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The impact of unilateral tax treaty terminations on FDI

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Abstract

This study analyses the effect of unilateral tax treaty terminations on FDI. It identifies two major patterns—developing countries terminating tax treaties with developed countries for the reasons of tax revenue losses and developed countries terminating treaties with other developed countries for the reasons of non-taxation of pensioners. The study focuses on the effects of terminations for developing countries. To assess the effects of terminations on FDI, a theoretical model is developed incorporating factors such as the rate of return on FDI, exit and entry costs, termination-induced distortion and the probability of concluding new treaties. This contributes to our understanding of the impact of tax treaty terminations on FDI and may have significant implications for policymaking and investment strategies.

KEYWORDS

FDI, tax treaty, termination

1 | INTRODUCTION

This study analyses the effects of unilateral tax treaty termination on FDI. There are more than 3000 bilateral income tax treaties[1] globally (Arnold, 2013). Broadly speaking, the main goal of tax treaties is to boost trade and investment between countries by removing unnecessary tax barriers. Primarily, this means eliminating double taxation, when tax on the same income is paid twice,

[1]The term 'bilateral tax treaty' is interchangeable with 'double tax treaty', 'double taxation treaty', 'double taxation agreement', and 'double taxation convention'.

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that is, in each country. Another important goal is to fight tax evasion and double non-taxation. In other words, these two goals mean that the objective of a tax treaty is to have the income taxed once. Tax treaties generate both benefits and costs for participating countries (Pickering, 2013). The benefits potentially include factors such as increased FDI, positive spillovers from increased FDI, increased certainty, FDI protection and prevention of fiscal evasion. The costs may include immediate revenue costs, limitation of domestic tax laws, risk of treaty shopping and double non-taxation as well as additional tax administration capacities. Countries signing a tax treaty will be able to cover the costs if they receive more FDI in return (Neumayer, 2007). Thus, the question of entering into a treaty is very important for policymakers (Barthel et al., 2010). Growing empirical literature reaches ambivalent conclusions on the effects of tax treaties on FDI—positive, negative as well as no effect. Against this background, this study looks at the role of tax treaties from a different angle and analyses what happens when they are terminated and how this affects FDI.

1.1 | History of tax treaty terminations

Unilateral termination of a tax treaty is a rare event and often represents the last available option when other diplomatic efforts and measures are unsuccessful[2] (Cannon & da Câmara, 1999; Christians & Ezenagu, 2015; Dagnese, 2006). Moreover, the breach of the treaty by the treaty partner should be severe enough to justify potential negative economic consequences of the termination and the loss of benefits the treaty provides[3] (Townsend, 2001). The termination threat can also be applied to make the other party give up its position in the renegotiations (Falcão, 2021). The first, albeit limited, double tax treaty between Great Britain and Switzerland concluded in 1872 was terminated in 1957 (Jogarajan, 2012). In 1973, Kenya as a developing country cancelled tax treaties with the United Kingdom, Sweden, Denmark, South Africa, Switzerland and Norway because of 'substantial losses of tax revenues' and 'developed countries ... dragging their feet on negotiations for new double taxation agreements (or modification of old double taxation agreements) while the old agreements continued in force' (Irish, 1974).[4] In 1983, the US terminated treaties with 18 former United Kingdom and Belgian colonies to prevent treaty shopping (Grady, 1983). No more than 15 agreements were terminated between 1986 and 2006.[5] Though the OECD recognises the sovereign right of countries to terminate a treaty, it calls it a last resort given the possible negative impact it may have on many taxpayers not engaged in practices, which have led to the termination (OECD, 2015).

[2]Some countries are not willing to terminate their tax treaties so as not to damage diplomatic ties with other countries (Avi-Yonah, 1996). However, such an approach can be risky if the termination is in the economic interest of the country.

[3]It is often the case that treaties are terminated due to insufficient measures by the treaty partners against treaty shopping (Blonigen & Davies, 2004). A treaty can be considered beneficial only for one party and thus unfair as in the case of Honduras-US when Honduras terminated its treaty with the US. However, the reasons for termination can be non-economic. E.g., the US terminated the tax treaty with South Africa as part of the Anti-Apartheid Act (Bradley, 2013).

[4]Termination allowed Kenya negotiating more favourable tax treaties because treaty partners were not ready to renegotiate to their detriment while old tax treaties were in force (Irish, 1974).

[5]A famous example is the German termination of its tax treaty with Brazil (Dagnese, 2006). The double tax treaty with Brazil dated back to 1975 and contained numerous unilateral provisions that no longer corresponded to German double tax treaty policy and practice – not even with regard to developing countries. In practice, it no longer offered German business the legal protection provided for in the treaty.

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The US Department of Treasury has recently even referred to termination as a 'nuclear weapon' (Marian, 2015). In the literature, treaty termination is as well called 'a draconian step' (Doernberg, 1995). At the same time, some authors see treaty termination as the best policy option when it is about the termination of only few treaties in the treaty network, which are predominantly used for abusive purposes (Cooper, 2016; Hearson, 2015; Marian, 2015). In this case, renegotiation seems to be meaningless, as it only prolongs the use of illegal practices. Some of the later tax treaty terminations include Argentina–Austria (2009), Argentina–Switzerland (2013), Argentina–Chile (2013), and Argentina–Spain (2013), Mongolia–Netherlands (2014), Mongolia–Kuwait (2015), Mongolia–Luxembourg (2014), and Mongolia–United Arab Emirates (2015), Denmark–France (2009), and Denmark–Spain (2009), Malawi–Netherlands (2014), Finland–Portugal (2019), Sweden–Portugal (2022) with the effective year of termination in brackets. Senegal (2021), Rwanda (2013) and Zambia (2021) terminated their treaties with Mauritius.

