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THE IMPACT OF TAX TREATY ON FOREIGN DIRECT INVESTMENT IN INDONESIA

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ABSTRACT

Tujuan utama dari Persetujuan Penghindaran Pajak Berganda (P3B) atau yang lebih dikenal dengan nama *tax treaty* adalah untuk menghilangkan hambatan yang disebabkan oleh pajak berganda, tetapi sebagian besar studi empiris mengasumsikan bahwa P3B tersebut dapat mendorong *foreign direct investment* (FDI). Di sisi lain, beberapa studi empiris menyatakan bahwa P3B tidak berpengaruh terhadap FDI. Berdasarkan hasil penelitian terdahulu yang beragam dan saling bertentangan, penelitian ini bertujuan untuk mengetahui pengaruh P3B terhadap FDI Indonesia. Objek penelitian ini adalah P3B antara Indonesia dengan 27 Negara Mitra P3B selama periode 1996 sampai 2017. Penelitian ini menggunakan data panel dengan *Fixed Effect Model*. Penelitian ini menunjukkan bahwa variabel independen secara bersama-sama mempengaruhi FDI di Indonesia. Secara parsial, P3B dalam jangka panjang berpengaruh positif terhadap FDI di Indonesia, sedangkan P3B dalam jangka pendek dan P3B dalam jangka menengah tidak signifikan secara statistik. Koefisien determinasi menunjukkan bahwa pengaruh variabel independen terhadap FDI di Indonesia sebesar 48.45% sedangkan sisanya dijelaskan oleh penyebab lain di luar model regresi ini. Penulis menyarankan dalam rangka mendapatkan hasil yang lebih komprehensif mengenai hubungan antara P3B dan FDI, diperlukan kombinasi dengan penelitian kualitatif.

The primary goal of double tax agreement (DTA) or better known as tax treaty is to remove the obstacles that double taxation presents but most empirical studies assume that tax treaty encourage foreign direct investment (FDI). On the other hand, several empirical studies state that tax treaty has no effect on FDI. Based on the results of previous studies that are mixed and contradictory, this study aims to determine the impact of tax treaties on FDI in Indonesia. The object of this research is tax treaties between Indonesia and 27 treaty partners in the period 1996 to 2017. This study use panel data with Fixed Effect Model. This study shows that the independent variables together affect the FDI in Indonesia. Partially, tax treaty in the long term has positive effect on FDI in Indonesia, meanwhile tax treaty in the short term and tax treaty in the medium term are not significant statistically. The coefficient of determination shows that the influence of the independent variables on the FDI in Indonesia is 48,45% while the rest is explained by other causes outside the regression model of this study. The authors suggest in order to obtain comprehensive results regarding the relationship between tax treaty and FDI, combination with qualitative research is needed.

1. INTRODUCTION

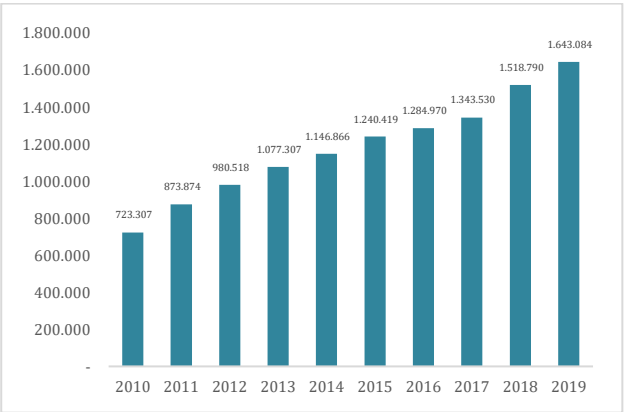
As a developing country, Indonesia need funds to implement the national development. The needs of funds in substantial amount was due to efforts to catch up with the development of advanced countries, both regionally and globally. Indonesia still has not been able to provide the development fund. In addition, the efforts to find domestic sources of financing, the government has also attracted foreign sources of financing, one of which is foreign direct investment (FDI) (Sarwedi, 2002). For the past decades, the capital inflows or FDI in Indonesia has a positive trend.

