

The Impact of Tax Incentives on Foreign Direct Investment: The Case of Tax Holiday and Corporate Income Tax Rates in Indonesia

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Abstract: This study aims to analyse the impact of tax incentives, namely tax holidays and corporate income tax rates, on Foreign Direct Investment (FDI) in Indonesia from 1981 to 2020. The sampling technique used in this study was purposive sampling so that 40 samples were obtained from 1981 until 2020 of each variable, namely FDI inflows as the dependent variable, tax holiday and corporate income tax rates as independent variables, and gross domestic product growth, inflation, and trade openness as control variables. Analysis of the data used in this study is the method of multiple regression analysis. This study consisted of two models, namely testing without control variables and with control variables. The study results without control variables show that the tax holiday positively and significantly affects FDI inflows. In contrast, the corporate income tax rate has a negative and significant effect on FDI inflows. The study results with control variables show that the tax holiday positively and significantly affects FDI inflows, income tax rates, and trade openness negatively and significantly affects FDI inflows. In contrast, Gross Domestic Product (GDP) growth and inflation have no significant effect on FDI inflows.

Keywords: *tax incentives, tax holiday, corporate income tax rates, foreign direct investment (FDI), gross domestic product (GDP) growth, inflation, trade openness*

Introduction

Indonesia is a developing country that has many resources, both natural resources and human resources. Currently, these resources cannot be adequately maximised because Indonesia has not managed all its resources. This is due to one of the factors, namely limited capital. Economic activities related to increasing capital can be through investment to increase the capital stock. The investment that enters Indonesia will affect the condition of the Indonesian economy through the amount of national revenue. Therefore, the government has an essential role in improving the investment climate by issuing policies that can attract both domestic and foreign investors to invest in Indonesia.

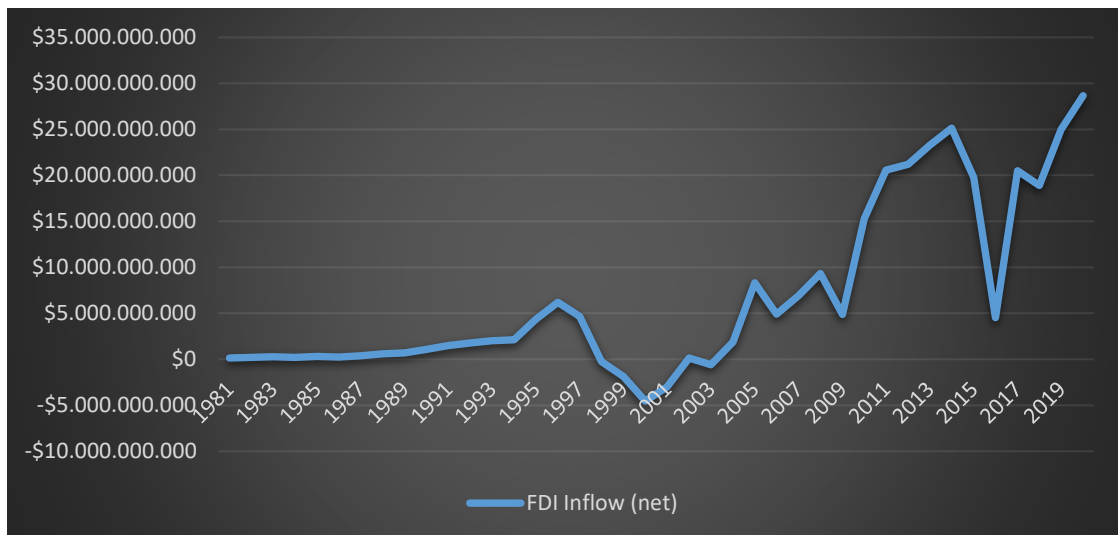
The government is currently trying to get foreign investors to invest in Indonesia. FDI is considered to have the potential to increase the rate of economic growth. One of the

Indonesian government's agendas is attracting foreign investors to invest directly, where FDI has close economic relations with Indonesia. The government is trying to target the required level of investment by promoting various investment opportunities in Indonesia, which can attract foreign investors to invest in Indonesia. In 2017, Indonesia was in the 47th position in the world based on the number of incoming foreign investment flows with a total of US\$23 billion. Besides that, Indonesia also occupies the fourth position as an investment destination country from the survey results in 2014-2016 (UNCTAD, 2018). This is evidenced by the fact that in 2020, Indonesia won a credit rating with an investment grade (BBB) rating by Fitch, one of the international rating agencies. Indonesia experienced an economic crisis in 1998, where it caused the inflow of foreign direct investment to experience a significant decline until it reached

-\$4,550 million in 2000. After that, foreign direct investment increased in 2008 and reached the highest increase in 2014, which amounted to \$ 25,121 million, but FDI inflows fluctuated,

where inflows decreased to \$ 4,542 million in 2016 and then increased again in 2019, amounting to \$ 24,947 million.

