

POLICY EVALUATION: IMPACT OF IMPORTATION INCOME TAX INCENTIVE

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ABSTRACT

This study aims to evaluate the effectiveness of the Income Tax Incentive on Imports in maintaining the productivity of construction taxpayers in Bekasi during the Pandemic. The study uses a positivist approach with a quantitative method. This method adopts the difference-in-differences analysis. Such a method measures the average treatment effect of the construction taxpayers' productivity before and after the implementation. The construction sector was selected as the research object since it became the government's most targeted sector under the incentive policy. Meanwhile, this study selected the taxpayers in Bekasi because it faced the lowest decline during the Pandemic. The study concludes that the Income Tax Incentive on Imports significantly maintains the Total Factor Productivity of construction taxpayers in Bekasi. However, this effectiveness occurs only for the taxpayers who utilise it. On the other hand, 96% of construction taxpayers did not utilise the incentive. Therefore, the effectiveness is infinitesimal. Therefore, this study recommends that the Government monitor utilisation levels and promptly assess the tax incentive's effectiveness before considering its re-implementation during construction taxpayers' productivity decline.

Keywords: Public policy, policy evaluation, tax policy, tax incentive, productivity

ABSTRAK

Penelitian ini bertujuan untuk mengevaluasi efektivitas kebijakan Insentif Pajak Penghasilan Impor dalam menjaga produktivitas Wajib Pajak Sektor Konstruksi di Bekasi selama Masa Pandemi. Penelitian ini menggunakan pendekatan positivis dengan metode kuantitatif. Metode ini mengadopsi analisis *difference-in-differences*. Metode tersebut mengukur rata-rata pengaruh perlakuan terhadap produktivitas wajib pajak konstruksi sebelum dan sesudah penerapan kebijakan. Sektor konstruksi dipilih sebagai objek penelitian ini karena merupakan sektor yang menjadi sasaran pemerintah dalam kebijakan insentif. Sedangkan penelitian ini memilih Bekasi karena Wajib Pajak Sektor Konstruksi di Bekasi mengalami penurunan terendah selama Pandemi. Penelitian menyimpulkan bahwa Insentif Pajak Penghasilan Impor efektif secara signifikan dalam menjaga Produktivitas Faktor Total Wajib Pajak Konstruksi di Bekasi. Namun demikian, tingkat efektivitas ini hanya terjadi pada wajib pajak yang menggunakan insentif pajak. Sedangkan, terdapat 96% wajib pajak sektor konstruksi yang tidak memanfaatkan insentif pajak tersebut. Oleh karena itu, tingkat efektivitasnya sangat kecil. Oleh karena itu, studi ini merekomendasikan agar Pemerintah memantau tingkat pemanfaatan dan segera mengevaluasi efektivitas insentif pajak sebelum mempertimbangkan penerapannya kembali pada saat produktivitas Wajib Pajak Sektor Konstruksi menurun.

Kata kunci: Kebijakan publik, evaluasi kebijakan, kebijakan pajak, insentif pajak, produktivitas

INTRODUCTION

The COVID-19 Pandemic (“Pandemic”) has engulfed the world and profoundly affected the global economy since 2020. The world’s economy was slowing due to the economy’s demand and supply and the domino effect. As a consequence, many countries experienced a recession in 2020. In contrast, Indonesia’s economic growth slowed at 1.74%, 2.41%, and 4.19% (Quarter on Quarter). Still, the growth started to rise slowly in Quarter 3 of 2020 until May 2021. Generally, the negative economic impact of the Pandemic lasted from April 2020 to 2021. Since the virus began to spread in January 2020, many countries have started implementing policies to limit traffic flows between countries. This situation has caused several business sectors to experience a significant decline in import activity. Considering the impact of the Pandemic is very threatening to economic activities, the Government initiated the National

Economic Recovery Program (PEN). One of the forms of this program is the provision of the Income Tax Article 22 on Import Exemption Incentive (from now on referred to as “the Income Tax Incentive on Imports”). This tax incentive aims to counter the impact of the Pandemic on taxpayer business activities related to import activities.

Based on the Ministry of Finance Regulation, there are three objectives of the tax incentives for the taxpayers affected by the Pandemic. One of the main objectives is to maintain productivity of specific sectors. Moreover, Ministry of Finance Republic of Indonesia (2022) also states that the Income Tax Incentive on Imports aims to help the supply side during the Pandemic (p.162). Therefore, the objectives of the Income Tax Incentive on Imports correspond to the Government’s efforts to maintain the productivity of the targeted sector.