Figure 1: Foreign Direct Investment (FDI) In Indonesia (Rp Trillion)

Source: tradingeconomics.com and BKPM (2021)

According to Tambunan (2016), expected inflow of FDI will be part of the national capital to expand employment, transfer of technology and other economic benefits. As a form of capital flows, FDI are expected to help drive the growth of sustainable investments in a country. The presence of FDI positively could support the role of taxes as a source of revenue (Pratomo, 2020). Tax revenue realization from 2010 till 2019 is constantly increasing.

Figure 2: Table of Tax Revenue Realization in the Budget (Rp Billion)



Source: Ministry of Finance, data processed (2021)

However, the tax revenue is likely to decline due to policies that provide types of tax facilities such as reduced rate in tax treaty. Tax treaty plays an important role since it can regulate the taxation portion to be paid by an investor of Contracting State in accordance with agreements that have been agreed upon. If Indonesia and a Contracting State had established a tax treaty, the rates used are based on tax treaty rates. Conversely, if there is no tax treaty, the rates will be based on domestic tax provision (Tatang, 2009). The declining in tax revenues due to the tax treaties was expected to be compensated by investment (FDI) into Indonesia. However, on a practical level, there is an urge to explore further whether the existence of the tax treaties is able to encourage investment, especially in developing countries.

According to Neumayer (2007), developing countries invest time and other scarce resources to negotiate and conclude tax treaties with developed countries. Developing countries also accept a loss of tax revenue as such treaties typically favor residence-based over source-based taxation and developing countries are typically net capital importers. The incurred costs will only pay off if developing countries can expect to receive more FDI.

In addition, numerous studies have examined whether and to what extent FDI responds to tax treaties, but the findings are mixed. Given the conflicting empirical results, more evidence is needed. This study, using the Indonesia's tax treaties, seeks to find out if tax treaties have a significant impact on FDI flows into the region.

Investigating the impact of tax treaty on FDI is expected to have a useful contribution to the government in formulating policy for the establishment of the new tax treaty.

2. LITERATURE REVIEW

2.1 Tax Treaty

Tax treaty is a bilateral agreement that is formed by the two countries or jurisdictions that aims to eliminate the double taxation due to their cross-border transactions. Double taxation can arise because of the mutual claims of taxing rights between source countries of income and the residence country of the taxpayer concerned. The mutual claim of taxation right arises because of the conflict of connecting factors that brought the two states or jurisdictions to impose a tax on the same economic transaction.

When a cross-border transactions occurred, a conflict possibly arises over the interaction of connecting factors of both countries so that the double taxation emerges. There are two types of double taxation, the double taxation that arise because of legal reason and because of economical reason. Double

taxation arising on cross-border transactions is called juridical double taxation, because the same income is claimed by the two different countries or jurisdictions.

On the other hand, economic double taxation is a condition in which the income is taxed twice for the same tax subjects. Juridical double taxation can be eliminated through tax treaty, while the economic double taxation is often unavoidable. According to Arnold (2016), tax treaty is one of important aspects in international tax regulations. Tax treaty assigns rights and obligations to the countries of the agreement.

2.2 FDI

According to Ambarsari and Purnomo (2005), Foreign investment in Indonesia is divided into three kinds, namely portfolio, foreign direct investment (FDI) and export credit. FDI involves the investor to carry out the business operations directly so that the dynamics of business involving the company's goals can't be separated from interested parties or foreign investors. FDI can be interpreted as a number of investments placed in the long term to a company in another country. FDI is one of the characteristics of a globalized economic system. FDI is considered more useful to the country than portfolio investments on equity of companies since portfolio investment is short term and can be withdrawn any time all of a sudden which lead to economic vulnerability.

2.3 How does tax treaty affect FDI?

A primary goal of a tax treaty is to remove the obstacles that double taxation presents (OECD, 1997). tax treaty is aimed to reduce transfer pricing and various forms of tax avoidance. Tax treaty also promotes the exchange of tax information between treaty partners.

The basic concept of the existence of a tax treaty in the context of FDI is to create certainty and commitment regarding a tax treatment to investors. In regard to the ratification of such an agreement, it is expected to guarantee investors to obtain a standard treatment of settlement when the dynamics related to the issue of taxation in a country occurred. Moreover, the agreement is also a means of ensuring that the treatment accorded to investors will be fair and tend to be easier or favor them (Braun & Zagler, 2014).