Figure 1. Development of Foreign Direct Investment in Indonesia, 1981-2019 (In US\$)



Source: WDI Indonesia Data 2019 (Data processed by the researcher)

In 1998, the OECD discussed the need for global attention regarding the publication through the publication of “Harmful Tax Competition: An Emerging Global Issue”. Competition in reducing tariffs also continues even though it is considered as one of the causes of the complexity of resolving the 2008 global financial crisis (Dietsch, 2015). According to the OECD (2019), in 2000, the average corporate income tax rate in 94 countries was 28.6%. About 18 years later, the rate was set at 7%, so that the average corporate income tax rate was only 21.4%. Regionally, countries in Africa still have relatively higher corporate income tax rates than globally and in other regions. In developing countries, tax competition is generally more focused on offerings than drastically reducing tax rates (Abbas and Klemm, 2012). Developing countries often use tax holiday incentives to develop durable capital investment and direct long-term economic development (Mintz, 1990).

In the framework of implementing Law Number 25 of 2007 concerning Investment, the Indonesian government issued a tax regulation that regulates tax holidays in the Minister of Finance of the Republic of Indonesia Regulation (PMK) Number 130/PMK/011/2011 concerning the Provision

of Corporate Income Tax Exemption or Reduction Facilities as amended by becoming PMK Number 192/PMK/011/2014. The government made changes to the provisions to simplify and simplify the provision of tax holiday facilities to foreign investors as stated in PMK Number 159/PMK.010/2015. A year later, this regulation was again changed to PMK Number 103/PMK.010/2016, where this change was made to eliminate the processing industry, the primary industry in Special Economic Zones (SEZ) pioneer industries that obtain tax holiday facilities. The Indonesian government has revised the previous regulation to PMK Number 35/PMK.010/2018. The government considers two changes, namely, extending the period and increasing the number of pioneer industries given tax rate cuts.

Within months of implementing the regulation, the Minister of Finance revoked PMK Number 35/PMK.010/2018 and replaced it with PMK Number 150/PMK.010/2018 concerning the provision of Corporate Income Tax Reduction Facilities. The change is in adding one pioneer industry, namely the digital economy-related to data processing & hosting. The relaxation in regulations related to tax holidays is carried out as an effort by the government. The tax incentives provided are not strict and do not make it difficult for foreign

investors to comply with the previous regulations regarding the criteria, procedures, and requirements for foreign investors obtaining these incentives. Then in 2020, the Minister of Finance again issued PMK Number 130/PMK.010/2020 and revoked PMK Number 150/PMK.010/2021 as the government's effort to improve the provision of this tax holiday incentive facility.

Based on the Ministry of Finance data, as of October 2020, the realisation of investments with a 100% tax exemption facility or tax holiday has only been 3 (three) corporate taxpayers worth IDR 27.15 trillion. This amount is only equivalent to 2.2% of the total investment plan that gets the facility, namely Rp. 1,261.2 trillion, which includes 82 taxpayers. Entrepreneurs complain about the difficulty in obtaining these incentives in terms of licensing. On the other hand, when the government has facilitated licensing and provided tax holiday incentives, investors have not realised their investment. Therefore, Investment Coordinating Board (BKPM) plans to revoke the tax holiday incentive for companies that are slow to realise an investment in Indonesia.

Several factors cause investors never to realise their investments. First, the tax holiday incentive is one of the things that investors look at when investing in a country. Second, the ongoing Covid-19 pandemic, not only in Indonesia but globally, which also affects investors, tends to rethink and prioritise essential steps to get through these times of crisis. The tax holiday incentive is already desirable to investors, but due to the Covid-19 conditions, it affects the industrial sectors in Indonesia (Ajib, 2021).

According to Hestu (2020), the provisions related to the obligation of investors to realise their investment a maximum of one year after the tax holiday decision was set were triggered by the government's desire to encourage investors to realise their investments. PMK Principle Number 130/2020 reviews three essential points in the process of granting tax holiday facilities. The first is the delegation of authority to the Head of BKPM to grant a tax holiday. Second, the addition of commitment requirements to start realising investment no later than one year after the tax holiday or reduction of corporate income tax is given. These points are made to guarantee that potential investors will immediately make

investments. Third, for non-pioneer industries, tax holiday incentives can still be given based on quantitative criteria for pioneer industries, and scoring is carried out to determine the granting of tax holiday facilities.

Indonesia's investment value is lower than other countries in the Southeast Asian region. Investors tend to be more interested in investing in Vietnam than in Indonesia. According to the Minister of Finance (2020), the considerable value of investment entering Vietnam is due to various facilities offered by the local government, including fiscal policies. In addition, the corporate income tax that companies must pay to the government in Vietnam is the smallest in the ASEAN region, which is 20%. The current corporate income tax in Indonesia is 22%. However, in terms of tax holiday incentives, Indonesia and Vietnam have policies that are not much different. The tax holiday policy in Indonesia is quite progressive because it is given for up to 20 years, while Vietnam's tax holiday policy can be extended for up to 13 years according to the type of investment.

The country of Vietnam prioritises several sectors, including high-technology and sectors that have significant social effects, such as education, vocational, health, culture, sports, and the environment. Likewise, in Indonesia, the priority sectors are also almost the same, namely vocational and education, so it can be said that Indonesia's benchmarking is not too different from Vietnam. According to the former Managing Director of the World Bank (2019), Vietnam has a particular, fiscal policy for under-developed regions, namely cutting the corporate income tax rate by 3% below the usual rate of 17%. In fact, for very underdeveloped regions, a cut of up to half is given, namely 10%. Meanwhile, in Indonesia, there has been no reduction in corporate income tax rates as implemented by Vietnam.