Moreover, there are cases without clear governmental communication (at least publicly available), which would explain the reasons behind termination (LEX Africa, 2020). Some old treaties are terminated to be replaced by the new treaties successfully negotiated beforehand. These treaties are not analysed in the study (e.g. the tax treaty between South Africa and Mauritius). More than that, the termination of the treaty can be an external decision to the government itself. An interesting example in this respect is the treaty between Kenya and Mauritius, which was declared invalid by the Kenyan High Court (Hearson, 2019). These treaties are beyond the scope of the study.

1.2 | Potential consequences of tax treaty terminations

Termination of tax treaties can have negative consequences for business and investment relationships between treaty countries (Falcão, 2021). Investors value tax treaties for the stability they provide, whereas an abrupt treaty termination goes in an opposite direction (Hearson, 2013). The longer the period between the termination and the conclusion of a new treaty, the more severe the possible consequences may be. Terminating countries need to take into account the potential reputational costs when unilaterally terminating a treaty, which they could alternatively try to exit without protest by providing some kind of side payments to the other party (Parisi & Pi, 2016). At the same time, according to some tax advisers, it is unlikely that investors would withdraw their investments but rather restructure them following a termination (Hearson & Kangave, 2016). An anecdotal example of what may happen after tax treaty termination demonstrates the 1987 termination of the tax treaty between the United States and the Netherlands Antilles.[6] The termination of the treaty led to panic selling of Eurobonds and a 15 to 20 percent drop in prices on outstanding Eurobonds, so that the U.S. Treasury Department found it necessary to reinstate the section on the withholding tax exemption for interest in order to stabilise the market for Eurobonds (Crandall, 1988; Papke, 2000).[7] Though the termination was preceded by 8 years of unsuccessful negotiations about the possibility of changing the treaty and it was well known that the treaty was being

[6]This treaty can be considered a special case. It was referred to as 'one-way treaty with the world' since it gave an opportunity to investors from the whole world to invest in the USA through the Netherlands Antilles and benefit from the treaty provisions (Papke, 2000).

[7]The reinstatement restored maturity expectation of Eurobond holders in the amount of 32 billion US dollars (Pergram & Duncan, 1987).

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used aggressively in tax planning and that the US treasury had concerns about this, the panic response suggests that the termination was not foreseen.

Whereas some authors see this termination as a failure for its potential negative consequences for the reliability of the United States as a treaty partner (Schoeller, 1988), it is also argued that terminations of tax treaties with tax havens might have a positive political impact in the relationships with other countries that would view the terminating country as the first mover in combatting the shared problem of tax avoidance and treaty shopping (Marian, 2015). If a treaty is being used for double non-taxation, it is conceivable that a given country would not mind the loss of at least nominal investment that was taking advantage of the treaty. Moreover, the terminating country sends a clear signal against abusive practices so that the termination of one treaty may be viewed as an effective tool against tax avoidance in the whole treaty network since it discourages investors from reallocating their business to other tax havens because they could likewise receive termination letters and the investor efforts would not pay off (Tokarev, 2021). Indeed, the termination of the Antilles treaty was a change in the U.S. tax policy, which not only did not enter into new treaties with tax havens, but in addition introduced a limitation on benefits (LOB) clause in existing treaties to prevent double non-taxation (Avi-Yonah, 2014).[8]

Following the above discussion, this study focuses on the following research question. What is the impact of a tax treaty termination on FDI from the country with which the treaty was terminated? Given that investors lose treaty-related benefits, a negative effect is expected. In the case investors expect negotiations to start after termination, investment declines may partly reflect the re-timing of activities rather than long-term levels. If a treaty disappears, but investors expect it to come back, they may want to wait due either to disliking uncertainty or wanting to be inside the new-treaty environment.

This study makes a significant contribution to the understanding of tax treaty terminations and their implications for FDI helping policymakers and stakeholders make informed decisions regarding tax policies and investment promotion strategies.

1.3 | Literature on treaty terminations

To the best of the author's knowledge, there is no economic literature that analyses the effects of the termination of tax treaties. The reason may lie in the small number of terminations, the early renegotiation of terminated agreements,[9] the possible effect of anticipation of termination, insufficient data and others. Interestingly, tax treaty terminations were mainly noticed by tax specialists and remained out of a broader attention (Reuters, 2013). There is one unpublished study that analyses the 'blocking' of treaty shopping routes (Park et al., 2022). It compares three scenarios of (1) blocking tax haven routes, (2) blocking routes when the treaty tax rate is zero and (3) blocking routes with countries with zero domestic withholding tax rates and finds that option (2) is the most effective in eliminating treaty shopping. However, the study does not analyse the effect of blocking these routes on the economies. A study by

[8]Some authors argue that the LOB was even unnecessary for combatting treaty shopping after a series of treaty terminations with tax havens and changes in the domestic tax law (Mason, 2005).

[9]A country may terminate a treaty to improve its bargaining position when renegotiating a new treaty (Huikuri, 2020).

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Davies (2003) looks at the effects of tax treaty renegotiations on FDI and finds no robust positive impact.

The economic literature on the termination of other kinds of agreements also remains scarce. There is only one published study on the bilateral investment treaty (BIT) terminations. The study by Hartmann and Spruk (2022) is the first to examine the impact of BIT termination on FDI. They utilise the difference-in-differences estimation with random timing to study the effect of the unilateral termination of 44 BITs by India between 2013 and 2019. They find that FDI flows to India declined by 30 percent following the terminations in comparison with countries without BIT terminations. Largely, the decrease was caused by the sudden loss in investor protection for those countries that relied on the investor state arbitration procedure. The working paper by Kim and Steinbach (2020) also finds a negative effect of international investment agreements termination on FDI. The effect is driven by the policy uncertainty to investors caused by the termination. Von Borzyskowski and Vabulas (2018) are the first to look at the effect of withdrawal from intergovernmental organisations. They apply the synthetic control method and study the effect of 47 withdrawals from regional economic organisations between 1980 and 2015. They find a positive effect on GDP growth and a negative effect on the political risk for countries exiting highly institutionalised organisations, whereas there are no costs when leaving low institutionalised organisations. The findings of these studies suggest that one should distinguish between different types of treaties when analysing the effect of their termination.