In terms of the targeted sector, according to the Minister of Finance Regulation, the Government

has listed several sectors of the Income Tax Incentive. Based on this regulation, 17 sectors and 730 Business Field Classification (KLU) can use the Income Tax Incentive on Imports. Moreover, based on the KLU eligibility, it turns out that Construction, Wholesale and Retail Trade, Real estate Activities, and Manufacturing are the most targeted sectors. Even though the amount of the KLU Construction sector is less than the Wholesale and Retail Trade Manufacturing Sectors, in terms of KLU proportion, Construction Sector is the most targeted sector by the Government.

However, there is a gap in the number of construction taxpayers registered at the Kota Bekasi Medium Tax Office. According to the administrative data (2023), compared to other regions, the taxpayers in Bekasi experienced the lowest decline in productivity even though they had the highest import intensity and utilisation. This phenomena gap became the basis for the need to evaluate the effectiveness of the policy in providing the Income Tax Incentive on Imports because there is a doubt that the Income Tax Incentive on Imports did not effectively maintain the productivity of Construction Taxpayers during the Pandemic.

Since the implementation, the effect of the tax incentives during the Pandemic is often an exciting research topic to discuss. Nonetheless, some of these studies yielded contradictory results. For example, according to Chetty et al. (2020), the Government cannot effectively carry out fiscal stimulus during the Pandemic. It is because, during this period, the change in consumer behaviour and restrictions on activities shake the market balance. In contrast, according to Nur & Fitriandi (2021), the tax incentive provision during the Pandemic was adequate and positively affected tax revenue. It happened because the tax incentive allowed taxpayers to continue carrying out the production process, purchase raw materials and increase capital.

Recently, no previous research has been conducted to evaluate the effectiveness of the Income Tax Incentive on Imports in Indonesia during the Pandemic. However, in terms the effect of Tax Incentive on Import on productivity, the previous study is still very rare. Furthermore, based on the previous studies result there are only two studies that have been conducted regarding the effectiveness of tax incentive (Hanum & Syah, 2022; Safiq & Afrilin, 2022). Moreover, the study that has been conducted by Wicaksono et al. (2022) and Bandiyo & Al Fajar (2019) did not measure the impact of tax incentive on taxpayers' productivity. Furthermore, in terms of the study scope, two studies have been conducted regarding the

evaluation of Tax incentives within the local scope (Wulandari et al., (2022) and (Kumala & Abu Bakar, 2022). However, the focus of their evaluation studies was not on the effectiveness but on the implementation and utilisation. Therefore, it is safe to state that there is a research gap of the effectiveness evaluation of income tax incentive on import which impact on the taxpayers' productivity.

Based on the phenomena and research gap explained above, this research will conduct the effectiveness evaluation of the tax incentive on import in Bekasi. The concept that is used in this study is the Formal Evaluation concept introduced by William N. Dunn. Formal evaluation is an approach that uses descriptive methods to produce valid and reliable information related to the outcomes of the policy. Moreover, these outcomes are evaluated on the basis of the objectives of the policies that have been formally announced by policymakers or program makers. In the Formal Evaluation concept, there is a Summative method of measurement that focuses on the output or the effect that can be measured. Moreover, there are several measurement methods in Summative measurement. In this study, the measurement method that is used is the experimental method, which is stated by Dunn (2018) as the best method for effectiveness evaluation. This method can measure the difference of effect that has resulted from the policy, which focuses on the targeted group.

According to Dunn (2018), a formal evaluation is a systematic and objective process of evaluating the quality, effectiveness, or worth of a program, product, or process using standardised procedures and measures. This formal evaluation uses descriptive and explanative methods to produce reliable and valid information about policy outcomes. In addition, the concept of Formal evaluation is deemed feasible for this study, considering that the goals and objectives of policymakers are officially announced and measurable.