In addition to the tax holiday, a reduction in the corporate income tax rate is also needed to attract foreign direct investment inflows. The government is increasingly ready to implement a plan to reduce the corporate income tax rate, to maintain competitiveness in attracting foreign investors. One of the reasons for the low interest of foreign investors to enter Indonesia is that Indonesia's corporate income tax rate is currently higher than in Vietnam. Although lowering corporate income tax rates is welcome, this policy can negatively affect

because lowering corporate income tax rates in Indonesia risks hitting state revenues. Entrepreneurs want corporate income tax to decrease to encourage investment, but this is a dilemma for the government because it can pose a considerable risk to tax revenues.

Reducing corporate income tax does not necessarily become the correct answer to attract investment in Indonesia because there are still several tax and non-tax issues that hinder investment inflows in the country. This is evidenced by the 22% corporate income tax rate, which is relatively moderate; even some countries apply a tax rate of up to 30%, including India and Japan. Meanwhile, the United States is at 27%, and China, South Korea, and Myanmar are at 25%, which is higher than Indonesia at 22%. Then, Indonesia still has tax payment compliance problems. In addition, the reduction in corporate income tax rates does not guarantee a rapid entry of FDI; for example, Singapore, which has a tax rate of 17%, experienced an average FDI growth of only 2.6% during 2015-2018. Brunei's average FDI growth for the same period experienced minus 163.48% with a corporate income tax rate of 18.5%.

The study results (Abdioglu, 2016 & Fahmi, 2012) found that the corporate income tax rate had a significant negative effect on FDI inflows. This indicates that foreign investors are encouraged to invest in countries with lower income tax rates. Another study conducted by Kassahun (2015) found that the tax holiday has a significant positive effect on FDI cash inflows, then a low tax rate will increase after-tax profit for investors. This policy of providing tax holiday facilities, in the short term, will reduce state revenues in the tax sector. However, the provision of a tax holiday is believed to attract investors and create a favourable investment climate for Indonesia. With the investment, it will form a multiplier effect.

The presence of FDI in Indonesia has an important role, one of which is a driving factor in achieving economic growth and maintaining sustainable development, especially in the manufacturing sector. Manufacturing or processing industries can generate significant added value in the economic sector and contribute to GDP in Indonesia. The study results (Abdioglu, 2016 & Van Parys, 2010) found that GDP growth has a significant positive effect on FDI, where

investors will see good opportunities when a country's economy proliferates.

The increase in returns on FDI was also generated by the low inflation rate, in which the "host country" was experiencing internal economic stability. Thus, countries with low inflation rates encourage foreign investors to invest their capital because the nominal interest rate decreases, and consequently, the cost of capital is low. The availability of capital and low-interest rates will maximise their return on investment. Research conducted by Kassahun (2015) and Fahmi (2012) found that inflation positively affects FDI, where the country's economic stability supports the FDI inflow.

The openness of the country's trade also affects FDI inflow, where the country's economy allows or conducts international trade. This opens up tremendous market opportunities. Kassahun (2015) explains that trade openness means the ability of a country's economy to open up opportunities to obtain sources of funds from other countries' economies and the willingness to invest in other countries. Research conducted by Fahmi (2012) found that trade openness has a positive effect on FDI, where the openness of a country to open markets encourages export-import

Based on this description, the authors can identify problems including: (1) How is the effect of the tax holiday on FDI inflows in Indonesia. (2) How is the corporate income tax rate affect FDI in Indonesia. (3) How are the effects of GDP growth, inflation and trade openness on FDI in Indonesia

Literature Reviews

Eclectic Theory

The eclectic theory was first developed by Dunning (1988). Based on this theory, there are three conditions that a company must meet if it engages in FDI, namely: 1) Ownership Advantage, 2) Internalisation Advantage and 3) Location Advantage

Ownership Advantage, Companies must have a competitive advantage over other companies that arise due to ownership of tangible and intangible assets. These are also known as ownership benefits, including rights to specific technologies, the power and size of a monopoly, access to raw materials, and access to low-cost finance. Internalisation Advantage,

Internalisation advantage refers to the company's choice to expand its business or expand within the company or sell the rights (license) to expand to other companies. Location Advantage, Determination of a specific (typical) and strategic location by the company will result in a location advantage for the company to place its production facilities abroad. Location advantages can include investment destination countries with considerable market growth potential, cheap labour, needed natural resources, attractive incentives.

The eclectic theory holds that all forms of FDI can be explained by reference to their conditions. It is recognised that the benefits arising from ownership, internalisation, and location may change over time. Country-specific characteristics are important determinants of FDI, and it may not be appropriate to generalise from country-to-country experience (Moosa, 2002).

Tax Competition Theory

Chales Tiebout (1956) first introduced the theory of tax competition and defined tax competition as something that is desirable and should not be limited in any way because voters have the right to choose the most suitable location according to their wishes based on subjective evaluations of the balance between the tax burden and public services.