Brexit gave rise to the literature on the topic of termination. A group of studies is devoted to the impact of Brexit on FDI (among others, Dhingra et al., 2016, 2018; Driffield & Karoglou, 2019; Ebell & Warren, 2016; McGrattan & Waddle, 2020). The effects of Brexit are analysed with respect to inflation (Breinlich et al., 2017), services exports (Du & Shepotylo, 2021), mental health and life satisfaction (Braakmann, 2021), hate crime (Carr et al., 2020), public perception of referendum fairness (Van der Eijk & Rose, 2021), well-being of immigrants in the United Kingdom (Rienzo, 2020) and many others.

Given the economic and political role of the United Kingdom and the scale of the event, this increased attention to the topic seems justified. However, as has already been noted, a large number of terminations have been left almost without any attention. This study aims to fill this gap in the area of tax treaty terminations and their impact on FDI. In particular, it contributes to the growing literature on the role of tax treaties for FDI by focusing on the aspect of tax treaty terminations.

The structure of the study is as follows. Section 2 examines the various treaties terminated in recent years, including the reason for their termination and subsequent history. Section 3 introduces a theoretical model, which is discussed in Section 4. Finally, Section 5 concludes.

2 | TREATY TERMINATIONS

Unilateral terminations of tax treaties often follow the same pattern, where one country breaks a treaty with another country, which is used for abusive practices and results in a loss of tax revenue, and the other side makes no concessions in the renegotiations. This section looks at specific examples of tax treaty terminations. In particular, it focuses on the recent terminations explicitly mentioned in the Introduction. Table 1 lists the tax treaty terminations, their effective termination month and year, the reasons for termination and whether a new treaty came into force afterwards. The data source is the International Bureau of Fiscal Documentation Tax Research Platform (IBFD, 2022) unless otherwise stated.

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TABLE 1 Tax treaty terminations.

Tax treaty	Effective	Terminating country	Effective termination	Reasons for termination (from the point of view of the terminating country)	New treaty
Argentina–Austria	January 1978	Argentina	January 2009	Double non-taxation in the Austrian bond market, round-tripping, circumvention of CFC rules though Austrian holding companies, non-payment of personal assets tax charges (PATC), most favoured nation clause in other treaties	Yes (not in force)
Argentina–Chile	January 1986	Argentina	January 2013	Non-payment of PATC, double non-taxation through the abusive use of holding corporation regime, most favoured nation clause in other treaties	Yes (in force)
Argentina–Spain	January 1995	Argentina	January 2013	Non-payment of PATC, double non-taxation through the abusive use of holding corporation regime, most favoured nation clause in other treaties	Yes (in force)
Argentina–Switzerland	January 2001	Argentina	January 2013	Non-payment of PATC, lack of right to collect withholding taxes, lack of information exchange provision, triangulation of foreign trade transactions	Yes (in force)
Mongolia–Kuwait	January 1998	Mongolia	April 2015	Zero withholding rate on dividends and interest, exemption of technical service fees	No
Mongolia–Luxembourg	January 2004	Mongolia	January 2014	Zero withholding rate on dividends and bank loans, participation exemption	No
Mongolia–Netherlands	January 2004	Mongolia	January 2014	Zero withholding rate on dividends and bank loans, participation exemption, loose substance rules, 5% withholding rate on technical service fees, no tax on indirect transfers of mining licences, differences in defining royalties, lack of anti-abuse provision	No

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TABLE 1 (Continued)

Tax treaty	Effective	Terminating country	Effective termination	Reasons for termination (from the point of view of the terminating country)	New treaty
Mongolia–United Arab Emirates	January 2001	Mongolia	January 2015	Zero withholding rate on dividends and interest, exemption of technical service fees	No
Senegal–Mauritius	January 2005 for Senegal, July 2005 for Mauritius	Senegal	January 2020 for Senegal, June 2020 for Mauritius	Residence taxation, investments through Mauritius for tax optimisation	No
Rwanda–Mauritius	January 2003 for Mauritius, January 2004 for Rwanda	Rwanda	January 2013 for Rwanda, July 2013 for Mauritius	Zero withholding tax rate on interest, dividends and royalties, residence taxation, treaty shopping	Yes (in force)
Zambia–Mauritius	July 2012 for Mauritius, August 2012 for Zambia	Zambia	December 2020 for Zambia, June 2021 for Mauritius	Residence taxation, no real economic activities but mostly shell companies in Mauritius	No
Malawi–Netherlands	July 1964	Malawi	January 2014 for the Netherlands, April 2014 for Malawi	Exemption of interest payments and management fees from withholding taxes	Yes (not in force)
Finland–Portugal	January 1972	Finland	January 2019	Non-taxation of Finish pensioners moving to Portugal	No
Sweden–Portugal	January 2000	Sweden	January 2022	Non-taxation of Swedish pensioners moving to Portugal, non-taxation of capital gains from Sweden	No
Sweden–Greece	January 1963	Sweden	January 2022	Non-taxation of Swedish pensioners moving to Greece, non-taxation of capital gains from Sweden	No
Denmark–France	January 1958	Denmark	January 2009	Non-taxation of Danish pensioners moving to France	Yes (not in force)
Denmark–Spain	January 1974	Denmark	January 2009	Non-taxation of Danish pensioners moving to Spain	No

(Continues)