OECD (2008) mentioned that mutual agreement procedure is identified as key to certainty and stability in the treatment of cross-border investment. According to Tambunan (2016), tax treaty is seen to favor investors due to the existence of provisions such as non-discrimination, mutual agreement procedure to minimize the tax dispute.

In addition, according to Barthel et Al. (2010), mutual agreement procedure is one measure in tax treaties of considerable interest to many foreign direct investors, that can be used by taxpayers to reach "advance pricing agreements" in which the revenue authorities in both the residence country and source country agree on a common transfer price for transactions between parts of the enterprise in the residence and source jurisdiction.

Moreover, tax treaties usually reduce maximum allowable withholding taxes on three types of remitted income: dividend payments, interest payments, and royalty payments. Some treaties lower this withholding rate to as low as zero (Blonigen & Davies, 2000).

Blonigen & Davies (2004) also mentioned that more overseas incomes are repatriated to the home nation, since a tax treaty can reduce the overseas taxes. The lower overseas taxes can then promote a more efficient allocation of global investments.

Combining those arguments, it is easy to understand the common expectation that tax treaties serve to increase the amount of FDI activity between treaty partners.

2.4 Empirical evidence of the impact of tax treaty on FDI

Research conducted by Blonigen & Davies (2000) using both U.S. inbound and outbound FDI over the period 1980-1999 show that they find little evidence that bilateral tax treaties increase FDI activity, contrary to OECD-stated goals for tax treaties. They also find a negative correlation between the emergence of significant new bilateral tax treaties with the U.S. outbound FDI. These findings reinforce the idea that the tax treaties were not intended to encourage FDI but to suppress tax evasion case. The main purpose of the establishment of tax treaty is to eliminate double taxation, but other than that, tax treaties were also intended to close international tax evasion loopholes and strengthen economic cooperation for development.

The research conducted by Neumayer (2007) examines whether tax treaties between developing countries and the U.S. lead to more FDI to these countries in the period 1970 to 2001. FDI stocks are on average about 20 percent higher if a tax treaty is concluded in the sample period, but the effects are only effective in the group of middle, not low-income developing countries.

Coupé et. Al (2008) use the number of treaties that both countries have concluded as an instrument for the probability that two countries conclude a treaty in a sample of 17 OECD and 9 transition countries between 1990 and 2001. With this instrument the coefficients of the tax treaties on income and capital and on income are not significant. For the timing of the effects, they distinguish dummies three years after treaty ratification, but these are often not significant.

However, other studies show the opposite result. According to research conducted by Ohno (2010) using tax treaty between Japan and 13 countries in Asia over the period 1981-2003 show that tax treaty has a positive effect on FDI. The results show that the establishment of a new tax treaty will be significant in the long term on an investments scale. The opposite will happen if there are amendments to the tax treaty. Amendment of the tax treaty does not significantly influence the investments scale.

Research conducted by Ohno is a starting point to looking at the effects if tax treaty on FDI by dividing tax treaty period into short, medium, and long term and give the positive result. This method has been developed in many subsequent studies, including studies in Indonesia.

Research using evidence from Indonesia is still limited. Research conducted by Nurhidayat (2012) using tax treaties between Indonesia and six countries from the period 1982 to 2007 show the existence of tax treaties, both the new and revised agreements will have a negative impact in the short term but change into positive in the medium and long term.

This finding is supported by Satrio & Lestari (2018) which states that tax treaty in the short term did not significantly affect FDI inflows to Indonesia. However, in the medium and long term, it has a significant and positive impact on FDI inflows to Indonesia. The study using panel data set of 51 countries from 2000 to 2015.

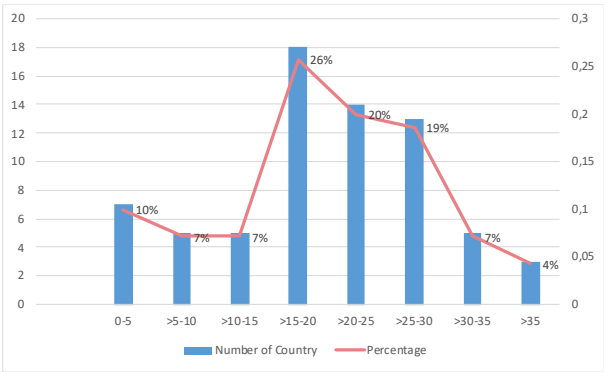
3. RESEARCH METHODOLOGY

The model developed in this study is adopted and modified from previous research. This study uses FDI as the dependent variable. The independent variable in this study use Ohno (2010) and Coupé et. Al (2008) research model which dividing tax treaty period into short, medium, and long term. This model is also adopted by Nurhidayat (2012) and Satrio & Lestari (2018). This variable is used to detect the tax treaties influence on the development of FDI.