In Formal Evaluation, there are two variables that can be used as an approach to evaluate the effectiveness. The first variable is the definition of all policymakers' objectives in implementing policies. Based on the Minister of Finance Regulation, the Government had formally announced the objective of providing the Income Tax Incentive on Imports. The objective of the Income Tax Incentive on Imports is to maintain the productivity of the targeted sector. Therefore, the first-dimension definition of this study has been clearly defined. The second variable is the measurement of the results compared with the goals to be achieved. Therefore, this study uses the operational definition

of productivity that is maintained in the construction sector. According to Wahyuni (2017), maintained productivity is productivity which is not experience decline. Moreover, the maintained productivity should experience steady growth. Therefore, the second dimension working definition also can be defined by this definition.

This study does not measure the relationship between variables. The outcome that has been achieved by the policy is measured by the difference in productivity. First of all, this study uses the indicator of the Construction Taxpayers' productivity as the targeted group before and after the implementation of the tax incentive. Regarding productivity measurement, this study uses the measurement of the Total Factor Productivity (Lorys, 2018; Shehata & El-Gohary, 2011; Tangen, 2005). This productivity value describes the maintained productivity after the implementation as the main objective of the tax incentive. In terms of time measurement, this study measures the effectiveness of the Income Tax Incentive on Imports before (2016 – 2019) and during the time of implementation (2020 – 2021).

Second, this study measures the difference in Construction Taxpayers' Productivity by generating the difference between the Construction Taxpayers' productivity as the targeted group with the non-targeted sector productivity as the control group. This difference can describe the effectiveness of the Income Tax Incentive in maintaining the Productivity of Construction Taxpayers in The Kota Bekasi Medium Tax Office as a whole. Moreover, to measure the effectiveness of the Income Tax Incentive on Imports, it is essential to generate the difference in the productivity within the Construction Taxpayers group. The difference can show the effectiveness of the Income Tax Incentive on Imports in maintaining the productivity of the Construction Taxpayers who utilised the tax incentive.

Based on theoretical and literature reviews, tax incentive can reduce opportunity cost and ultimately helps companies in increasing their productivity. Therefore, it can be deduced that the tax incentive effectively helps productivity at a firm level (Rapuluchukwu et al., 2016; Rosdiana, 2010). Income Tax Incentive on Imports can potentially have a positive effect on Construction Taxpayers' productivity. By providing an exemption on income tax for imported goods, they may be able to reduce their costs and increase their competitiveness. This can lead to increased productivity as they are able to invest in new equipment or technology, expand their operation, or hire additional employees. Additionally, the Income Tax Incentive on Imports can also in-

centivise Construction Taxpayers to import higher-quality goods, which can lead to increased productivity as they can produce higher-quality products. Therefore, the Hypothesis of this study is: (H0) The Income Tax Incentive on Imports is effective in maintaining the Productivity of Construction Taxpayers in The Kota Bekasi Medium Tax Office during the Pandemic.

METHODS

The approach used in this research is positivism. According to Ricucci (2018), the positivism paradigm relies on quantitative as a way to capture as much of reality as possible. Moreover, according to Creswell & David Creswell (2017), positivism research is an approach that involves collecting data followed by integrating the data using a research design with philosophical assumptions and a theoretical framework.

Furthermore, this research uses the difference-in-differences analysis to analyse the difference in the productivity level of the Construction Sector. The difference is measured by comparing the treated group and the control group. The first treated and control groups are the productivity level of the Construction Sector and non-targeted sector. The indicator of this variable is the average treatment effect on the treated (ATET) value difference between the productivity of the targeted group and the non-targeted group as a whole. Furthermore, the second treated and control group are the productivity level of the Construction Sector, which utilises and does not utilise the Income Tax Incentive on Imports. This variable indicator is the average treatment effect on the treated value difference between the productivity of the Construction Sector that utilises and does not utilise the tax incentive.

In terms of analysing the effectiveness of the Income Tax Incentive on Imports on productivity, this study uses a quasi-experimental design with the Difference-in-Differences (DID) method. DID is the method to identify a specific intervention or treatment. The difference in outcomes after and before the intervention for the intervention-affected groups was then compared with the same difference for the unaffected groups (Bertrand et al., 2003). The great appeal of the DID estimate comes from its simplicity and ability to circumvent many of the uniformity problems that often arise when comparing heterogeneous individuals.