Tax competition is a reduction in the tax burden to improve the economy and welfare by increasing business competitiveness in attracting foreign investors. This brief understanding highlights the objective and subjective aspects of tax competition theory. The objective aspect is reducing the direct tax burden imposed in a country on specific categories of taxpayers. This reduction in the tax burden can be achieved through the provision of different tax incentives. Meanwhile, a country's subjective aspect concerns the goals achieved by reducing the direct tax burden. According to Pinto (2002), this theory states that there may be suitable or desirable tax competition as opposed to bad forms, depending on the intention of reducing the direct tax burden, whether it is intended to improve a country's economy and provide benefits to taxpayers or is directed to attract the

interest of foreign investors at the expense of other countries.

The tax policy (often countries with a lower tax rate) is an instrument to see whether tax competition allows the country to gain a competitive advantage (Steichen, 2002). They are providing tax incentives to investors following the provisions regulated by the host country based on the primary business activity sector or specific companies. For example, reducing the corporate income tax rate under tax laws or abolishing corporate tax regardless of income or beneficiary status are available tax incentives. In contrast, deductions from limited tax rates, such as income from manufacturing, finance, income earned by foreign taxpayers, or withholding taxes on interest earned from non-resident taxpayers, are special tax incentives (Pinto, 2002).

Foreign Direct Investment

According to Kurniati (2007), FDI can be defined as a long-term investment made by one country to another in a business field to generate wealth under total or partial control of asset owners. The concept of FDI is considered very important as a catalyst for the economic transformation of countries in general and developing countries in particular (Alshamsi, 2015).

FDI creates linkages between countries by stimulating technology transfer and knowledge exchange, increasing productivity and creating a more competitive economy (EU 2018). The effect of foreign companies is limited to capital inflows and the exchange of technology, knowledge, and managerial capabilities. Since the mid-1980s, FDI has increased its importance by transferring technology and establishing trade and procurement networks for foreign markets (Swenson 2004, Osano & Koine 2016). FDI is considered one of the elements that influence other macroeconomic variables, such as employment, exports, consumption, and savings (Koojaroenprasit 2012).

The critical role of FDI in economic growth and productivity causes the government to use policy instruments to attract FDI (Abdioglu, Bini,s & Arslan 2016). The government will attract net FDI inflows by providing good economic benefits to investment firms, and one way is by offering a competitive tax climate (Mohs et al., 2016). Tax

policy affects FDI inflows and increases direct investment abroad, increasing a country's net domestic income (OECD 2008).

Tax Incentive Policy

According to UNCTAD (United Nation, Conference on Trade and Development) in Prasetyo (2008), tax incentives are all forms of incentives to reduce the company's tax burden to attract companies to invest in specific projects or sectors. The types of tax incentives provided by a country to investors, including 1) Reduction of corporate income tax rate; 2) Tax holidays; 3) Loss carry-forwards; 4) Investment allowances; 5) Investment tax credit and 6) Tax deduction on dividends and interest paid abroad.

Reduction of the corporate income tax rate is one of the incentives provided with the best approach to competing in tax policy where lower tax rates can increase after-tax returns to investors (Shome, 1995). According to Darussalam et al. (2015), the tax holiday is an exemption from the burden of corporate income tax, or it can also be in the form of reducing the corporate income tax rate for companies that make foreign investments in the country within a certain period. Loss carry-forwards are incentives that allow a company to reduce its future tax burden, i.e., reducing future profits with current losses. Investment allowance can be defined as a deduction from taxable income based on a percentage of new investment (depreciation). Investment tax credits can be divided into two, namely flat and additional investment tax credits. A flat investment tax credit can be obtained as a fixed percentage of the investment expenditure incurred by the company in a year on qualifying or targeted capital.

On the other hand, additional investment tax credits can be obtained as a fixed percentage of investment spending in a year over a moving average basis, for example, the average investment spending by tax-paying companies over the previous three years. An increase in the dividend tax rate will make investors less interested in expanding their investment. Therefore, this incentive is provided with the intention that this tax can be discounted to maintain investor interest. These incentives are also usually combined with tax holiday incentives by exempting all types of

income taxes, including taxes on income returned abroad (UNCTAD, 2000).

Tax Holiday

Ismawan (2001) defines a tax holiday as a tax exemption from the use of taxation imposed on company profits and profits paid to shareholders. A tax holiday is a type of tax incentive often used by developing countries to encourage investment in a country (Easson and Zolt, 2004). This incentive is intended for companies that have just invested in a country and not currently operating companies. New companies that receive tax holiday incentives will be given a specific period during which they will be exempt from the income tax burden.

Regulations governing tax holidays in Indonesia are regulated in Law Number 25 of 2007 concerning Investment Article 18 paragraph 5 regulates the provision of tax holiday facilities which reads as follows: "Exemption or reduction of corporate income tax in a certain amount and time can only be granted to new investment which is a pioneer industry, namely an industry that has broad linkages, provides added value and high externalities, introduces new technology and has strategic value for the economy national."