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2.1 | Argentina

A series of tax treaty terminations in Argentina started back in 2008 with the termination of a treaty with Austria (Teijeiro, 2013). In 2011, Argentina convened a commission to review its tax treaties. Some of them had loopholes that allowed foreign investors to significantly reduce tax payments (Verstraeten, 2018). This led Argentina to terminate tax treaties with Chile, Spain and Switzerland in 2012. According to estimates, in 2011, Argentina lost 75 million US dollars in tax revenue through tax avoidance via Chile and 60 million US dollars[10] via Spain (Latindadd, 2013). There were fears that these terminations would greatly affect multinational companies from these countries operating in Argentina (Edelstein & Rodriguez, 2012). Though some regarded these terminations as an attempt of Argentina to set its own tax policy regardless of previous international commitments, others viewed the situation as a positive step towards a new policy with a regular assessment of revenue losses, abusive practices and distortions (Teijeiro, 2013). Moreover, these countries were very important investors to the Argentinian economy so that new tax treaties were soon signed again, but without previous loopholes for tax avoidance.

2.1.1 | Argentina–Austria

The double tax treaty between Argentina and Austria was signed in September 1979 and entered into force in January 1982 effective as of 1 January 1979. The treaty did not follow the OECD model but granted the exclusive taxing right to the source country (Htj, 2022). The treaty was terminated in June 2008 effective as of 1 January 2009 (Orbitax, 2008a). Following the tax treaty termination, about 1 billion US dollars in investments moved to Chile (Latindadd, 2013). The new treaty was signed in December 2019 and has not entered into force yet (Rodríguez et al., 2020).[11]

The termination of the treaty followed abusive behaviour of Argentinian taxpayers in the Austrian bond market (Teijeiro, 2013). Austria had an exclusive right to tax their public bond holdings and related interests as well as provided domestic exemptions from taxes on these bonds, which resulted in double non-taxation. Argentinians used the treaty for round-tripping and to circumvent Argentinian CFC rules through the use of Austrian holding companies. The termination also related to the fact that the treaty did not allow Argentina to collect the so-called personal assets tax charges (PATC). Without the treaty, 0.5 percent annual tax would have to be paid by foreign investors on the net equity value of the participation held in an Argentinian commercial company (Guarin, 2012). However, the treaty allocated the taxing rights to the country of residence of investors. Foreign investors could use Austria as a conduit country to avoid paying PATC. Moreover, there was a danger that other countries that had a most favoured nation clause in the treaty with Argentina would demand the same rules for their investors.

[10] 60 million US dollars corresponded to more than 8% annual revenue from personal assets taxes (Latindadd, 2013).

[11] The conclusion of a new treaty was expected in 2016 (Schwanke, 2016) with already much earlier negotiations in place (Teijeiro, 2013) but it seems to have taken some more years to fulfil.

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2.1.2 | Argentina–Chile

The double tax treaty between Argentina and Chile was signed in November 1976 and entered into force in December 1985 effective as of 1 January 1986. The peculiarity of the treaty was that it did not follow the OECD model, but instead adopted the source principle, giving full tax exemption in the non-source country (Edelstein & Rodriguez, 2012). The Chilean government was notified of the termination in June 2012. The termination was effective as of 1 January 2013. The new treaty was signed in May 2015 and entered into force in October 2016 effective as of 1 January 2017.

The termination of the treaty had several reasons (Alba, 2012). One of them was the non-payment of the PATC. Another reason was the misuse of holding corporation regime (source income taxation) and tax-exempt repatriation of assets in Argentina that resulted in double non-taxation (Alba, 2012). ‘The Canadian mining company Barrick Gold, the American companies General Motors and Procter & Gamble, Coca-Cola, and the large Argentine groups Pérez Companc and Arcor’ were investing via Chilean holding companies (Latindadd, 2013). ‘Aluar, the largest aluminium manufacturer in Argentina, the online sales company Mercado Libre and banks Macro and Patagonia’ purchased Chilean bonds to avoid the property and income tax.

2.1.3 | Argentina–Spain

The double tax treaty between Argentina and Spain was signed in July 1992 and entered into force in July 1994 effective as of 1 January 1995. The Spanish government was notified of termination in June 2012. The termination was effective as of 1 January 2013. The new treaty was signed in March 2013 and entered into force in December 2013 with retrospective effect on 1 January 2013.

The termination of the treaty had several reasons (Alba, 2012). One of them was the non-payment of PATC. Another reason was the abusive use of the Spanish holding company regime leading to double non-taxation (Guarin, 2012). According to the commission report mentioned above, this tax-planning scheme was used by many well-known companies like ‘the French corporation Danone, the US retailer Wal-Mart, the Chilean retailer Cencosud, the Brazilian oil company Petrobras, the car manufacturer General Motors, the Swiss cement company Holcim, the US chemical company Monsanto and large Argentine groups like the steel company Techint and the food company Aceitera General Deheza’ (Latindadd, 2013). There was a fear that countries with a most favoured nation clause in the treaties with Argentina would demand the same benefits for their investors. ‘Telefónica (telecommunications), Repsol (oil) and BBVA and Santander (banking)’ also used the holding regime for investing in Argentina.

However, it is difficult to link the situation with Spain only to the termination of the tax treaty. In 2012, Argentina nationalised a major Spanish-owned energy company, which led to a negative impact on FDI from Spain to Argentina[12] and required the government to pay compensation to the Spanish owners and to liberalise the investment policy to calm down international investors (Bonnefoy, 2016; Fernández González et al., 2019). This situation should not harm the identification of the effect for other countries because we can assume that all investors became less certain

[12]The effect was both mechanical (change of ownership from foreign to domestic) and reputational (Argentina violated private property rights).

TABLE 2 Problematic aspects of the Mongolian tax treaties (Ulziisaikhan, 2015).