The most common terms are generally considered short, medium and long. Though the term does not denote a specific length of time, most consider anything below five years to be short term, from five to 10 years as medium term; and anything beyond 10 years to be long term.

The age of Indonesia's tax treaty with partner countries varies. As we can see in Figure-3 below, only 10% of Indonesia's tax treaty is effective under five years (short term) and only 7% of Indonesia's tax treaty are effective within five to 10 years (medium term). The rest of them or 83% of Indonesia's tax treaty has been effective for more than 10 years.

Figure 3: Percentage of age of Indonesia's tax treaty



Source: self-proceed

Due to the large gap between tax treaty in the short, medium, and long term in Indonesia, the authors suggest it is necessary to examine the effects in timeframe in order to find accurate relationship between tax treaty and FDI.

In this study, three variables of tax treaties are treated as a dummy variable as follows:

1) Tax treaty in the short term (TT1)
   The dummy variable data of "short term" is defined as the number 1 for the period in which the tax treaty is effective or revision and one year thereafter. If not, then It is marked 0.
2) Tax treaty in the medium term (TT2)
   The dummy variable data of "medium term" is defined as the number 1 for the period in which the tax treaty is effective or revision and 4 years thereafter. If not, then it is marked 0.
3) Tax treaty in the long term (TT3).
   As for the dummy variable "long term" is defined as the number 1 for the period in which the tax treaty is effective or revision and the years thereafter. If not, then it is marked 0.

The use of a dummy period, in this case the "short-term", "medium-term" and "long term" described as an information which will affect FDI in terms of timescales.

Several previous researches take the year of signature as a starting point (Neumayer, 2007;

Nurhidayat, 2012; Satrio & Lestari, 2018), while others take the year of ratification (Coupé et. Al, 2008). The author prefers to use the effective date instead of the year of signature or the year of ratification of tax treaties because the ratification process in Indonesia required time and it will create gap in the application of tax treaty. Therefore, the author suggests using the effective date is closer to reality.

This study use three control variables as follows.

1) Gross Domestic Product of partner countries (GDPM) variable.
   According to Ohno (2010) the greater the size of the economy of a country, the greater the increase in investment. Therefore, the increase in GDPM would have a positive effect on inbound FDI.
2) Trade Cost or cost of trading in the partner country (TCM) variable.
   This variable is approached through a country's level of economic openness (Ohno, 2010). The higher the openness level of a country, the lower the cost of trade. On the contrary, the lower the level of its openness, the greater the cost of trade.
3) inflation rate (INR) variable
   This variable is measured on the consumer price index. High inflation makes prices of goods and services become expensive so that the cost of production inputs increases. On the other hand, the inflation rate reflects the macroeconomic stability of a country. The more stable macroeconomic conditions of a country, the more it can reduce investment uncertainty and increase investor confidence as well.

The model formula is as follows:

$$FDI_{it} = \alpha + \beta_1 GDPM_{it} + \beta_2 TCM_{it} + \beta_3 INR_{it} + \beta_4 DTT1_{it} + \beta_5 DTT2_{it} + \beta_6 DTT3_{it} + \varepsilon_{it}$$

Information:

FDI_{it}	=	the value of foreign investment from countries *i* or partners countries to Indonesia
$GDPM_{it}$	=	the country's GDP value of partners
TCM_{it}	=	the cost of trading in partner countries
INR_{it}	=	the inflation rate of Indonesia
$DTT1_{it}$	=	Dummy variable tax treaty in the short term
$DTT2_{it}$	=	Dummy variable tax treaty in the medium term
$DTT3_{it}$	=	Dummy variable tax treaty in the long term
ε_{it}	=	Error term
α	=	Coefficient

4. RESULTS AND FINDINGS

4.1 Data and Descriptive Analysis

Currently, Indonesia has 71 effective tax treaties, based on the availability of data, this study uses panel data consist of 27 tax treaties between Indonesia and partner countries, which has the value of the biggest investment in Indonesia over the period of 1996 to 2017.

