifying the amendment of double tax treaties necessary to allow for the levying of brain drain taxes by developing countries.

7. CONCLUSION

Since Bhagwati proposed the establishment of a brain drain tax to curb the emigration of highly-skilled individuals to more developed countries in the 1970s, the idea of how tax measures can curb or foster brain drain/gain has been subject to considerable scrutiny in academic circles. Those that side with Bhagwati normally focus on the fairness of a brain drain tax and on the benefits that the collected income could have for the budget of the emigration state, while its detractors point that the emigration of individuals to more developed countries would also be beneficial for the individual's home state. Others focus on providing benefits for individuals to remain put or to attract residents of other states, favoring a preferential tax treatment instead of the levying of a tax as a means of combating brain drain.

Irrespective of the position taken, the focus has mainly been on the benefits and problems of the ideas for each individual state, with almost no attention being paid to its compatibility with the obligations assumed in the signing of double tax treaties. In this article we delve precisely into this issue, to assess whether tax measures focused on combating brain drain can be applied when the states involved have signed a double tax treaty based on the OECD or the UN model tax conventions. The study of this issue has shown that even though in their domestic laws states may resort to brain drain taxes to collect further income from the emigrating person after emigration, this behavior is not in line with the model tax conventions and treaties signed by the states, save in specific circumstances.

The provision of a preferential tax treatment, on the other hand, could deter brain drain without conflicting with double tax treaties, but it would not curb the loss of tax revenue from highly-skilled individuals and it could lead to questions regarding the equity of the measure. Having the revenue collection goal in mind, if states want to levy a brain drain tax in situations involving treaty partners, it is paramount that they modify their tax treaties. In this article, we present three possible amendments to double tax treaties that could serve to maintain the tax collection rights of the emigration state over the income of the emigrating person, as well as a justification to support these amendments – the right to development.

In brief, this article shows that if states opt to levy a brain drain tax in their domestic legislation, this tax will not serve the purpose of collecting taxes over the income earned, after emigration, by emigrants who move to a state that has a double tax treaty with the emigration state, unless states also modify their tax treaties. Considering that developing countries are the greatest victims of brain drain, and thus more likely to want to introduce such a tax, the necessary amendments to the treaties can be made based on the right to development, a human right duly recognized by states and by the United Nations.

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