

Never-Ending the Application of Double Tax Treaties to Foreign Direct Investment

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ABSTRACT

Foreign Direct Investment (FDI) plays an important role in avoiding double taxation of income in the two countries. Double Tax Treaties (DTT) is the main instrument to coordinate international taxation directly or can also be called a bilateral agreement between countries. In many developing countries, DTT can inhibit FDI because they also enable the exchange of information between tax authorities. Considering that, it is an empirical question about whether DTT helps attract FDI or not, a wider and broader discussion is needed to fully comprehend the resulting dynamics in such developing countries. To this end, the current study aims at reviewing and discussing DTT and FDI, as it is considered key that the relationship between DTT and FDI is crucial for taxes revenues performance. The body of knowledge that is created here is meant to support mainly students and practitioners, but also researchers, which are addressing the problem of DTT and FDI in developing countries.

Keywords: Double Taxes Treaties, Foreign Direct Investment, Developing Countries, Tax Revenues Performance.

1. INTRODUCTION

Investment in economic development for developed countries and developing economies has an essential role in business worldwide. It helps in economic development in today's economy, financial stability, decreasing unemployment rates, and increasing the nation [1].

With globalization, it is crucial to realize that market integration is still limited in absolute terms. Foreign operations of multinational companies throughout the world produce only about 9% of global output. Exports of goods and services add up to 29% of world GDP, but even that number drops to around 20% if we adjust for output across the border more than [2]. This means has potential cross-border improvement and world economic linkages [3]–[5]. Modern globalization is acceptable for companies and investors because it actively strengthens an individual's roles through innovation and increased productivity and can potentially unify all knowledge in the world's development process with unprecedented opportunities for productivity growth [6]. Foreign direct investment is needed to apply modern globalization in

worldwide business [7]. FDI is an investment made with another country by an investor who must invest fully because of the entire business or partnership. It allows investors to get different opportunities than their own country and can access other countries' markets [7]. FDI plays an important role in avoiding double taxation of income in the two countries. Double Tax Treaties (DTT) is the main instrument to coordinate international taxation directly or can also be called a bilateral agreement between countries [8]. Also, there is another dilemma that some countries base taxes on the residence or citizenship principle. In contrast, other countries base taxes on the source principle [9], and the impact of bilateral tax treaties on foreign direct investment (FDI) is still unclear. This ambiguity is evident from the relatively broad empirical view that DTT variations in taxation affect the distribution of FDI activities [10]. The fact that DTT is challenging is negotiated and implemented. Blonigen & Davies [11] find strong positive effects (at least sometime after the DTT signature) of 'old' tax treaties on FDI using 1966-1992 US data, the Empirical model using the Gravity and Markusen model. However,

Blonigen & Davies find negative effects of 'new' tax treaties, using 1982-1992 data OECD and 1980-1999 US data, empirical model using Markusen model [10]–[13]. Some research finds a null effect of DTT on FDI are Davies using 1996-2000 US data, empirical model using Markusen model [14]; Louie & Rousslang [15] using 1992, 1994, and 1996 U.S. data, empirical model using the alternative model; Baker using 1991-2006 transition countries data [16], empirical model using Markusen model. Other research finds a positive effect of DTT on FDI are: Di Giovanni using 1990-1999 at 1993 countries data, empirical model using a gravity model [17]; Neumayer states positively at middle-income countries, using 1970-2001 developing countries, empirical model using the alternative model [18]; Stein & Daude using 1997-1999 OECD data, empirical model using gravity and Markusen model [19]; Barthel et al. using 1978–2004 with a sample of 30 FDI countries, empirical model using specific determinants of FDI [20]; Sato using 1981-2003 Japan data, empirical model using gravity model [21]; Blonigen et al., using 1987-2007 US data, empirical model using Markusen model [13]; Hong using 2012 in 70 countries data, empirical model using five bilateral variables [22]; Kumas & Millimet [23] state positive effects of DTTs at lower quantiles of the distribution of FDI, using a sample of Blonigen & Davies (2004), empirical model using Markusen model. Moreover, other research finds a negative effect of DTT on FDI are: Egger et al. [39] using 1985-2001 OECD data, empirical model using Markusen model; Kumas & Millimet [23] state negative effects in the upper quantiles, using a sample of Blonigen & Davies [12], empirical model using Markusen model.

Double Tax Treaties are not easy to implement because many studies have different results. Some researchers claim that there is evidence of a positive, negative, and null relationship. This paper examines the literature on the impact of double tax treaties on FDI in various countries, especially developing countries. Some studies have different research results; some researchers provide conflicting evidence. DTT can inhibit FDI because they also enable the exchange of information between tax authorities. Therefore, it is an empirical question about whether DTT helps attract FDI or not. So far, empirical evidence on this issue is inconclusive. Consequently, from the explanation above, this study examines the literature on the extent to which some tax treaties attract foreign direct investment.