Table 1 shows the results of measurements of average value (mean), minimum value, maximum value, standard deviation, number of cross section and number of observations.

Table 1: Descriptive Statistics Summary of Analysis Results

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Cross section	Observations
FDI	3.665.427	1.706.750	9.178.692	0.000000	1.043.351	27	594
GDPM	1521398.	449050.0	19485400	5.000.000	2843519.	27	594
TCM	-0.165459	-0.436942	3.467.069	-0.842743	0.729619	27	594
INR	0.102977	0.065950	0.776000	0.020000	0.151423	27	594
TT1	0.042088	0.000000	1000000	0.000000	0.200958	27	594
TT2	0.050505	0.000000	1.000.000	0.000000	0.219169	27	594
TT3	0.767677	1.000.000	1.000.000	0.000000	0.422670	27	594

Source: Data processing from EViews 9

Based on the descriptive statistics above, it is known that the study consisted of 27 (twenty-seven) countries for 22 (twenty-two) years, so that the number of observations in the study (N) was 594. The average value of FDI entering Indonesia is 366,5427 or in the amount of USD 366,542,700.

The average Gross Domestic Product (GDP) of partner countries is known to be 1,521,398 or USD 1,521,398,000,000. The highest GDP value of 19,485,400 or USD 19,485,400,000,000 was owned by the United States in 2017, while the lowest GDP value of 500 or USD 500,000,000 was owned by Seychelles in 1996.

The partner country's trade cost average (TCM) is known to be -0.165459 or equal to (-16.55%). The highest Trade Cost was 3.467069 or (34.67%) owned by Hong Kong in 2015, while the lowest Trade Cost value was -0.842743 or (-84.2%) owned by Japan in 1996.

The average inflation rate in Indonesia is known to be 0.102977 or equal to (10.3%). The highest inflation rate was 0.776000 or equal to (77.6%) in 1998, while the lowest inflation rate was 0.02 or equal to (2%) in 1999.

4.2 Panel Data Analysis

To determine the most appropriate model, the regression models must be carried out Chow Test and Hausman Test.

The Chow test is done to determine which regression model is appropriate to use between Common Effect Model and Fixed Effect Model. Chow Test result in Table 2 shows that Fixed Effect Model is better.

Table 2: Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	16.762489	(26,561)	0.0000
Cross-section Chi-square	341.463303	26	0.0000

Source: Data Processing from EViews 9

Based on the Chow Test, the model chosen is Fixed Effect Model, therefore it is necessary to re-examine by Hausman Test. This test is required to select Fixed Effect Model or Random Effect Model. The Hausman Test result in Table 3 shows that Fixed Effect Model will be used.

Table 3: Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.590228	6	0.0004

Source: Data Processing from EViews 9

In accordance to Chow Test and Hausman Test above, it can be concluded that the appropriate model is Fixed Effects Model.

The following are the results of the estimated output by using a Fixed Effect Model that has eliminated the effect of heteroscedasticity. Preliminary tests related to the multicollinearity issue have also been conducted to assess the relative importance of the independent variables in explaining the variation caused by the dependent variable.

Table 4: Fixed Effect Model

White diagonal standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-350.4934	158.4504	-2.212006	0.0274
GDPM	0.000154	4.04E-05	3.809673	0.0002
TCM	-494.2743	251.6738	-1.963948	0.0500
INR	36.23912	225.8173	0.160480	0.8726
TT1	-94.99647	114.1250	-0.832390	0.4055
TT2	-258.0621	183.0844	-1.409525	0.1592
TT3	484.8266	128.1054	3.784593	0.0002

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.512294	Mean dependent var	366.5427
Adjusted R-squared	0.484474	S.D. dependent var	1043.351
S.E. of regression	749.1270	Akaike info criterion	16.12965
Sum squared resid	3.15E+08	Schwarz criterion	16.37336
Log likelihood	-4757.505	Hannan-Quinn criter.	16.22456
F-statistic	18.41507	Durbin-Watson stat	1.171594
Prob(F-statistic)	0.000000		