RESULTS AND DISCUSSION

This research has 302 respondents in Total. The respondent contains the taxpayers classified as Construction Sector in The Kota Bekasi Medium Tax Office as the Targeted Group. Based on the data derived from the Kota Bekasi Medium Tax Office, the respondents are classified into two

categories, first is the taxpayers who utilised the Income Tax Incentive on Imports (12 taxpayers), and the second is the taxpayers who did not utilise the Income Tax Incentive on Imports (290 taxpayers). The respondent also contains the taxpayers classified as the non-targeted sector in The Kota Bekasi Medium Tax Office as the control group. This data is used as the control group to compare the difference in productivity.

Furthermore, it is essential to eliminate confounding variables to generate reliable results. First, this research eliminates the taxpayers' data who have used other facilities related to the import income tax exemption before the Income Tax Incentive on Imports is provided. Second, this research eliminates the construction taxpayers who are not active in import activity. It is to ensure that the treated group has similar characteristics so that the result of the difference analysis is reliable.

Following the previous step, it is also essential to make sure that these respondents have run their businesses before and after the implementation of the Import Tax Incentive. Based on the data, all of these taxpayers are construction firms that have run their businesses since 2016. This is important to measure the productivity of the taxpayers before the Pandemic begins and also to make sure that there is a parallel trend of productivity. Furthermore, it is also indicated that until 2021, the taxpayers are still running their businesses. Thus, it also meets the requirement of measuring the difference in the productivity of the taxpayers after the implementation of the Income Tax Incentive on Imports.

Table 1. The Construction Taxpayers Respondent

	Utilising Tax Incentive (Million Rupiah)	Not Utilising Tax Incentive (Million Rupiah)	Total (Million Rupiah)
Total Import Value Before	193.728	336.518	530.247
Average Import Value Before	16.144	1.148	1.738
Total Import Value After	81.307	180.230	261.537
Average Import Value After	6.775	615	857
Total Import Value Before and After	275.035	516.749	791.784

Based on Table 1, it can be seen that the absolute difference of the import value of both taxpayers is not really high. However, after comparing its average import value, it can be seen that the difference in the import average is very high, where the import value of the taxpayers who utilised the tax incentive is considerably higher compared to those who did not utilise the tax incentive. The average import value of the taxpayers who utilised the tax incentive before the Pandemic reached Rp16.144.034.952. On the other hand, the average import value of the taxpayers who did not utilise the tax incentive is only Rp1.148.528.400. Based on this, it could be argued that the taxpayers who utilised the Income Tax Incentive were the ones that had higher import activity.

Before conducting the difference-in-differences analysis, it is required that the data have to be normally distributed. Therefore, this study tests the compiled variable data of the Total Factor Productivity of each taxpayer. The normality test is conducted using the Shapiro-Wilk test. Moreover, the normality test is also conducted using the histogram plot test, which can indicate the normality of residuals. A bell-shaped curve which is resulted from the histogram plot test, will show the normal distribution of the series. However, after conducting the Shapiro-Wilk and Histogram plot test, the Total Factor Productivity data of each taxpayer is not normally distributed. The result of the Shapiro-Wilk Test is as follows:

Table 2. Shapiro-Wilk Test Result of Total Factor Productivity 2016 – 2021

Variable	W	V	z	Prob>z
Total Factor Productivity 2016	0.281	109.955	10.830	0.00000
Total Factor Productivity 2017	0.288	108.868	10.807	0.00000
Total Factor Productivity 2018	0.246	115.361	10.941	0.00000
Total Factor Productivity 2019	0.295	107.862	10.786	0.00000
Total Factor Productivity 2020	0.448	84.435	10.222	0.00000
Total Factor Productivity 2021	0.599	61.274	9.483	0.00000

The Null Hypothesis of the Shapiro-Wilk Test is: (H0) The population data is normally distributed. However, according to Table 2, all of the P value (Prob>z) is under the α level of .05. Since the z value is less than the α level of .05, the Hypothesis is rejected and accept the alternative Hypothesis. The alternative Hypothesis is that all of the Total Factor Productivity variables are not normally distributed. Considering that the data is

not normally distributed, it is essential to transform the data with Natural Logarithm. This process is the statistical realisation of the multiplicative product of many independent random variables, each of which is positive. Once the data has been transformed, then the histogram test can be conducted. Therefore, the results of the normality test of the Profitability-based productivity from 2016 to 2021 are as follows:

Table 3. The Descriptive Statistics of Log Total Factor Productivity 2016 – 2021

Variable	Mean	Std. dev.	Min	Max
Log TFP 2016	-0.23842	1.544101	-7.2755	4.390012
Log TFP 2017	-0.05764	1.33719	-4.6353	4.415126
Log TFP 2018	-0.08712	1.138875	-3.641	4.364529
Log TFP 2019	-0.02389	1.167332	-2.9331	4.157645
Log TFP 2020	-0.03235	1.224787	-3.6992	3.689941
Log TFP 2021	1.2568	1.193248	-2.8751	4.270535

Once the normality test is done and the data is normally distributed, the Difference-in-difference analysis can be conducted. There are several variables that are involved in this analysis. The treated group (Tax_Incentive = 1) is the construction taxpayers and the construction taxpayers who utilised the tax incentive. Meanwhile, the control group (Tax_Incentive = 0) is the non-targeted sector taxpayers and the construction taxpayers who did not utilise the tax incentive. Furthermore, there are steps that need to be carried out in a quasi-experiment. First, it is crucial to eliminate the confounding variables. Therefore, the data of the treated group and control group should be filtered and cleaned up. To measure the exact effect of the Income Tax Incentive on Imports, the control and treated group is also filtered to be the only taxpayers active in import activity before and during the Pandemic. Moreover, the taxpayers are also filtered to be the ones who did not utilise the other facilities related to the Income Tax Import exemption.

Second, this study also separates the time variable (year) as before and after the implementation of the Income Tax Incentive on Imports. The year 2016 until 2019 is considered before treatment (0), while the year 2020 and 2021 are considered after treatment (1). With this strategy, the average year effect can be measured. Following the previous step, it is also essential to measure the y value. The y value is the difference between the Total Factor Productivity of the taxpayers before

and after the treatment. The value of y of this study uses the Total of taxpayers' total factor productivity each year. Therefore, the analysis is as follows:

$$y_{it} = \beta_0 + \beta_1 t + \beta_2 i + \beta_3 i.t + \epsilon$$

Notes:

y = Difference in differences value of the

Total Factor Productivity

i = intervention (the tax incentive)

t = time dummy variable

β_0 = baseline average

β_1 = time trend in control group

β_2 = Difference of groups pre – intervention

β_3 = Difference in changes over time

ϵ = exogenous

Table 4. The Difference-in-Difference ATET Result of Total Factor Productivity between The Targeted and Non Targeted Group

y	Co efficient	Robust std. error	t	P> t	95% conf.Interval
ATET					
Tax Incentive (1 vs 0)	-1.507	3.03e-15	-0.50	0.0	-1.5

Based on the result in Table 4, it can be seen that the Average Treatment Effect on the Treated (ATET) of the Difference-in-Differences is -1.507174. The value means a 1.507174 value difference in the average productivity. The negative value of the Coefficient shows that the total factor productivity of the treated group is less than the total factor productivity of the control group. And this result occurs after the implementation of the Income Tax Incentive on Imports. It is also can be seen in Table 4 that the robust standard error value is 3.03. Moreover, the t value is also in the negative value of -5.0, while it is also indicated that the P-value of t is less than alpha ($\alpha=0.01$). Therefore, it can be stated that the model of Difference-in-Differences is significant at 1%.

Moreover, it is also essential to measure the construction sector's productivity to further the result of the effectiveness of the Income Tax Incentive on Imports in maintaining productivity. Therefore, this study measures the ATET within the Construction Taxpayers. The result of the ATET value is as follows:

Table 5. ATET Result of Total Factor Productivity Within the Construction Taxpayers

y	Co efficient	Robust std. error	t	P> t	95% conf.Interval	
ATET						
Tax Incentive						
(1 vs 0)	1.27	1.51	0.84	0.417	-2.05	4.61

Note: ATET estimate adjusted for group effects and time effects.

Based on Table 5, the Coefficient value of ATET is positive at 1.279724. The value indicates a difference of 1.279724 in average productivity between the control and treated groups. However, given that the observation data is small, the Robust Standard Error, t-value, and p-value are insignificant. Therefore, it is essential to conduct wild-clustered bootstrap on the difference-in-differences regression. It is because we need to obtain the p-value and confidence intervals. Therefore, the result of the wild-clustered bootstrap is as follows:

Table 6. ATET Result with Wild-Clustered Bootstrap of Total Factor Productivity

y	Coefficient	t	P> t	[95% conf. Interval]	
ATET					
Tax Incentive					
(1 vs 0)	1.27	3.0e+07	0.000	1.27	1.27

Note: ATET estimate adjusted for group effects and time effects.