Double tax is the taxation of the same income or capital from taxpayers in the same period in two jurisdictions [16]. The tax system designed by DTT references each country; this is useful so that no two or more countries can tax the same income on cross-border transactions [24],[25]. DTTs using for precluding DTT in countries. According to Ahmed & Giafri, there are two ways to prevent DTT. First, the first state allocates to countries that sign exclusive taxation rights or taxation

rights granted to two countries with the mechanism provided; second, taxation rights are the first state's authority [25].

DTTs preclude double taxation in one of two ways by Ahmed Bin Saghir Ahmed & Najmiddin Mustafa Giafri: one of the countries has exclusive taxation rights or both. If the two countries have tax rights, several exceptions will be given, such as tax credits. DTTs provides for the exchange of information to help prevent tax avoidance and evasion between two countries that agreed. In addition to avoiding double taxation, DTT also aims to attract direct investment from other countries, avoid tax avoidance, allocate tax rights between the signatory countries, and provide legal certainty [25].

2. METHODS

Research is a systematic review. This research data comes from the literature obtained through the internet in the form of student research results on a double tax treaty on foreign direct investment in various countries published on several websites such as Scopus, Emerald, Scholar, and others. After searching through the website, research data on a double tax treaty from 2000 to 2018 amounted to 100 studies consisting of 100 journals. The data was then narrowed based on themes related to foreign direct investment by 48 researchers. It is done to maintain the recency of writing based on the latest research results. The search begins by specifying a set of keywords and possible combinations that can be significant for the Double Tax Treaties and Foreign Direct Investment. Keywords related to other important concepts analyzing are possible Double Tax Treaties, and Foreign Direct Investment also used.

3. RESULTS AND DISCUSSION

The following result section summarizes prior studies' findings on the impact of DTTs on FDI, with the literature divided into four groups with findings. According to conclusions, the studies sorted indicate that DTT has a positive effect, a negative effect, no effect (null), and mixed effects on FDI. Specific studies that investigate the effect of DTT on FDI typically use the Tinbergen gravity model [26],[27] or the Markusen capital-knowledge model [28], [29].

3.1. Positive Effect

Hines examined the effects of the 'tax sparing' agreement rather than DTT on Japanese FDI [30]. This paper state a 'tax sparing' agreement in developing countries exists 1.4 to 2.4 times higher than what it would have been otherwise. Di Giovanni examined the impact of macroeconomic and financial variables on merger and acquisition activities as a cross-border FDI component from 1990 to 1999 [17]. They were using samples from 193 countries, using gravity models and F.E. techniques.

In this paper, the indicator FDI variable is the aggregate data on cross-border mergers and acquisitions: Flow, for the DTT indicator, is DTT. The results found that an increase in cross-border acquisition activities accompanied tax agreements. The caveat of the study is that mergers and acquisitions may not result in any net increase in actual FDI since the activity may constitute nothing more than one foreign investor selling interests in foreign assets to another.

Neumayer (2007) used a dataset from 1970 to 2001, a sample of 114 host countries. He provides DTT signing with the U.S. or other developed countries to increase FDI inflows to developing countries by statistical evidence [18]. However, it should be noted about the substantial costs incurred by developing countries in negotiating, signing, and withdrawing DTT and losses in tax revenue compared to the benefits shown from signing DTT in the form of higher FDI increases. He also estimated the effect of OECD DTT on total FDI in developing countries and concluded that there was a positive effect of DTT on FDI.

Azémar et. al. study the effect of 'tax sparing' clauses in the period 1989- 2000 with a sample of 26 developing countries [31]. The results show that the comparison between tax- sparing and non-tax-sparing countries is 3: 1. Investors are very concerned about the taxation provisions in select locations [31]. It can conclude that the tax sparing clause positively influences the location of Japanese FDI. Barthel et al. [32] state that foreign investment for the host country is positively related to DTT; this is estimated by statistical results that show that DTT is insignificant [32]. However, substantively DTT can attract more FDI, provide capital gains, and increase competition in the host country. Their study considers DTT as an essential policy tool using a sample of 30 sources and 105 host countries. They have access to a larger sample built from aggregate data [17], [18].

Weyzig analysed structural determinants of FDI diversion via the Netherlands that uses Dutch microdata of shell companies in 2007 and analyses tax treaty shopping as a determinant of FDI [33]. The author finds that the shares of bilateral FDI flows through the Netherlands had higher points with a tax treaty route between the home and host country via the Netherlands. This article also provides some evidence of investment treaty shopping via Dutch SPEs as well.

