

AN ANALYSIS OF DEPRECIATION TAX SHIELD ON PROPERTY AND REAL ESTATES INDUSTRY IN INDONESIA

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ABSTRACT

Depreciation Tax Shield is a tax protection from depreciation expenses that can be used to reduce the company's profits so that the tax burden paid is lower than it should be. The depreciation tax shield can be calculated with total depreciation multiplied by the effective tax rate (ETR). This DTS then affects taxable income (TI) which is obtained from EBITDA multiplied by ETR. After that, net income (NI) can be calculated, namely by reducing EBITDA from TI. The final step is to add back the depreciation tax shield (DTS) to the Cash Flow (CF) by adding DTS and NI to find out how much tax evasion is done by the company. This study aims to test and analyze the depreciation tax shield by taking the place of research and complete financial report data, namely from 45 Property and Real Estates companies listed on the Indonesia Stock Exchange for 2015-2017. The data analysis technique used is descriptive statistics and depreciation tax shield analysis. The results of this study indicate that the depreciation tax shield looks to increase from 2015 by 12% in 2016 and increases to 30% in 2017 so it can be concluded that the Property and Real Estates companies listed on the Indonesia Stock Exchange utilize investment assets and property to minimize profits and tax burden.

Keywords: *depreciation tax shield; taxable income; net income; cash flow*

ABSTRACT

Perlindungan Pajak Dari Depresiasi adalah perlindungan pajak dari biaya depresiasi yang dapat digunakan untuk mengurangi keuntungan perusahaan sehingga beban pajak yang dibayarkan lebih rendah dari seharusnya. Perisai pajak depresiasi dapat dihitung dengan depresiasi total dikalikan dengan tarif pajak efektif. Perlindungan pajak dari depresiasi ini kemudian mempengaruhi penghasilan kena pajak yang diperoleh dari EBITDA dikalikan dengan ETR. Setelah itu, laba bersih (NI) dapat dihitung, yaitu dengan mengurangi EBITDA dari TI. Langkah terakhir adalah menambahkan kembali peredaman pajak depresiasi (DTS) ke Arus Kas (CF) dengan menambahkan DTS dan NI untuk mengetahui berapa banyak penggelapan pajak yang dilakukan oleh perusahaan. Penelitian ini bertujuan untuk menguji dan menganalisis peredaman pajak penyusutan dengan mengambil tempat penelitian dan melengkapi data laporan keuangan, yaitu dari 45 perusahaan Properti dan Real Estates yang terdaftar di Bursa Efek Indonesia selama 2015-2017. Teknik analisis data yang digunakan adalah statistik deskriptif dan analisis perisai pajak depresiasi. Hasil penelitian ini menunjukkan bahwa tax shield depresiasi terlihat meningkat dari tahun 2015 sebesar 12% pada tahun 2016 dan meningkat menjadi 30% pada tahun 2017 sehingga dapat disimpulkan bahwa perusahaan Properti dan Real Estates yang terdaftar di Bursa Efek Indonesia menggunakan aset investasi dan properti untuk meminimalkan laba dan beban pajak.

Keywords: *perlindungan pajak dari depresiasi; penghasilan kena pajak; laba bersih; arus kas*

INTRODUCTION

Large companies that have formed as Limited Liability Companies or Multinational Companies (MNC) in their practice must continue to look for ways to reduce its income taxation. There are several ways that are always practiced by many large companies in order to minimize their income tax, namely tax planning. Tax planning has been lively used to do tax avoidance legally without violating the constitution or Taxation Law that applies both at home and abroad. When viewed theoretically, the practice of tax planning is very effective considering that corporate taxpayers can produce a tax savings through structured tax avoidance procedures in accordance with the Taxation Law. So what is done by the taxpayer is counted as legal and cannot be arbitrarily subject to the tax article (Charles E. McLure, Jr).

Tax avoidance is proven not to violate the tax laws and regulations because the action only uses things that are not regulated, in other words taking the opportunity where there are gaps or loopholes between these regulations. All these loopholes in the law motivate the emergence of tax planning due to elements such as Tax Policy and Tax Administration (Kemsley, Deen). The factors that encourage tax management within a company tries to do tax planning are questions such as what is the type of tax to be collected, who is the subject being taxed, what are the objects of taxation, how much tax rates are levied, how are the procedures and Taxation Laws.