Withholding taxes	Domestic rates	UAE treaty	Kuwait treaty	Luxembourg treaty	Netherlands treaty
Dividends	20%	0%	0% for at least 49% participation, 5% for others	15%/5%/0%	0% for at least 10% participation, 15% for others
Interest	10% for financial institutions, 20% for others	0%	0%	0% for financial institutions, 10% for others	0% for financial institutions, 10% for others
Royalties	20%	10%	10%	5%	5%
Technical service	20%	Exempted	Exempted	5%	5%

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through this situation. Another event that happened at about the same time was the suspension of the Pascua-Lama gold-mining mega-project, which led to a decrease in FDI flows to Argentina in 2013 (UNCTAD, 2014).

2.1.4 | Argentina–Switzerland

The double tax treaty between Argentina and Switzerland was signed in April 1997. It did not enter into force and was provisionally applied effective as of 1 January 2001. The Swiss government was informed of termination in January 2012. The effective date of the termination was debatable—immediately from the notice or 1 January of the following year. The new treaty was signed in March 2014 and entered into force in November 2015 effective as of 1 January 2015 for withholding taxes, and 1 January 2016 for other taxes and exchange of information.

The termination of the treaty had several reasons. One of them was the non-payment of the PATC. A second reason was that the treaty prevented Argentina from the collection of withholding taxes on royalty payments to Swiss tax treaty beneficiaries and again the danger that other countries may claim the same benefits for their investors. It was the only treaty by Argentina that did not have an information exchange provision (Verstraeten, 2018). For example, the tobacco company Philip Morris avoided income tax on royalties by transferring them to Swiss subsidiaries (Latindadd, 2013). Switzerland was used for 'triangulation of foreign trade transactions' to over-report profits to the buying company and avoid paying income tax in Argentina.

2.2 | Mongolia

In 2012, the Mongolian Ministry of Finance undertook an analysis of the lost tax revenue due to double tax treaties and considered termination of the treaties (Oxford Business Group, 2013). Also, in 2012, the IMF published a technical assistance report, in which it studied the Mongolian tax treaty network and provided technical advice to the Mongolian authorities (IMF, 2012). At the time, Mongolia was facing increased international tax planning, when some of its tax treaties were used to substantially cut source taxation in the country. It was seen harmful for the development of the country. Especially, investors in the mining sector were engaging in aggressive treaty shopping (Ulziisaikhan, 2015). As a result, the Mongolian authorities were planning to terminate all tax treaties and renegotiate them on the basis of trade volumes and economic reciprocity. Yet the IMF considered only a few tax treaties 'potentially harmful as they insufficiently protect the Mongolian tax base' and regarded termination 'as ultimate remedy'. Instead, the IMF recommended that Mongolia should repair its tax treaty network through selective renegotiations and amendments. Following the report and apparently unsuccessful renegotiations,[13] Mongolia terminated tax treaties with Kuwait, Luxembourg, the Netherlands and the United Arab Emirates (World Bank, 2021).[14] Table 2 summarises the main concerns raised, which led to the termina-

[13]Mongolia contacted the Netherlands in 2011 to renegotiate the treaty and the answer was no (Reuters, 2013). Five further proposals were sent afterwards but the parties did not reach a conclusion. Mongolia undertook about one-year unsuccessful efforts to renegotiate other treaties (Ulziisaikhan, 2015).

[14]Given the IMF recommendation to renegotiate, the termination of this and other treaties by Mongolia were regarded surprising (McGauran, 2013). The unexpected termination helps to overcome anticipation effects when estimating the impact of termination.

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tions. Some even argue that it could be a miscommunication between the IMF and the Mongolian authorities (Falcão, 2021). Still, the remaining treaties have some concerning aspects, which could mean further renegotiations or terminations in the future.[15]

2.2.1 | Mongolia–Kuwait

The double tax treaty between Mongolia and Kuwait was signed in March 1998 effective as of 1 January 1998. The treaty was terminated in November 2012 effective as of 1 April 2015 (Oxford Business Group, 2013). Currently, there is no tax treaty between the two countries.

Some of the problematic points raised in the IMF report were the zero withholding rate on dividends and interest and the exemption of technical service fees (IMF, 2012; Ulziisaikhan, 2015).

2.2.2 | Mongolia–Luxembourg

The double tax treaty between Mongolia and Luxembourg was signed in June 1998 and entered into force in March 2004 effective as of 1 January 2004. The treaty was terminated in November 2012 effective as of 1 January 2014 (Oxford Business Group, 2013). Currently, there is no tax treaty between the two countries.

Some of the concerning points brought up in the IMF report included the zero withholding rate on dividends and bank loans, and participation exemption, which have created international tax-planning opportunities (IMF, 2012).

2.2.3 | Mongolia–Netherlands

The double tax treaty between Mongolia and the Netherlands was signed in March 2002 and entered into force in October 2003 effective as of 1 January 2004. The treaty was terminated in November 2012 effective as of 1 January 2014 (Clearstream, 2013). Currently, there is no tax treaty between the two countries. However, some companies had special stabilisation agreements with Mongolia and were not subject to the termination (Reuters, 2013).[16]

The main reason for the termination was that the Mongolian government considered the tax treaty being used for tax avoidance by foreign extracting companies[17] (McGauran, 2013). An example brought up in the media was 'a little-known Amsterdam-based company with three employees, no office and not even its own mailbox', which 'represents billions in taxes' that the Mongolian government would never see (Reuters, 2013). According to the estimates, Mongolia may have lost about 230 million US dollars in taxes[18] between 2011 and 2015 due to the tax-planning scheme of the Oyu Tolgoi mine[19]—one of the largest copper mines world-

[15]Mongolia aimed first at reforming its domestic tax law and then starting treaty negotiations with new partners and amendments with old partners (Ulziisaikhan, 2015).