Source: Data Processing from EViews 9

Regression analysis aims to measure the strength of the relationship between two variables and indicate the direction of the relationship. Based on the tests performed, the model chosen is the Fixed Effect Model. In accordance with the results of the regression performed with the Fixed Effect Model, the regression equation is:

FDI = –350,4934 + 0,000154 GDPM – 494,2743 TCM + 36,23912 INR – 94,99647 TT1 – 258,0621 TT2 + 484,8266 TT3

Based on the results of the regression performed, the value of Adjusted R-squared is 0.484474 (48.4474%). This value means that 48.4474% of variations or changes in FDI can be explained by the presence of tax treaties in the short term, tax treaties in the medium term, and tax treaties in the long term. The rest of percentage is explained by other factors beyond the models in this study.

Based on the regression equation, it can be seen that tax treaties in the long term (TT3), gross domestic

product of partner countries (GDPM), and trade cost of partner countries (TCM) has significant effect on FDI. Meanwhile, tax treaties in short term (TT1), tax treaties in medium term (TT2), and inflation rate (INR) are not statistically significant.

Conforming to Table 4, it is known that the F-statistic (18.41507) is greater than the value of the F-table (2.11398) and the F-statistic probability value (0.00000) is smaller than the significance value (α = 0.05). Therefore, it can be concluded that all independent variables simultaneously influence FDI in Indonesia.

However, individually, tax treaties in the short term (TT1) and tax treaties in the medium term (TT2) are insignificant. Tax treaties in the long term (TT3), individually, has a positive and stimulate FDI significantly.

5. CONCLUSIONS

This study aims to determine the effect of tax treaties on FDI using evidence from Indonesia. The study adopts the previous research model by dividing tax treaty based on time frame. This is based on a large gap between the age of tax treaty in Indonesia, where only 17% of all tax treaty are under 0 to 10 years.

The regression results show that all independent variables simultaneously influence FDI in Indonesia. However, tax treaties in the short term and tax treaties in the medium term, individually, have no effect on FDI in Indonesia and not statistically significant. In terms of independent variable, only tax treaties in the long term that has positive and significant impact to Indonesia's FDI inflow.

This study confirms previous research conducted by Satrio & Lestari (2018) that mentioned tax treaty in the short term did not significantly affect FDI Inflows to Indonesia. The difference between the results of this study and the previous research was that the tax treaty in the medium term has no effect on FDI or not statistically significant. This difference could be due to differences in the number of tax treaty tested as well as the number of time periods the test was conducted. Although the methods and variable used are mostly the same.

Moreover, this study confirms (Ohno, 2010) findings about the significant impact of market size and country's level of economic openness on FDI flows.

Even though this study results in conclusions above, but there still several limitations, such as:

1) The observations still limited to 27 (twenty-seven) countries from 1996 to 2017 or 22 (twenty-two) years, considering the availability of data.
2) The use of the inflation variable in this study does not provide significant results for FDI.
3) The data used in this study are secondary data. Further research is expected using not only quantitative data but also using qualitative data such as using questionnaires or interviews with parties related to the object of research in order to obtain comprehensive results regarding the relationship between tax treaty and FDI.

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REFERENCES

Ambarsari, Indah., & Purnomo, Didit. (2005). Studi tentang Penanaman Modal Asing di Indonesia. Jurnal Ekonomi Pembangunan, 6(1), 26-27.

Arnold, B. J. (2016). An introduction to tax treaties. United Nations, Department of Economic and Social Affairs, New York.

Barthel, F., & Busse, M., & Krever, R., & Neumayer, Eric. (2010). The Relationship between Double Taxation Treaties and Foreign Direct Investment.

Blonigen, B. A., & Davies, R. B. (2000). The effects of bilateral tax treaties on U.S. FDI activity. NBER Working Paper No. 7929.

Blonigen, B. A., & Davies, R. B. (2004). The effects of bilateral tax treaties on U.S. FDI activity. International Tax and Public Finance, 11(5), 601-622.

Coupé, T., Orlova, I., & Skiba, A. (2008). The Effect of Tax and Investment Treaties on Bilateral FDI Flows to Transition Countries. mimeo.