Table 6 shows that the ATET Coefficient is still at 1.279724. At the same time, the t-value is 3.0, with the p-value at 0.000 ($\alpha=0.01$). This result indicates that the ATET value is significant at 1%. Moreover, before concluding that the ATET value is valid, it is compulsory to test the parallel trend of the control and treated group. This is important to make sure that both the control and treated group have the same trend of Productivity before the Pandemic. Moreover, this is also important to validate the ATET value. This model uses the year 2016 to 2019 as the variable before the Pandemic or the implementation of the Income Tax Incentive on Imports. Therefore, the parallel trend analysis for the ATET value of the Total Factor Productivity between The Targeted and Non-Targeted Groups is as follows:

Table 7. ATET Result with Wild-Clustered Bootstrap of Total Factor Productivity

y	Coefficient	t	P> t	[95% conf. Interval]	
ATET					
Tax Incentive					
(1 vs 0)	1.27	3.0e+07	0.0	1.27	1.27

Note: ATET estimate adjusted for group effects and time effects.

Table 7 shows that the ATET Coefficient is still at 1.279724. At the same time, the t-value is 3.0, with the p-value at 0.000 ($\alpha=0.01$). This result indicates that the ATET value is significant at 1%. Moreover, before concluding that the ATET value is valid, it is compulsory to test the parallel trend of the control and treated group. This is important to make sure that both the control and treated group have the same trend of Productivity before the Pandemic. Moreover, this is also important to validate the ATET value. This model uses the year 2016 to 2019 as the variable before the Pandemic or the implementation of the Income Tax Incentive on Imports. Therefore, the parallel trend analysis for the ATET value of the Total Factor Productivity between The Targeted and Non-Targeted Groups is as follows:

H0: Linear trends are parallel
 $F(1, 1) = 4901.65$
 $Prob > F = 0.0091$

This result shows that the F value with the degree of freedom (1,1) is 4901.65. Meanwhile, The F table (1,1) is 4052.181. Since the F value is more than the F table, then we have to accept the Hypothesis that the Linear trends are parallel. However, after conducting the Granger test, we have also accepted the null Hypothesis that there is no effect in anticipation of treatment (The f value is less than that F table). However, the parallel trend analysis for the ATET value of the Total Factor Productivity within the Construction Sector is as follows:

H0: Linear trends are parallel
 $F(1, 11) = .07$
 $Prob > F = .8003$

According to the test result, the F value with the degree of freedom 0 (df1) and 11 (df2) is 0.07. Based on this, the F value (0.07) is less than the F table (3.22520). Therefore, there is no sufficient evidence to reject the null Hypothesis. So we accept the null Hypothesis that the linear trends are parallel before treatment.

Moreover, the parallel trend test can also be carried out with the Parallel Trendplot Test. This test is conducted to make sure that before the treatment, the control and treated groups have the same linear trend. The test result is as follows:

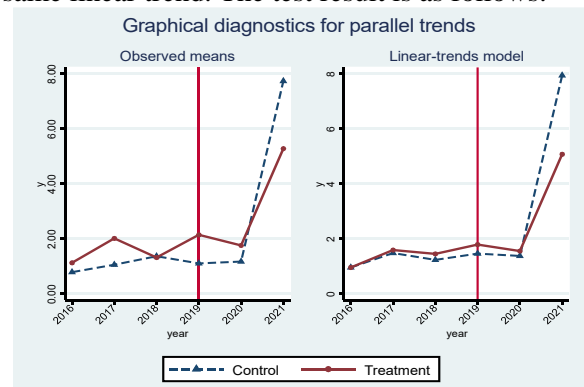


Figure 1. Total Factor Productivity Trendplots between Targeted and Non-Targeted Group

Based on Figure 1, the Linear-trends model shows that the productivity before the treatment of the control and the treated group is parallel. Therefore, the Parallel assumption is met. Moreover, after the treatment, it was exhibited that the productivity value of the control and treated groups had almost the same movement in 2020 and 2021. In 2020, the productivity of the control and treated groups decreased slightly. Furthermore, in 2021, productivity raised significantly. However, according to the linear-trend model, it can be seen that the growth of the productivity of the control group exceeds the treated group's productivity. This result can indicate that the Income Tax Incentive on Imports was ineffective in maintaining the Construction Taxpayers' productivity, as the Targeted Group in 2020 and 2021.