Apart from tax evasion that is still in the region of the Tax Law, there are also other ways that still fulfill the tax provisions, as well as ways that violate tax regulations. The practice is called Tax Savings and Tax Evasion. Tax Savings is an effort of taxpayers to streamline income tax through the selection of alternative tax imposition through lower rates. One way is to legally protect taxes through debt or non-debt factors. These ways are called as debt tax shield or non-debt tax shield. Both of these methods protect profits and is also a way to reduce corporate tax bills caused by an increase in the number of expenses that can reduce taxes, usually depreciation or interest.

Tax Shield differs from one country to another and is always based on what is allowed in the terms and those that do not meet the requirements for use as a reduction. The reduction value is also very influential on the effective tax rate owned by a company or an individual, where if they have a higher tax rate it will also increase the reduction rate (Vernon L. Smith). The expenses that can be used are such as depreciation, amortization, mortgage expense and interest expense. In some cases, income tax can be reduced in certain years because there is an unclaimed tax losses from the previous year.

This study aims to test and analyze whether it is true that depreciation tax shield is able to reduce the net income of the company concerned so that it minimizes the tax burden that must be paid by the company and to know what variables or elements are related to the analysis of the depreciation tax shield The purpose of this research is to test and analyze whether the depreciation tax shield is able to reduce the net income of the related company, thereby reducing the tax burden that must be paid by the company and knowing what variables or elements are related to the depreciation tax shield analysis so that tax avoidance using chances of loopholes can be done without violating existing tax laws.

LITERATURE REVIEW

Earning Before Interest and Depreciation (EBITDA)

EBITDA is profit before interest and depreciation which is used to analyze operational profitability before non-operating expenses, namely interest expense and other expenses as well as depreciation and amortization (Copeland, 2000).

Depreciation

Depreciation is a decrease in physical value in accordance with the time with its use. In accounting theory, depreciation can be said as an annual deduction from pre-tax income so that time and use of asset values can be reported in the company's financial statements (Madhuparna, 2011).

Effective Tax Rate (ETR)

Effective tax rates are the true rates for the tax burden paid compared to the amount of taxable income imposed on taxpayers (Ampenberger, 2011).

Depreciation Tax Shield (DTS)

The depreciation tax shield is a determinant of capital structure originating not from debt but from depreciation expense and amortization of profit and loss. Depreciation and amortization as a driver for companies to reduce debt because depreciation expense is cash flow as a source of capital from within the company so that it can reduce funding from debt (Madhuparna, 2011).

Taxable Income (TI)

Taxable income is income both profit and loss obtained by the taxpayer as the basis for calculating income tax expense in accordance with the tax rate, as stipulated in Article No. 36 of 2008 concerning the fourth amendment to Article Number 7 of 1983 concerning Taxable Income (Graham, 2016).

Net Income (NI)

Net income is the excess of all income from all costs and expenses after deducting income tax in a certain period that must be presented and reported in the financial statements. Net income can be used as a measure of financial performance for one period to attract the attention of investors and creditors in accordance with the ratios and standards that have been determined (Copeland, 2000).

Cash Flow (CF)

Cash flow in and out in a company must be reported, where the report is called a cash flow statement. Cash flows are liquid, short-term and can be quickly made into cash in terms of needs without facing the risk of significant changes in value. The cash flow report tells you where the cash inflows are obtained and how the company spends it for one book year (Fernandez, 2010).

Conceptual Framework

The conceptual framework of this research can be shown in the following figure:

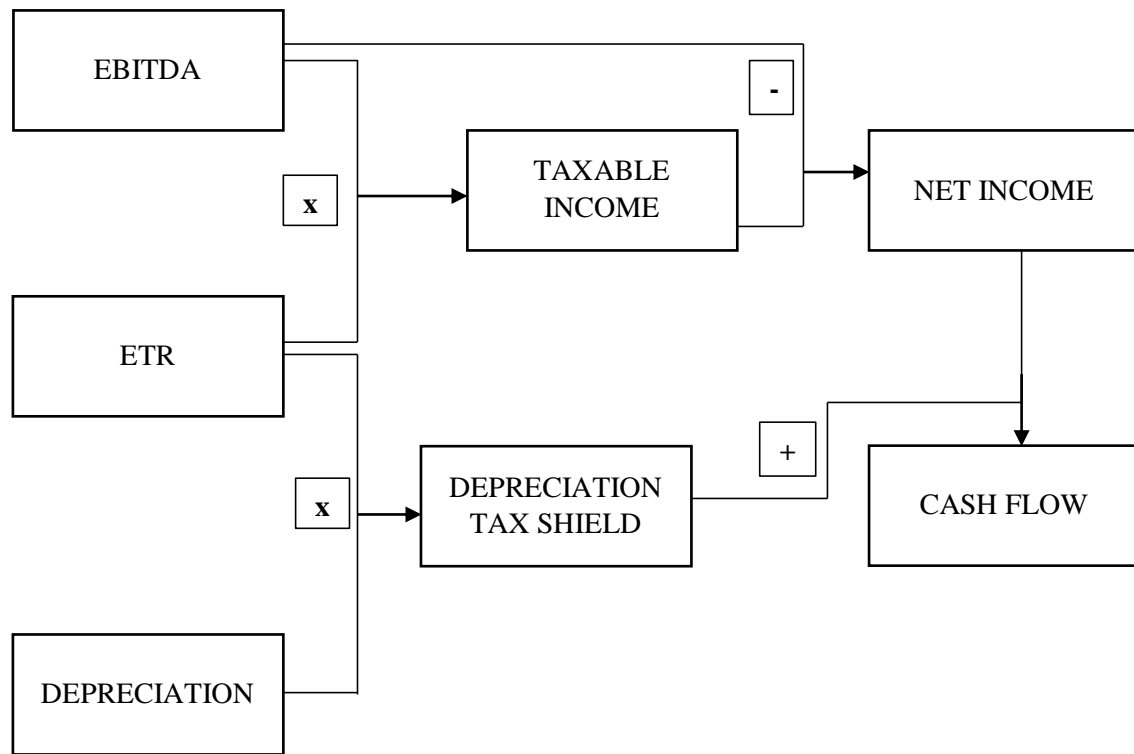


Figure 1. Conceptual Framework

RESEARCH METHODOLOGY

This study uses a descriptive research approach with a descriptive method of sustainability. The place of research taken is all the companies included in the Property and Real Estates Industry that are listed on the Indonesia Stock Exchange and have fulfilled the criteria needed in this study, namely from the year 2015 to 2017. There are 45 companies that met the criteria needed.

The type of data used in this study comes from secondary data accessed through www.idx.co.id, namely the financial statements of 45 companies in Property and Real Estates Industry that meet the criteria from the year 2015-2017, Indonesian Capital Market Directory, previous researches, relevant main and supporting theories, literature books, journals, scientific articles and other sites.

Data analysis technique used is descriptive statistics and analysis of depreciation tax shield. This study uses the Minimum, Maximum, Mean and Deviation Standard elements to measure the data that has been processed. Depreciation tax shield is a tax reduction technique in which depreciation costs are deducted from taxable income. The amount of depreciation that protects taxpayers from income tax is the applicable tax rate, multiplied by the amount of depreciation. The following is a table that shows the operational definitions of several variables related to this study:

Table 1. Operational Definition

No.	Variabel	Definition	Formulations
1.	Depreciation Tax Shield (DTS)	Depreciation tax shield is a non-cash expense that can be used for tax purposes. Depreciation can reduce a company's taxable income by providing protection from overall depreciation, thereby reducing tax liabilities for the year (Investopedia, 2018).	$DTS = TD \times ETR$
2.	Taxable Income (TI)	Taxable income is the profit or loss obtained by individual taxpayers or entities that are subject to tax over a fiscal year (Graham, 2016).	$TI = EBITDA \times ETR$
3.	Net Income (NI)	Net Profit is the difference between total income minus the total cost or difference in operating profit with the company's interest and income tax (Copeland, 2000).	$NI = EBITDA - TI$
4.	Cash Flow (CF)	The statement of cash flow is a primary report of cash inflow, receipt, payment and net change resulting from the operating, investing and financial activities of an enterprise during a period (Fernandez, 2010).	$CF = DTS + NI$

RESULTS AND DISCUSSIONS

In carrying out this research, the data used are 45 Property and Real Estates companies listed on the Indonesia Stock Exchange from 2015 to 2017 with the criteria of a complete and accessible published financial report.