[16]'Taxes payable by the Investor shall remain Stabilised' (Oyu Tolgoi, 2009).

[17]The extracting sector accounts for 80% of Mongolia's exports, 30% of GDP and 32% of government revenue (McGauran, 2013).

[18]There was also opposition raised to these estimates (Forstater, 2018).

[19]The mine was expected to account for 30% of the Mongolian GDP after reaching full production (Oxford Business Group, 2013).

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wide (Kiezebrink et al., 2018). In particular, the treatment of dividends—participation exemption, loose substance rules and no withholding taxes—opened up possibilities for tax planning (IMF, 2012). Further problem areas were related to the 5% withholding tax on technical service fees, zero withholding tax rate on bank loans, differences in defining royalties, no tax on indirect transfers of mining licences and the lack of an anti-abuse provision (McGauran, 2013).

2.2.4 | Mongolia–United Arab Emirates

The double tax treaty between Mongolia and the United Arab Emirates was signed in February 2001 effective as of 1 January 2001. The treaty was terminated in November 2012 effective as of 1 January 2015 (Oxford Business Group, 2013). Currently, there is no tax treaty between the two countries.

The reasons for the termination included the zero withholding rate on dividends and interest and the exemption of technical service fees (IMF, 2012; Ulziisaikhan, 2015). According to the treaty, a source state could neither levy withholding taxes. Another issue was that the United Arab Emirates did not levy income taxes (except for oil and gas production).

2.3 | Mauritius

In recent years, several African countries terminated their tax treaties with Mauritius. The trigger was the publication of the so-called Mauritius Leaks, which exposed 'a sophisticated system that diverts tax revenue from poor nations' (Fitzgibbon, 2019). Experts expect a domino effect that other African countries in an attempt to maximise their taxing rights will terminate or at least renegotiate treaties with Mauritius and other countries (Mehboob, 2020).[20] African countries are becoming more aware of tax revenue they lose due to tax treaties with tax havens (Fitzgibbon, 2020a). For example, following some of these and the above terminations Uganda conducted a study of its tax treaty network (Hearson & Kangave, 2016).

2.3.1 | Senegal–Mauritius

The double tax treaty between Senegal and Mauritius was signed in April 2002 and entered into force in September 2004 effective as of 1 January 2005 for Senegal and 1 July 2005 for Mauritius. Senegal terminated the treaty in June 2019 effective as of 30 June 2020 for Mauritius and 31 December 2019 for Senegal (Orbitax, 2020). Negotiations of a new treaty were in process prior to the termination (Mauritius Revenue Authority, 2018) so that the decision to terminate was met with surprise (Fitzgibbon, 2020a). Currently, there is no treaty between the two countries, though negotiations are ongoing.

The treaty was considered being an 'enormous pipeline for tax avoidance' (Fitzgibbon, 2019). Senegal claimed to have lost about 257 million US dollars in tax revenue since the treaty had entered into force (MNE Tax, 2020). The tax treaty granted taxing rights to the residence country,

[20]E.g., Namibia, Uganda, and Lesotho are considering different options they have to alter their tax treaties (LEX Africa, 2020).

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which in these bilateral relations used to be Mauritius, rather than the source country, which was Senegal. Especially, there were various tax optimisation schemes in the extraction sector, where international companies invested in Senegal through Mauritius and benefited from the tax treaty (OECD, 2021). The Senegalese government felt it was necessary to act amid expectations of large investments coming in after the discovery of oil and gas deposits from natural resource companies and the fear that they would abusively use offshore companies in Mauritius (Fitzgibbon, 2020a).

2.3.2 | Rwanda–Mauritius

The double tax treaty between Rwanda and Mauritius was signed in July 2001 and entered into force in April 2003 effective as of 1 July 2003 for Mauritius and 1 January 2004 for Rwanda. Rwanda terminated the treaty in June 2012 effective as of 1 January 2013 for Rwanda and 1 July 2013 for Mauritius with renegotiations starting in November 2012 (Amar, 2013). The new treaty was signed in April 2013 and entered into force in August 2014 effective as of 1 July 2013 for Mauritius and 1 January 2013 for Rwanda.

The old tax treaty had a zero withholding tax rate on interest, dividends and royalties and granted all taxation rights to Mauritius (Oguttu, 2016). This led to treaty shopping when investors from other countries registered in Mauritius to do their business in Rwanda.

2.3.3 | Zambia–Mauritius

The double tax treaty between Zambia and Mauritius was signed in January 2011 and entered into force in June 2012 effective as of 1 July 2012 for Mauritius and 1 August 2012 for Zambia. Zambia terminated the treaty in June 2020 effective as of 31 December 2020 for Zambia, and 30 June 2021 for Mauritius (KPMG, 2020). Negotiations of a new treaty are in process.

The treaty was regarded 'not balanced or fair' (Fitzgibbon, 2020b). It gave exclusive taxation rights to the residence country and deprived Zambia of taxing dividends, interest and royalties arising in Zambia (Government of Zambia, 2020). Many Mauritian companies did not have any real activities but were rather used as shell companies. The new treaty is expected to contain shared taxing rights and anti-abuse provisions.

2.4 | Malawi

2.4.1 | Malawi–Netherlands

The double tax treaty between Malawi and the Netherlands was an extension of the 1948 U.K.-Netherlands Convention signed in June 1969. It entered into force in January 1970 effective retroactively as of July 1964. Malawi terminated the treaty in June 2013 effective as of 1 January 2014 for the Netherlands and 1 April 2014 for Malawi. The new treaty was signed in April 2015 and ratified by the Netherlands in March 2018. Malawi has not ratified it yet.