Hearson [34], this paper has replicated two studies that resulted from negotiating tax agreements, integrating fiscal content data and tax agreements by adding fiscal data from Prichard et. al. [35] for research by Barthel and Neumayer [20] and Hearson [36] for research by Schwarz [37]. The results of this study indicate that developing countries tend to make agreements with rich countries.

3.2. Negative Effect

Desai et. al. analyzed investment decisions by foreign affiliates owned by Americans abroad, finding that taxes have a real and statistically significant negative impact on investment [38]. Egger et al. examine that DTT has two primary goals: eliminating double taxation for cross-border activities and tax avoidance and evasion prevention [39]. This study uses an OECD sample out of our FDI during the 1985-2000 period and identified that the DTT effect was negative on FDI. Our general equilibrium model explained if tax revenues are spent on public infrastructure to reduce plant set-up costs. It might also indicate that a bilateral tax treaty's tax avoidance aspect is present in our sample. Coupé et. al. [40] use smaller bilateral data samples that find that bilateral investment treaties (BITs) have a positive impact on FDI, while DTT has an insignificant impact. They present evidence that countries with signed BITs with OECD countries will receive more FDIs while signing DTTs exerts no effect [40].

Blonigen & Davies analyzed bilateral FDI and OECD out of the country from 1982 to 1992, the empirical model used was the Markusen model with the econometric technique POOL, F.E. The results of this study using ordinary least square estimation (OLS) found that the presence of DTT was associated with higher bilateral FDI flow and stock [13]. However, with the development of research that distinguishes between old DTT and new DTT, this new agreement does not positively affect FDI in OLS Estimates. In estimating fixed effects, which are only based on variations in the data, the old agreement concluded before the sample's start is not relevant to the estimate. The effect of the estimation of the agreement becomes even negative. Likewise, Blonigen & Davies [12], in the FDI analysis in and out of the U.S. during the period 1980 to 1999, the empirical model used was the Markusen model with the F.E. econometric technique. This study found that the U.S. agreement during this period did not have the best statistically significant effect and the worst negative effect on inbound and outbound [12].

Davies [14] confirms insignificant and negative findings from both studies and finds irrelevant results when looking explicitly at DTT renegotiation [14]. Egger et al. [39] used OECD data from 1985-2001, with the model marked as the empirical and econometric models using differences in differences. This study estimates the effect of tax treaties on the bilateral outward FDI of the sample countries. This study found negative results between DTT and FDI. There is a reason that DTT is an endogenous event, so the division of the two groups was carried out; namely, this treatment group includes 67 observations, while the control group without agreement includes 719 observations [42].

3.3. No Effect

Davies [14] uses both inbound and outbound US FDI data from 1996 to 2000 using Markusen as an empirical model and OLS as an econometric model. This study's results cannot consider this evidence very slowly because we could not observe FDI activities before this agreement existed [14]. It may be since data on aggregate FDI activity is not suitable for addressing whether this issue is related to corporate-level behavior behind the overall results, and also that the additional possibility of not promoting FDI activities by the new agreement is that the agreement can increase investment uncertainty, at least in short-term. Moreover, this study shows that, during this sample period, 20 treaty renegotiations took place. The overall finding is that the revisions are generally insignificant with negative coefficients, indicating no strong positive effect of treaty renegotiations on FDI. On the other side, Blonigen & Davies [12], except having a negative effect, also have investigated the US FDI flows from 1980 to 1999 and find that DTTs concluded by the U.S. during this period had no significant effect on inward and outbound FDI.

Baker [16] uses transition countries from 1991 to 2006 with the Markusen model as an empirical model and differences in differences as an econometric model; this study fails to document a significant impact of DTTs on FDIs. Thus, the author recommends that the strategy makers of least developed countries (LDC) investigate the costs and benefits of signing a new treaty and only sign such treaties if the benefits outweigh the costs.

Baker [16]. uses U.S. data from 1992, 1994, and 1996, with an alternative model. This study found that the failure to select variables for host country governance quality can lead to simple cross-section regressions to produce misleading implications that tax treaties encourage US FDI Coupé et, al. [40] researched 17 sources and nine host economies from 1990 to 2001. This study shows that no consistent results were found as a sign. The estimated agreement coefficient's statistical significance depends on the estimators used (OLS, random effects, effects fixed, two-stage least squares).