In addition, other provisions governing the tax holiday facility are regulated in the PMK Number 130/PMK.010/2020 concerning the Provision of Income Tax Reduction Facilities. New investment in pioneer industries carried out by corporate taxpayers will receive a reduction in corporate Income Tax imposed on income derived from their primary business activities as stated in Article 2 paragraphs 2 and 3 as regulated in PMK Number 130/PMK.010/2020 concerning Provision of Corporate Income Tax Reduction Facility, namely the value of the new investment is at least IDR 100,000,000,000.00 by providing a reduction of 100% of the amount of corporate Income Tax payable for new investment with a value of at least IDR 500,000,000,000.00 and 50% of the total corporate Income Tax payable for new investment with a value of at least IDR 100,000,000,000.00 and at most less than IDR 500,000,000,000,000. Article 2 paragraph 4 also explains the provisions on the period given to an investment company with an investment

value of at least IDR 500,000,000.00, namely 5 tax years up to 20 tax years.

Corporate Income Tax Rate

Waluyo (2017) defines the tax rate as the rate used to calculate the amount of tax payable (tax to be paid). The basis used to calculate the amount of tax payable is Taxable Income. In calculating this Taxable Income, it must be sourced from the company's financial statements (profit and loss statement) after positive and negative fiscal corrections have been made to obtain net income after fiscal corrections.

The statutory tax rate is the most basic income tax measure. Corporate income taxes are often imposed at more than one level of government. A high tax rate does not necessarily imply high tax payments, depending on the tax base. Determination of a country's tax rate is an essential factor that can attract multinational companies to invest. When companies have decided which country they will invest, they are expected to follow the criteria and conditions set in a jurisdiction to be taxed on income tax laws have determined. Therefore, the determination of corporate income tax based on tax laws is critical in determining where multinational companies carry out their main business activities in a country (Devereux, 2006).

Effect of Tax Holiday on Foreign Direct Investment

In the eclectic theory, it has been explained that three conditions must be met by companies involved in FDI, namely ownership, location, and internalisation. In the location hypothesis, when the host country provides certain advantages to foreign investors, namely tax incentive facilities that can attract foreign investors, low labour costs, good labour productivity, and adequate infrastructure quality, foreign investors will consider investing in the host country. In addition, investment companies can choose which countries can provide tax holiday incentive facilities to invest in that country. Previous research (Cleeve, 2008, Samuel Kassahun, 2015, Klemm and Parys, 2011) found that tax holidays significantly positively affect FDI.

H1: Tax holiday has a positive and significant effect on FDI.

The Effect of Corporate Income Tax Rates on Foreign Direct Investment

In tax competition theory, it has also been explained that corporate income tax must be lower than other countries to attract foreign investors. A decrease in the tax burden on investment occurs when there is higher capital mobility so that the tax rate on investment is reduced. This indicates that the government determines the tax rate considers capital inflows to cause capital outflows in a country. Each country can choose to cut tax rates in attracting FDI to its country. Therefore, the tax incentive policy in the form of a lower corporate income tax rate is expected to attract more foreign investment. Previous research (Abdioglu, 2016; Samuel Kassahun, 2015; Klemm and Parys, 2011; Saidu, 2015; and Etim, 2019) found that corporate income tax rates have a significant negative effect on FDI.

H2: The corporate income tax rate has a significant and negative effect on FDI.

Research Methods

The type of research used is a quantitative approach and descriptive method. The population in this study is data from 1967 to 2020, wherein in 1967, the Indonesian government first implemented a tax holiday facility policy. The total research population is 54 members, each consisting of data on tax holiday recipients, FDI inflows, and income tax rates.

The sampling technique used is non-probability sampling, namely by purposive sampling, where the number of respondents is determined by using the Slovin formula as many as 40 data. The data used in this research is secondary data. Data collection techniques in this study are document analysis with observation techniques through internet research and literature. Data on FDI inflows in Indonesia were obtained from the World Bank, recipients of tax holidays were obtained from the Ministry of Industry, Ministry of Finance (TK I DJP), BKPM, and corporate income tax

rates taxfoundation.org and Indonesian tax regulations.

The variables studied in this study consist of the dependent variable, namely FDI inflows as measured by net inflows in US\$, the independent variable being tax holidays as measured by the number of companies receiving tax holidays in Indonesia, and corporate income tax rates as measured by the highest tax rates. According to the Indonesian Taxation Law and control variables, which include GDP growth as measured by the GDP growth ratio, inflation as measured by the annual inflation rate, and trade openness as measured by the ratio obtained from the value of exports+imports/GDP. The data analysis technique used to hone and test the data is multiple regression analysis. In this study, there are two regression models tested, namely:

$$FDI = \beta_0 + \beta_1TH + \beta_2TR + \epsilon$$

$$FDI = \beta_0 + \beta_1GDP\ Growth + \beta_2Inflation + \beta_3Openness + \beta_4TH + \beta_5TR + \epsilon$$

Wherein, FDI: *FDI inflow*, TH: *Tax Holiday*, TR: *Tax Rate*, β_0, \dots : Koefisien, ϵ : *std. error*

Results and Discussion

Descriptive Analysis

The descriptive statistical analysis used in this study includes the average, maximum, minimum, and standard deviation values. The summary of test results is presented in the following table:

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FDI	40	-4550355286	28666300000	6895271721	9335438612
TAXHOL	40	0	48	3,60	9,465
TAXRATE	40	0,22	0,45	0,3100	0,05611
GDP	40	-0,1313	0,0822	0,048520	0,0350214
INFLATION	40	0,0168	0,7763	0,089037	0,1163078
OPENNESS	40	0,28708	0,96186	0,5221525	0,11139945

The results of the descriptive analysis show that the average FDI entering Indonesia is US\$ 6,895,271,721,598, and the highest is US\$ 28,666.3 million in 2020, while the lowest is US\$ -4,550,355,286 which occurred in 2000. The average tax holiday recipient in Indonesia was 3.60, and the highest was 48 tax holiday recipients in 2019, while the lowest was 0 tax holiday recipients in 1983-1995, 2000, 2008, 2010, and 2016-2017. The average corporate income tax rate ratio in Indonesia is 4.852%, and the highest tax rate is 45% which occurred in 1981-1983, while the lowest was 22% in 2020.