Nico, C., & Purwaningsih, A. (2015). Pengaruh Biaya Perdagangan Mitra dan Produk Domestik Bruto Mitra Terhadap Foreign Direct Investment Negara-Negara Asia, Eropa dan Amerika di Indonesia dengan Tax Treaty sebagai Variabel Moderasi. Jurnal Universitas Atma Jaya.

Braun, J., & Zagler, M. (2014). An Economic Perspective on Double Tax Treaties with (in) Developing Countries. World Tax Journal. International Bureau Fiscal Documentation.

Neumayer, E. (2007). Do double taxation treaties increase foreign direct investment to developing countries?. Journal of Development Studies, 43(8), 1501-1519.

Nurhidayat R. (2012). Tax Treaty dan Foreign Direct Investment di Indonesia. Finance and Banking Journal, 14(1), 44-49.

Organization for Economic Cooperation and Development (1997). *Model tax convention on income and on capital*. OECD Committee on Fiscal Affairs, Paris.

Organization for Economic Cooperation and Development (2008). *Tax Effects on Foreign Direct Investments*. OECD Committee on Fiscal Affairs, Paris.

Ohno, T. (2010). Empirical analysis of international tax treaties and foreign direct investment. Public Policy Review, 6(2).

Pratomo, A. (2020). The Effect of Foreign Direct Investment on Tax Revenue in Developing Countries. Jurnal BPPK: Badan Pendidikan dan Pelatihan Keuangan, 13(1), 83-95. Retrieved from https://jurnal.bppk.kemenkeu.go.id/jurnalbppk/article/view/484.

Ruth, A. M., & Syofyan, S. (2014). Faktor Penentu Foreign Direct Investment di ASEAN-7; Analisis Data Panel, 2000-2012. Media Ekonomi Universitas Trisakti, 95-121.

Sarwedi. (2002). Investasi Asing Langsung di Indonesia dan Faktor yang Mempengaruhinya. Jurnal Akuntansi dan Keuangan Universitas Kristen Petra, 4(1).

Satrio, H. N., & Lestari, N. I. (2018). The Effect of Tax Treaty on Foreign Direct Investment in Indonesia. Jurnal Akuntansi Berkelanjutan Indonesia, 1(3), 278-288.

Tambunan, M. R.U.D. (2016). Nilai dari Sebuah Perjanjian Penghindaran Pajak Berganda (P3B) di Negara Berkembang. https://www.ortax.org/ortax/?mod=issue&page=show&id=72&list=&q=&hlm=3. Accessed: August 7, 2019.

Tatang, H. 2009. Penguatan Posisi Indonesia Dalam Pemajakan Terhadap Transaksi Ekonomi Global. Badan Pendidikan dan Pelatihan Keuangan.