The tax treaty was used by international investors to avoid paying taxes in Malawi. An example of such activities discussed in the media was the case of an Australian mining company, which avoided paying more than 43 million US dollars in taxes in Malawi between 2009 and

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2014 (ActionAid, 2015). For this, the company relied on the exemption of interest payments and management fees from withholding taxes between Malawi and the Netherlands.

2.5 | Scandinavian countries

Denmark, Finland and Sweden have terminated some of their tax treaties with southern European countries. All of these terminations follow the same pattern of mostly pensioners moving from the north to the south and using tax treaties to save taxes. Whereas the Scandinavian countries applied source taxation, their partners were in favour of residence taxation. What happened was that pension premiums were deductible and pension build-up was exempt for those working in the Scandinavian countries with the intention to tax them when they would be pensioners but they moved to the southern European countries and paid no taxes at all on their pensions. However, terminating the whole treaties rather than cancelling some of the pensions-related provisions may have broader economic effects than just be limited to the particular socio-demographic group (Bundgaard & Dyppel, 2009; Signer & Delaurière, 2008). At the same time, given that all the countries and their partners are members of the European Union (EU), economic effects may be limited through applicable EU directives.

2.5.1 | Finland–Portugal

The double tax treaty between Finland and Portugal was signed in April 1970 and entered into force in July 1971 effective as of 1 January 1972. In November 2016, a new treaty was signed between the two countries to allow Finland taxing Finnish pensioners living in Portugal (Ministry of Finance, 2016). However, Portugal was not going to ratify it so that Finland terminated the old treaty in June 2018 effective as of 1 January 2019 (Ministry of Finance, 2018). The new treaty has not entered into force since then so that currently there is no effective tax treaty between the countries.

2.5.2 | Sweden–Portugal

The double tax treaty between Sweden and Portugal was signed in August 2002 and entered into force in December 2003 retroactively effective as of 1 January 2000. One of the main issues was that under the tax treaty provisions, Sweden could not tax Swedish pensioners residing in Portugal (Orbitax, 2022). This also concerned capital gains arising in Sweden (Orbitax, 2021). To address this, an amendment to the treaty was signed in 2019. However, it was not ratified by Portugal so that Sweden terminated the treaty in June 2021 effective as of 1 January 2022. Now, there is no tax treaty between the countries.

2.5.3 | Sweden–Greece

The double tax treaty between Sweden and Greece was signed in October 1961 and entered into force in August 1963 effective as of 1 January 1963. In June 2021, Sweden terminated the treaty effective as of 1 January 2022. Currently, there is no tax treaty between the countries.

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The reasons for the termination were the same as in the case with Portugal—individuals moving from Sweden to Greece to pay low or no taxes on some income sources like occupational pensions and capital gains arising in Sweden (Orbitax, 2021).

2.5.4 | Denmark–France

The double tax treaty between Denmark and France was signed in February 1957 and entered into force in April 1958 effective as of 1 January 1958. In June 2008, Denmark terminated the treaty effective as of 1 January 2009 (Orbitax, 2008b). A new treaty was signed in February 2022 but has not entered into force yet.

The reasoning behind the termination was the difficulties with renegotiating the treaty, especially, in terms of the pension income taxation (Orbitax, 2009). Whereas Denmark applied the source taxation, France applied the residence taxation. As a result, it happened that Danish pensioners did not pay taxes on their pension premiums and build-up when working, then moved to France, and did not pay taxes on their pensions to Denmark.

2.5.5 | Denmark–Spain

The double tax treaty between Denmark and Spain was signed in July 1972 and entered into force in June 1973 effective as of 1 January 1974. In June 2008, Denmark terminated the treaty effective as of 1 January 2009 (Orbitax, 2008c). Currently, there is no tax treaty between the two states.

The termination was predominantly driven as in the case with France by the disagreement over the taxation rights over Danish pensioners residing in Spain (Schmidt, 2018).

3 | THEORETICAL MODEL

The theoretical model behind tax treaty terminations is inspired by the policy uncertainty and private investment model (Rodrik, 1991). We could think of two types of investors following the termination of a treaty: (1) Investors that have been operating in the country prior to the termination and can either stay in the country or leave it, and (2) Investors that have not been operating in the country prior to the termination but are considering entering the country. We analyse the two cases separately.

1. Investors that stay in the country, which terminates a treaty, earn $V_1 = \frac{(r-t)+\pi(V_t - V_1)}{\rho}$, where $(r-t)$ is the return from activities in the country (r is the rate of return on FDI and t is the termination-induced distortion), π is the probability that a new treaty will be concluded, $(V_t - V_1)$ is the gain from the conclusion of the new treaty and ρ is the discount factor. $V_t = \frac{r}{\rho}$, assuming that the new treaty will eliminate the created distortion, or $V_t = \frac{r-t_0}{\rho}$, where $t_0 < t$ because the new treaty is likely to be less beneficial to foreign investors than the old treaty but still more beneficial than the situation without a treaty.

$$V_1 = \frac{(r-t)+\pi V_t}{\rho+\pi} = \frac{(r-t)+\pi \frac{r}{\rho}}{\rho+\pi}$$

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Alternatively, investors leave the country, which brings them $V_0 = \frac{r^*}{\rho} - \theta$, where θ are the exit costs and r^* is the maximum rate of return on FDI they could earn elsewhere.

An investor will stay in the country if $\frac{(r-t)+\pi\frac{r}{\rho}}{\rho+\pi} \geq \frac{r^*}{\rho} - \theta$.

With this, we see that the investor reaction to the treaty termination is not unambiguous and depends on several variables. Investor decision to stay increases in the rate of return on FDI, in the probability that a new treaty will be concluded, and in the exit costs. It decreases in the maximum rate of return on FDI investor could earn elsewhere and in the distortion created by the treaty termination.