The average GDP growth ratio in Indonesia, namely 5.523% and the highest growth reached 8.22%, which occurred in 1995, while the lowest was -13.13% which occurred in 1998. The average inflation ratio in Indonesia

was 8.904%, and the highest inflation rate reached 77.63%, which occurred in 1998, while the lowest was 1.68% which occurred in 2020. The average trade openness ratio in Indonesia was 52.215%, and the highest trade openness reached 96.186%, which occurred in 1998, while the lowest was 28.708% which occurred in 2020.

Simultaneous Testing (F Test)

The statistical test used to test this simultaneous hypothesis is the F test. The F table value used as a critical value in this simultaneous hypothesis test is 2.49 obtained from the attachment of the F distribution table with $df_1 = 5$ and $df_2 = 34$ (Table 2) with a significance level of 5%.

Table 2. Results of Simultaneous Hypothesis Testing (Test F) ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2431506517856922600000	5	486301303571384500000	17,092	0,000 ^b
Residual	967359631294095700000	34	28451753861591050000		
Total	3398866149151018600000	39			

a. Dependent Variable: FDI

b. Predictors: (Constant), Openness, Tax rate, Tax holiday, GDP, Inflation

From table 2 above, information is obtained that the F count obtained is 17,092, and the value is much greater than the F-table value of 2,975 (F count > F table) with a Sig value. $0.000 < 0.05$ (α) so that it falls in the area of rejection of H_0 , then with a confidence level of 95%, it can be decided to reject H_0 and accept H_a , which means tax holiday, corporate income tax rates, GDP growth, inflation, and trade openness simultaneously affect significantly to FDI.

Partial test (t-Test)

This research was conducted by using a partial hypothesis test (t-test). This test consists of multiple linear regression analysis models, namely multiple linear regression analysis models without control variables and control variables. The results of partial hypothesis testing without control variables are presented in the following table

Table 3. Results of Multiple Linear Regression Analysis (t-Test) Without Control Variable

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	39722484315,337	5550212685,288		7,157	0,000
TAXHOL	345815427,675	107493430,024	0,338	3,217	0,003
TAXRATE	-109882266927,994	17459836101,059	-0,660	-6,293	0,000

a. Dependent Variable: FDI

Based on the regression equation and table 3 above, it is known that the effect of the variable tax holiday and corporate income tax rates on FDI without involving the control variables partially is:

- 1) the tax holiday variable on FDI shows the information on the value of t count, which is 3,217, which is greater than t-table, which is 2,026 (t count > t table) with a value of Sig. $0.003 < 0.05$ (α). This indicates that H_0 is rejected and H_a is accepted, which means that the tax holiday has a positive and significant effect on FDI, where the higher the recipient of the tax holiday will affect the higher FDI

inflows and vice versa.

- 2) The variable corporate income tax rate on FDI shows the information on the value of t count, which is -6.293 smaller than t-table, namely -2.026 (-t count < -t table) with a value of Sig. $0.00 < 0.05$ (α). This indicates that H_0 is rejected and H_a is accepted, which means that the corporate income tax rate has a negative and significant effect on FDI, where the lower the corporate income tax rate will affect the higher FDI inflows and vice versa.

After doing multiple linear regression analysis without control variables, it is necessary to analyse with control variables as follow

Table 4. Multiple Linear Regression Analysis (t-Test) With Control Variables

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	56791139142,315	7120849949,538		7,975	0,000
TAXHOL	231318329,629	103967039,534	,226	2,225	0,033
TAXRATE	-103774112677,099	16155382352,749	-,624	-6,424	0,000
GDP	35935135101,780	40892325010,852	,135	,879	0,386
INFLATION	27895676250,729	15605459572,298	,348	1,788	0,083
OPENNESS	-43627464291,665	12546293367,410	-,521	-3,477	0,001

a. Dependent Variable: FDI

Based on the regression equation and table 4 above, it is known that the effect of the variable tax holiday and corporate income tax rates on FDI by involving the control variables partially is:

- 1) The tax holiday variable on FDI shows the information on the value of t count, which is 2.225, greater than t table, which is 2.032 (t count > t table) with a value of Sig. $0.033 < 0.05$ (α). This indicates that H₀ is rejected and H_a is accepted, which means that the tax holiday has a positive and significant effect on FDI, where the higher the recipient of the tax holiday will affect the higher FDI inflows and vice versa.
- 2) The variable of the corporate income tax rate on FDI shows the information value of t count, which is -6.424 smaller than t table, namely -2.032 (-t count < -t table) with a value of Sig. $0.00 < 0.05$ (α). This indicates that H₀ is rejected and H_a is accepted, which means that the corporate income tax rate has a negative and significant effect on FDI, where the lower the corporate income tax rate will affect the higher FDI inflows and vice versa.
- 3) The GDP growth variable against FDI shows the information on the value of t count, which is 0.879, which is smaller than t-table, which is 2.032 (t-count > t table) with a value of Sig. $0.386 > 0.05$ (α). This indicates that H₀ is accepted, which means GDP growth does not significantly affect FDI, where higher or lower GDP growth does not necessarily affect FDI inflows.
- 4) The inflation variable on FDI shows the information on the value of t count, which is 1.788, which is smaller than the t-table, which is 2.032 (t count > t table) with a value of Sig. $0.083 > 0.05$ (α). This indicates that H₀ is accepted, which means that inflation does not significantly affect FDI, where higher or lower inflation does not necessarily affect FDI inflows.
- 5) The variable of trade openness to FDI shows that the information value of t count is -3.477 smaller than t-table, which is -2.032 (-t count < -t table) with a Sig value. $0.001 < 0.05$ (α). This indicates that H₀ is rejected and H_a is accepted, which means that trade openness has a negative and significant effect on FDI, where the lower the trade openness ratio will affect the higher FDI inflows and vice versa.

Coefficient of Determination Test

This test was conducted to measure how far the model's ability to explain the variation of the dependent variable. This study uses the coefficient of determination determined by the value of R Square. This test consists of two models, namely, testing the coefficient of determination without control variables and with control variables. The results of the determination coefficient test are presented in the following table

Table 5. Coefficient of Determination Test Results (R²) Without Control Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,773 ^a	0,597	0,575	6084739789,02345

a. Predictors: (Constant), Tax Rate, Tax Holiday

Based on the results of the coefficient of determination test without the control variables in table 5. it can be seen that the R² value obtained is 0.597. This means that the variable receiving the tax holiday and

corporate income tax rates simultaneously contributes 59.7% to FDI inflows, while the remaining 40.3% is the influence contribution given by other factors not examined in this study.

Table 6. Coefficient of Determination Test Results (R²) With Control Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,846 ^a	0,715	0,674	5334018547,17351

a. Predictors: (Constant), Openness, Tax Rate, Tax Holiday, GDP, Inflation

Based on the results of the coefficient of determination test with the control variable in table 6, it can be seen that the R² value obtained is 0.715. This means that the variables receiving tax holidays, corporate income tax rates, GDP growth, inflation, and trade openness simultaneously contribute 71.5% influence on FDI inflows, while the remaining 28.5% is the influence contribution given by other factors not examined in this study

Discussion

The Effect of Tax Holiday on Foreign Direct Investment

Based on the partial test results with the regression model without control variables, the regression coefficient value for the tax holiday is 345.815,427,675 and has a Sig value. 0.003 < 0.05 (α). This means that the tax holiday has a positive and significant effect on FDI. In addition, the tax holiday variable also has a correlation coefficient value of 0.401, which means that the tax holiday has a fairly strong relationship with FDI. Then, the results of a partial test with a regression model involving the control variable, the regression coefficient value for the corporate income tax rate variable is 231,318,329,629 and has a Sig value. 0.033 < 0.05 (α). This means that the tax holiday involving the control variables for GDP growth, inflation, and trade openness has a positive and significant effect on FDI, where the results are not different from the regression model without control variables. The results of this research analysis are following the proposed hypothesis, and the results of this study are supported by

research conducted by (Setyo, 2020) which states that tax holidays have a positive and significant effect on FDI. This indicates that the more companies or investors that are given tax holiday incentives by the government the higher the FDI inflows. Therefore, the state needs to create a tax holiday incentive policy that can attract foreign investors directly by providing ease of licensing and technical provisions to eliminate investor doubts over the uncertainty of the implementation of the tax holiday so that more and more investors register for this incentive.

The Effect of Corporate Income Tax Rates on Foreign Direct Investment

Based on the partial test results with the regression model without control variables, the regression coefficient value for the corporate income tax rate variable is -109,882,266,927,994 and has a Sig value. 0.000 < 0.05 (α). This means that the corporate income tax rate has a negative and significant effect on FDI. In addition, the corporate income tax rate variable also has a correlation coefficient value of -0.696, which means that the corporate income tax rate has a strong relationship with FDI. Then, the results of a partial test with a regression model involving the control variable, the regression coefficient value for the corporate income tax rate variable is -103.774.112.677,099 and has a Sig value. 0.000 < 0.05 (α). This means that the corporate income tax rate involving the control variables of GDP growth, inflation and trade openness has a negative and significant effect on FDI, where the results are not different from the regression model without control variables. The

results of this research analysis are following the proposed hypothesis, and the results of this study are supported by research conducted by (Abdioglu, 2016; Klemm and Parys, 2011; Saidu, 2015 and Etim, 2019) which states that the corporate income tax rate has a negative and significant effect.

Countries that impose relatively low corporate income tax rates will attract more foreign investors to invest in the country (Insah, 2013). This means that the higher the tax rate of a country will reduce the number of investors who will invest in that country because a high tax rate will reduce the number of profits from the company, so that companies will invest in countries with low tax rates.