APPENDIX-1

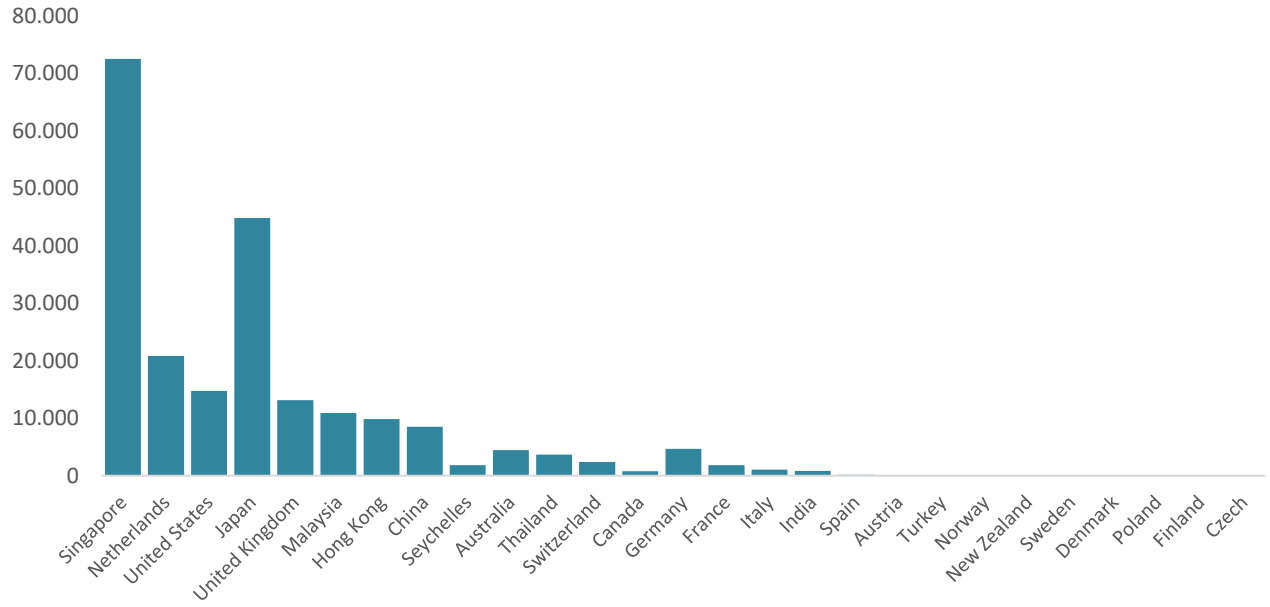
List of Countries under observations

No	Country	Region	Original		Amendment	
			Signature Date	Effective Date	Signature Date	Effective Date
1	Singapore	Asia - ASEAN	08/05/90	01/01/92	-	-
2	Netherlands	Europe	29/01/02	01/01/04	30/07/15	01/10/17
3	United States	Amerika	11/07/88	01/01/90	24/07/96	01/02/97
4	Japan	Asia	03/03/82	01/01/83	-	
5	UK	Europe	05/04/93	01/01/95	-	
6	Malaysia	Asia - ASEAN	12/09/91	01/01/86	12/01/06	01/09/10
7	Hong Kong	Asia	23/03/10	01/01/13	-	
8	China	Asia	07/11/01	01/01/04	26/03/15	01/01/17
9	Seychelles	Afrika	27/09/99	01/01/01	-	
10	Australia	Australia	22/04/92	01/07/93	-	-
11	Thailand	Asia - ASEAN	15/06/01	01/01/04	-	
12	Switzerland	Europe	29/08/88	01/01/90	08/02/07	01/01/10
13	Canada	Amerika	16/01/79	01/01/80	01/04/98	01/01/99
14	Germany	Europe	30/10/90	01/01/92	-	-
15	France	Europe	14/09/79	01/01/81	-	-
16	Italy	Europe	18/02/90	01/01/96	-	-
17	India	Asia	27/07/12	01/01/17	-	-
18	Spain	Europe	30/05/95	01/01/00	-	-
19	Austria	Europe	24/07/86	01/01/89	-	-
20	Turkey	Asia	25/02/97	01/01/01	-	-
21	Norway	Europe	19/07/88	01/01/91	-	-
22	New Zealand	Oceania	25/03/87	01/01/89	-	-
23	Sweden	Europe	28/02/89	01/01/90	-	-
24	Denmark	Europe	28/12/85	01/01/87	-	-
25	Poland	Europe	06/10/92	01/01/94	-	-
26	Finland	Europe	15/10/87	01/01/90	-	-
27	Czech	Europe	04/10/94	01/01/97	-	-

Source: IBFD (data processed)

APPENDIX-2

Graph of total investment of 27 partner countries to Indonesia from 1996 to 2017



Source: Fiscal Policy Agency (data processed)

APPENDIX-3

List of Indonesia's Tax Treaty Network

Algeria	Finland	Malaysia	Saudi Arabia	Ukraine
Armenia	France	Mexico	Seychelles	United Arab Emirates
Australia	Germany	Mongolia	Singapore	United Kingdom
Austria	Hong Kong	Morocco	Slovak Republic	United States
Bangladesh	Hungary	Netherlands	South Africa	Uzbekistan
Belgium	India	New Zealand	Spain	Venezuela
Brunei Darussalam	Iran	Norway	Sri Lanka	Vietnam
Bulgaria	Italy	Pakistan	Sudan	Belarus
Canada	Japan	Papua New Guinea	Suriname	Serbia
China	Jordan	Philippines	Sweden	Tajikistan
Taiwan	North Korea	Poland	Switzerland	Cambodia
Croatia	South Korea	Portugal	Syria	
Czech Republic	Kuwait	Qatar	Thailand	
Denmark	Laos	Romania	Tunisia	
Egypt	Luxembourg	Russia	Turkey	

Source: IBFD (data processed)