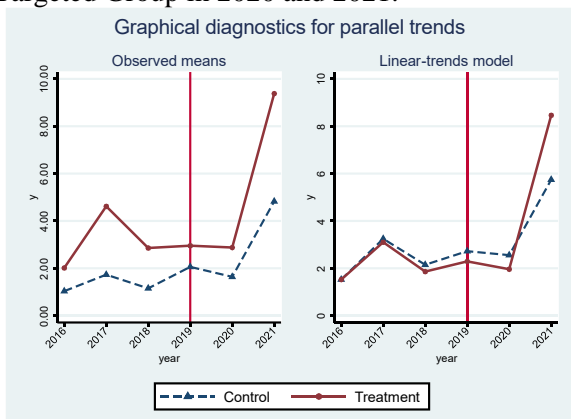


Figure 2. Total Factor Productivity Trendplots Within the Construction Taxpayers

Figure 2 exhibits the observed means over the pre-treatment time periods. Based on the figure, it can be seen that the total factor productivity of the treated group fluctuated from 2016 to 2019. On the other hand, the control group's total factor productivity experienced a steady trend over time. However, both of the group's productivity also indicates a similar fluctuation from 2016 to 2019. Moreover, from the Linear Parallel Trend, it can be assumed that there is a parallel trend between the control and treated group's total factor productivity from 2016 to 2019. Where from 2016 to 2018, the productivity of the control and treated groups fluctuated within the same movement.

After implementing the Income Tax Incentive on Imports in 2020, the total factor productivity of the control and treated groups followed the same trend. Where the total factor productivity of both groups decreased slightly. Therefore, it can be assumed that the Income Tax Incentive on Imports was ineffective in maintaining the total factor productivity of the construction sector in 2020. In the following year, 2021, the total factor productivity value of the control group increased signi-

ficantly, even though the taxpayers did not utilise the tax incentive. On the other hand, the productivity value of the treated group, in fact, experienced a more significant increase in 2021. This result can indicate that, in 2021, the Income Tax Incentive on Imports was effective in maintaining the total factor productivity of construction taxpayers during the Pandemic. However, the Total Factor Productivity of the construction sector experiences a significant increase. Therefore, this is also can indicate that the construction taxpayers can maintain their total factor productivity even though the tax incentive was not provided.

To sum up, the Hypothesis (H0) of this study is: The Income Tax Incentive on Imports is effective in maintaining the Productivity of Construction Taxpayers in The Kota Bekasi Medium Tax Office during the Pandemic. Based on the result, the ATET value of construction taxpayers' productivity is negative at -1.507174. Therefore, this study rejects the null Hypothesis and has to accept the alternative Hypothesis (H1) that the Income Tax Incentive on Imports is ineffective in maintaining Productivity.

However, it should be noted that within the Construction Taxpayers who utilised the tax incentive, the value of ATET has been positive (1.279724) and significant at α level 1%. Therefore, it also can be stated that for those who utilised the tax incentive, the Income Tax Incentive on Imports effectively maintains Total Factor Productivity. Even so, there is also an exciting finding. The trend of total factor productivity of the taxpayers who used the tax incentive and did not use the tax incentive is parallel in 2020. Therefore, it can be stated that the effectiveness of the tax incentive on total factor productivity is only significant in 2021.

CONCLUSION

Based on the research, which aims to evaluate the effectiveness of the importation income tax incentive during the Pandemic, this study found that the incentive is significantly effective in maintaining the construction taxpayers' total factor productivity. However, this effectiveness occurs only for the taxpayers who utilise it. On the other hand, 290 of 302 construction taxpayers (96 %) did not utilise the incentive during the Pandemic. Therefore, the effectiveness is infinitesimal.

Based on the above conclusion, it is recommended that the Government could consider re-implementing the Income Tax Incentive on Imports for Construction Taxpayers if a situation that can lead to productivity decline recurs. However, the Government should specifically focus on optimising utilisation.