The Effect of GDP Growth on Foreign Direct Investment

Based on the partial test results, the regression coefficient value for the GDP growth variable is 35.935.135.101.780 and has a Sig value. $0.386 > 0.05$ (α). This means that GDP growth does not have a significant effect on FDI. In addition, the GDP growth variable also has a correlation coefficient of 0.007, which means that GDP growth has a very weak relationship with FDI. The results of the analysis of this study are the same as the research conducted by (Fahmi, 2012 and Saidu, 2015), but different from the research conducted by (Van Parys, 2010; Insah, 2013; Abdioglu, 2015 and Putu, 2015) which in his research said that GDP growth has a positive and significant effect on FDI. This means that the higher the GDP growth rate of a country, the more interested investors are to invest in that country. This growth indicates the ability of a country to improve the country's economy and affects the ability of a country to produce goods and services so that the situation is positive and profitable for investors to invest in the country.

The Effect of Inflation on Foreign Direct Investment

Based on the partial test results, the regression coefficient value for the inflation variable is 27.895.676.250,729 and has a Sig value. $0.083 > 0.05$ (α). This means that inflation does not have a significant effect on FDI. In addition, the inflation variable also has a correlation coefficient of -0.230 which means that inflation

has a weak relationship with FDI. The results of the analysis of this study are the same as the research conducted by (Abdioglu, 2016), but different from the research conducted by (Van Parys, 2010; Klemm and Parys, 2011 and Fahmi, 2012) which said in his research that inflation had a positive and significant effect. It is different from the research conducted by (Kassahun, 2015 and Setyo, 2020), which says that inflation has a negative and significant effect on FDI. It means that a low inflation rate can attract foreign investors to invest, while a high inflation rate causes the level of risk of business failure to be also high so that investors are less attractive to invest in that country.

The Effect of Trade Openness on Foreign Direct Investment

Based on the partial test results, the regression coefficient value for the trade openness variable is - 43,627,464,291,665 and has a Sig value. $0.001 < 0.05$ (α). This means that trade openness has a negative and significant effect on FDI. In addition, the trade openness variable also has a correlation coefficient value of -0.516 which means that trade openness has a fairly strong relationship with FDI. The results of this study are the same as the results of research conducted by (Cleeve, 2008; Van Parys, 2010 and Abdioglu, 2016). The trade openness ratio has a negative effect on FDI due to the trade balance deficit (import value is more than export value) of a country. This indicates that the demand for imports in a country shows a promising market for imported products, thus attracting investors to invest their capital in producing imported products. In other words, an increase in imports can encourage FDI into the country.

Conclusions and Suggestions

Conclusions

Based on the results of data analysis and discussions that have been carried out, the researchers obtained the following conclusions:

1. The tax holiday and corporate income tax rates involving the control variables of GDP growth, inflation, and trade openness simultaneously significantly influence foreign direct investment (FDI) in

- Indonesia. They simultaneously also contribute 71.5% effect on FDI inflows in Indonesia. Indonesia. If, without involving control variables, the tax holiday and corporate income tax rates simultaneously contribute 59.7% of the influence of FDI inflows in Indonesia.
2. The tax holiday, corporate income tax rates, GDP growth, inflation, and trade openness partially affect foreign direct investment (FDI) in Indonesia. Each of these influences includes:
 - a) The tax holiday has a positive and significant effect on FDI. The higher the investor or company receiving the tax holiday, the higher the FDI inflow in Indonesia. The lower the investor or company receiving the tax holiday, the lower the FDI in Indonesia.
 - b) The corporate income tax rate has a negative and significant effect, where the higher the corporate income tax rate will affect decreasing FDI inflows in Indonesia. Conversely, the lower the corporate income tax rate will affect the higher FDI inflows in Indonesia.
 - c) GDP growth does not have a significant effect on FDI, where the higher GDP growth will not necessarily affect FDI inflows in Indonesia
 - d) Inflation does not have a significant effect on FDI, where higher inflation will not necessarily impact FDI inflows in Indonesia.
 - e) Trade openness has a negative and significant effect, where the higher the ratio of trade openness will impact decreasing FDI inflows in Indonesia, conversely the lower the ratio of trade openness will impact the higher FDI inflows in Indonesia.

Suggestions

Some suggestions that can be given by researchers related to the results of research conducted are as follows:

1. The provision of tax holiday incentives needs to be supported by a good investment climate in Indonesia because this incentive is one of the considerations for potential investors in making investment decisions in a country. Thus, the government must maintain a conducive investment climate to attract foreign

investors to invest their capital.

2. The government must foster, supervise and review regulations and policies related to the implementation of tax holidays following the needs of investors to attract foreign investors by simplifying the bureaucracy to facilitate investment licensing and making it easier for investors to obtain these incentive facilities.
3. The government is expected to create good macroeconomic stability through programs in economic development, such as building/repairing infrastructure, improving the quality of human resources, etc.
4. The government must ensure that exploration carried out by investors who receive tax holiday incentives also has a good impact on Indonesia, where investors who create jobs can reduce unemployment and improve people's welfare, technology transfer that occurs must be appropriately utilised and develop local production so that can compete in the global market.

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