3.4. Mixed Effects

Neumayer (2007) uses developing countries from 1970 to 2001 with an alternative model as an empirical model and F.E. as an econometric model. The result of this study is Positive in middle-income developing countries [18]. Davies et al. [14] use Swedish countries from 1965 to 1998 with the Gravity model as an empirical model and OLS, and Probit as an econometric model. The results provide mixed information; No results for profit, but new affiliates stated positively [41]. Egger [39] uses 187 signatory countries from 1900 to 2013, with the most essential observable except DTT (economic and political) determinants as an empirical

model and Exponential-family generalized-linear models as an econometric model. The result shows Heterogeneous, only for the Specific content of DTT [42]. Kumas & Millimet [23] use a sample of Blonigen & Davies [12], with a Model similar to the Markusen model, and OLS, panel data as econometric data. The result shows heterogeneous: Positive effects of DTTs at lower quantiles of the distribution of FDI, but negative effects in the upper quantiles. This study has three conclusions: First, bilateral tax treaties in the statistical sense significantly impact the distribution of both U.S. inbound and outbound FDI. Second, there is evidence that the effects of symmetrical distribution are related to the direction of capital investment in our chosen specifications. Third, while the decision to model FDI in the level versus log is significant in the previous regression analysis [12],[50], it is far less in the distribution analysis.

Blonigen & Davies [13] used 23 developed source countries from 1982 to 1992 by analyzing the effects of old and new DTT on FDI using OECD data on bilateral FDI stocks and flows. This study states a positive relationship between the presence of DTT and higher stock and FDI flows. The authors also found that when "old DTT" concluded years before their study period distinguished from "new DTTs" entered during the observed period, the authors found that the new agreement did not have a positive effect on FDI activity. The combined effect of both the first and second agreements has a significant effect.

Sato [21] analyzes the impact of new and revised tax agreements in Japan on FDI and evaluates DTT's effect on Japanese FDI. This study states that for FDI in the long term, the new agreement has a significant positive impact, but the significance disappears after the revision.

Millimet & Kumas [23] used using detailed U.S. company-level data from 1987 to 2007 available through the U.S. Bureau of Economic Analysis. This paper provides two additional pieces of evidence between high and low countries; the results are positive for the high countries low and negative. These effects are mainly in the short term.

4. CONCLUSIONS

The conclusion of a literature review regarding the effect of DTT on FDI sorted according to conclusions indicates that DTTs have a positive effect, a negative effect, no effect (null), and mixed effects on FDI.

First, a few studies have stated that there are positive influences, as follows: Di Giovanni, used a sample of 193 countries from 1990 to 1999 [17]; Neumayer used a dataset from 1970 to 2001 and 114 host countries [18]; Azémar et, al. using 26 developing countries for the 1989–2000 period[31]; Barthel et al. [32], state that after controlling for various determinants of bilateral FDI

stocks [32]; Weyzig [33] analyzed shell companies in 2007 and analyzed tax treaty shopping as a determinant of FDI at the Netherlands [33]; Lejour (2014) using of all OECD countries from 1985 [43]. Hong (2018); use 70 countries in 2012 [23]; Hearson [34] replicated two studies, and Lejour [43] using of all OECD countries from 1985. Hong (22); use 70 countries in 2012[23]; Hearson (2018) focuses on DTT and analyzes its impact on FDI in and out of Spain from 1993 to 2013[34].

Second, a few studies have stated that there are negative influences, as follows: Desai, Foley, & Hines [38]; Egger et al. (2006), use an OECD sample out of our FDI during 1985-2000[42]; Coupé, Orlova, & Skiba (2009) use smaller bilateral data samples [40]; Blonigen & Davies [13] use OECD 1982- 1992; Blonigen & Davies [12] use U.S. countries 1980-1999; Davies [14]; Egger et al[39] used OECD data in 1985-2001[42].

Third, a few studies have stated that there is no effect influence, as follows: Davies (2003) uses both inbound and outbound U.S. FDI data from 1996 to 2000[14]; Baker (2014) uses transition countries from 1991 to 2006 and Baker (2014), uses U.S data 1992, 1994 and 1996[16].

Fourth, a few studies have stated that there is mix effect influence, as follows: Neumayer (2007) uses developing countries from 1970 to 2001[18]; Davies et al. (2009) use Swedish countries from 1965 to 1998 [41];, Egger [39], uses 187 signatory countries from 1900 to 2013[42]; Kumas & Millimet [23], use sample of Blonigen & Davies [12]; Blonigen & Davies (2005) used 23 developed source countries from 1982 to 1992 [13]; Sato (21) use 13 Asian countries from 1981 to 2003[21] and Millimet & Kumas [23] used using detailed U.S. company-level data from 1987 to 2007.

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