REFERENCES

- Bandiyo, A., & Al Fajar, M. Z. (2019). Evaluasi Pelayanan Wajib Pajak dalam Aktivasi E-FIN. *Jurnal Kebijakan Publik*, 10(1), 17–24.
- Bertrand, M., Duflo, E., Mullainathan, S., Abadie, A., Acemoglu, D., An-Grist, J., Banerjee, A., Chernozhukov, V., Grossman, M., Hausman, J., Hirano, K., Honore, B., Imbens, G., Kling, J., Lang, K., Levitt, S., Murphy, K., Pakes, A., Saez, E., ... Barbara, S. (2003). *How Much Should We Trust Differences-In-Differences Estimates?*
- Chetty, R., Friedman, J. N., Hendren, N., & Stepner, M. (2020). *The Economic Impacts of COVID-19: Evidence from a New Public Database Built from Private Sector Data*.
- Creswell, J. W., & Creswell, D. J. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*.
- Directorate General of Taxes. (2023). Administrative Data of Directorate General of Taxes. In *Directorate General of Taxes Data*. Directorate General of Taxes.
- Dunn, W. N. (2018). *Public Policy Analysis An Integrated Approach* (6th ed.). Routledge.
- Hanum, N., & Syah, A. L. N. (2022). The Effectiveness of Tax Incentive Policy on Taxpayer Compliance Affected Msmes Covid-19 Pandemic. *TAAIJ: Tax Accounting Applied Journal*, 1(1), 29–43.
- Kumala, R., & Abu Bakar, I. (2022). Evaluation of the utilization of tax incentive policies during the Covid-19 pandemic in the framework of national economic recovery. *Ilomata International Journal of Tax and Accounting*, 3(1), 366–374. <https://doi.org/10.52728/ijtc.v4i1.422>
- Lorys, K. (2018). *Understanding construction productivity*. TU Delft.
- Ministry of Finance Republic of Indonesia. (2022). *Keeping Indonesia Safe from the COVID-19 Pandemic: Lessons Learnt from the National Economic Recovery Programme* (S. M. Indrawati, S. Nazara, T. Anas, C. F. Ananda, & K. Verico, Eds.). ISEAS Publishing.
- Nur, D. I., & Fitriandi, P. (2021). *Pengaruh Kebijakan Insentif Pajak di Masa Pandemi Covid-19 Terhadap Penerimaan PPN*.
- Rapuluchukwu, E. U., Belmondo, V., & Ibukun, B. (2016). *Incentives and firms' productivity: exploring multidimensional fiscal incentives in a developing country*. www.ocppc.ma
- Riccucci, N. M. (2018). *Public Administration: Traditions of Inquiry and Philosophies of Knowledge* (1st ed.). Georgetown University Press.
- Rosdiana, H. (2010). How “Pro Corporate Cash-Flow Tax” Design May Promote The Development of Telecommunication Industry. *Bisnis & Birokrasi: Jurnal Ilmu Administrasi Dan Organisasi*, 17(3), 183–200.
- Safiq, M., & Afrilin, S. B. S. (2022). Analysis of the Effectiveness of Tax Incentives on the Tax Compliance Before and During the COVID-19 Pandemic (Study on MSME Digital and MSME Non-Digital). *Jurnal Cakrawala Ilmiah*, 2(4), 1679–1698.
- Shehata, M. E., & El-Gohary, K. M. (2011). Towards improving construction labor productivity and projects' performance. *Alexandria Engineering Journal*, 50(4), 321–330. <https://doi.org/10.1016/j.aej.2012.02.001>
- Tangen, S. (2005). Demystifying productivity and performance. *International Journal of Productivity and Performance Management*, 54(1), 34–46. <https://doi.org/10.1108/17410400510571437>
- Wahyuni, H. C. (2017). *Analisa Produktivitas*. UMSIDA Press.
- Wicaksono, G., Puspita, Y., Asmandani, V., & Kusumaningrum, N. D. (2022). Kebijakan Pemerintah Daerah Dalam Merespon Pandemi Covid-19 dan Dampaknya Terhadap Penerimaan Pajak daerah. *Jurnal Kebijakan Publik*, 13(1), 86–92.
- Wulandari, W., Teron, F. C. K., Agustina, D., & Rofiyanti, E. (2022). Evaluation of the implementation of tax incentive policy for small and medium enterprises affected by the Covid-19 pandemic at the Tax Service Office Pratama Koja Utara Jakarta. *Ilomata International Journal of Tax and Accounting*, 3(2), 215–225. <https://doi.org/10.52728/ijtc.v3i2.476>