More generally, we could think of a decision on how much to invest in the host country (α) and elsewhere ($1-\alpha$).

$$\max_{\alpha} profit = \alpha V_1 + (1-\alpha)V_0$$

In the optimum, $V_1{}' = V_0{}'$. Following the termination, the investor will adjust the share α so that the marginal profits from the two investments are equal.

2. Investors[21] that enter the country, which terminates a treaty, earn $V_1 = \frac{(r-t)+\pi(V_t - V_1)}{\rho} - \varepsilon$, where ε are the entry costs.

$$V_1 = \frac{(r-t)+\pi\frac{r}{\rho} - \rho\varepsilon}{\pi+\rho}.$$

Alternatively, investors would earn $V_0 = \frac{r^*}{\rho}$.

An investor will enter the country if $\frac{(r-t)+\pi\frac{r}{\rho} - \rho\varepsilon}{\pi+\rho} \geq \frac{r^*}{\rho}$.

The investor reaction is again not unambiguous. The investor decision to enter the country increases in the rate of return on FDI and in the probability that a new treaty will be concluded. It decreases in the distortion created by the treaty termination, in the maximum rate of return on FDI they could earn elsewhere, and in the entry costs.

The model is generalisable to a case where investor decides on the share of FDI as above. The investor will be entering the market till the marginal profit in the market is equal to the marginal profit investor gets elsewhere.

The theoretical model suggests that the effect of tax treaty termination on FDI should not necessarily be negative. It depends on the entry and exit costs, on the rate of return on FDI, on the size of the distortion caused by the termination, and the probability of concluding a new treaty.

4 | DISCUSSION

The theoretical model presented offers a comprehensive framework for understanding the dynamics of tax treaty terminations and their impact on FDI. This model delineates the

[21]We are considering new investors because otherwise they would have entered when there had been a treaty.

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decision-making processes of two types of investors: those already operating in the host country and those considering entry post-termination. The intricacies of the model underscore the necessity of an empirical examination to validate its hypotheses and uncover nuanced insights into the FDI responses to treaty terminations.

To empirically test this model, future research should focus on examining FDI data before and after tax treaty terminations. A key hypothesis is that terminations lead to a significant decrease in FDI from countries whose treaties have been terminated. This can be tested by comparing the FDI inflows from affected countries to those from unaffected countries, providing a control group for more robust analysis. Such a comparison allows for isolating the effect of treaty termination from other macroeconomic factors influencing FDI.

Several challenges arise in empirically testing the model, primarily due to unobserved variables like the probability of a new treaty being concluded and the distortion created by the termination.

Moreover, tax treaty terminations have a very complex nature, as far as timeline is concerned. However, we would not expect a decline in FDI before the termination is effective because investors can still use tax treaty benefits. It could even be the case that investors may accelerate FDI to precede treaty termination. In this case, rapid investment rise before termination would reflect tax-planning opportunities. When the termination is effective, new investors are unable to use it anymore. In comparison to tax treaty conclusion, when investors can take time to react to the treaty benefits, after the termination is effective, new investors can no longer rely on the treaty benefits.

The effect of tax treaty terminations on FDI could be downward biased if investors choose other countries to reroute their FDI. To illustrate this, let us think of country i, which terminated its tax treaty with country j. Country i has a tax treaty with country k as well, which is now used by the investors instead of the i–j treaty. FDI from j to i decreases, whereas FDI from k to i increases. In this case, we would have both an effect of the tax treaty termination on the treatment and control group.

For identification purposes, unilateral, highly unexpected (Teijeiro, 2013) character of tax treaty terminations is important to take care of other potential effects such as pre-expectations. Otherwise, the investors would have time prior to the terminations to restructure their investments. An investor could accelerate a given investment to ensure that it is covered by a treaty being terminated. As the analysis of the terminated treaties shows, most of the terminations seem to have been an unexpected step following often unsuccessful negotiations.[22]

Future research should explore several areas to test and refine the theoretical model. Developing proxies for unobserved variables such as the probability of a new treaty and the distortion created by termination can enhance empirical analyses. Expanding the dataset to include more countries and treaties will provide a larger sample for more generalised conclusions. Conducting longitudinal studies can help observe long-term FDI trends post-termination and the potential for new treaty negotiations. Additionally, analysing sector-specific FDI responses can reveal which industries are most affected by treaty terminations, and investigating how different types of investors, such as small versus large or risk-averse versus risk-taking, react to treaty terminations can provide deeper insights.

[22]Given the drastic and rare nature of unilateral terminations, we expect both sides to adhere to a diplomatic solution and termination to be the last resort after diplomatic efforts have failed. We assume that investors have similar expectations and would not change their investment structure given the low probability of the event, but potentially high costs connected with restructuring.

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5 | CONCLUSION

In conclusion, the findings of this study shed light on the termination of tax treaties and its implications for FDI. The main narrative identified in the study reveals that treaties are often terminated with countries that are used or have the potential to be exploited for abusive purposes. Developing countries express concerns about developed countries using tax treaties to avoid paying taxes in the countries where they conduct business, while developed countries are more focused on personal-level tax avoidance, such as pensioners taking advantage of low or zero tax rates by changing their country of residence through existing tax treaties.

The theoretical model developed in this study predicts that the effect of tax treaty termination on FDI is ambiguous and depends on various factors such as entry and exit costs for firms, the distortion created by termination, the rate of return on FDI and the probability of concluding a new treaty.

Future research could expand on this study by empirically examining the effects of terminations on FDI and also other economic variables. For instance, analysing the impact of terminations on the flow of people could provide valuable insights. Additionally, including a larger number of terminated treaties in the analysis, once sufficient time has passed since their terminations, would enhance the robustness and generalisability of the findings.

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CONFLICT OF INTEREST STATEMENT

The author declares that he has no competing interests.

DATA AVAILABILITY STATEMENT

The data used to generate this paper is publicly available.

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