This study uses a tax protection analysis of depreciation that can be used by types of companies that have large fixed assets and property investments so that they have the opportunity to reduce the amount of annual income tax deducted from their taxable income. This is because depreciation is a burden that is allowed to be a deduction of the tax burden as stated in Article 10 of Act No. 36 of 2008. The following table shows the lists of Property and Real Estates companies listed on the Indonesia Stock Exchange where a few doesn't fit the criteria needed for the research :

Table 2. Property and Real Estates Companies That Fits The Criteria Needed

No.	Stock Code	Company Name	IPO Dates	Criteria		
				2015	2016	2017
1	ARMY	Armidian Karyatama Tbk	21-06-2017	x	x	x
2	APLN	Agung Podomoro Land Tbk	11-11-2010	√	√	√
3	ASRI	Alam Sutera Reality Tbk	18-12-2007	√	√	√
4	BAPA	Bekasi Asri Pemula Tbk	14-01-2008	√	√	√
5	BCIP	Bumi Citra Permai Tbk	11-12-2009	√	√	√
6	BEST	Bekasi Fajar Industrial Estate Tbk	10-04-2012	√	√	√
7	BIKA	Binakarya Jaya Abadi Tbk	14-07-2015	√	√	√
8	BIPP	Bhuawanatala Indah Permai Tbk	23-10-1995	√	√	√
9	BKDP	Bukit Darmo property Tbk	15-06-2007	√	√	√
10	BKSL	Bukti Sentul Tbk	28-07-1997	√	√	√
11	BSDE	Bumi Serpong Damai Tbk	06-06-2008	√	√	√
12	COWL	Cowell Development Tbk	19-12-2007	√	√	√

No.	Stock Code	Company Name	IPO Dates	Criteria		
				2015	2016	2017
13	CTRA	Ciputra Development Tbk	28-03-1994	√	√	√
14	DART	Duta Anggada Realty Tbk	08-05-1990	√	√	√
15	DILD	Intilang Development Tbk	04-09-1991	√	√	√
16	DMAS	Puradelta Lestari Tbk	29-05-2015	√	√	√
17	DUTI	Duta Pertiwi Tbk	02-11-1994	√	√	√
18	ELTY	Bakrieland Development Tbk	30-10-1995	√	√	√
19	EMDE	Megapolitan Development Tbk	12-01-2011	√	√	√
20	FORZ	Forz Land Indonesia Tbk	28-04-2017	x	x	x
21	FMII	Fortuna Mate Indonesia Tbk	30-06-2000	√	√	√
22	GAMA	Gading Development Tbk	11-07-2012	√	√	√
23	GMTD	Goa Makassar Tourism Tbk	11-12-2000	x	x	x
24	GPRA	Perdana Gapura Prima Tbk	10-10-2007	√	√	√
25	GWSA	Greenwood Sejahtera Tbk	23-12-2011	√	√	√
26	JRPT	Jaya Real Property Tbk	29-06-1994	√	√	√
27	KIJA	Kawasan Industri Jababeka Tbk	10-01-1995	√	√	√
28	LCGP	Laguna Cipta Griya Tbk	13-07-2007	√	√	√
29	LPCK	Lippo Cikarang Tbk	24-07-1997	√	√	√
30	LPKR	Lippo Karawaci Tbk	28-06-1996	√	√	√
31	MDLN	Modernland Realty Tbk	18-01-1993	√	√	√
32	MKPI	Metropolitan Kentjana Tbk	10-07-2009	√	√	√
33	MMLP	Mega Manunggal Property Tbk	12-06-2015	√	√	√
34	MTLA	Metropolitan Land Tbk	20-06-2011	√	√	√
35	MTSM	Metro Realty Tbk	08-01-1992	√	√	√
36	NIRO	Nirvana Development Tbk	13-09-2012	√	√	√
37	OMRE	Indonesia Prima Property Tbk	22-08-1994	√	√	√
38	PPRO	PP Property Tbk	19-05-2015	√	√	√
39	PLIN	Plaza Indonesia Realty Tbk	15-06-1992	√	√	√
40	PUDP	Pudjiati Prestige Tbk	18-11-1994	√	√	√
41	PWON	Pakuwon Jati Tbk	19-10-1989	√	√	√
42	RBMS	Rista Bintang Mahkota Sejati Tbk	19-12-1997	√	√	√
43	RDTX	Roda Vivatex Tbk	14-05-1990	√	√	√
44	RODA	Pikko Land Development Tbk	22-10-2001	√	√	√
45	SCBD	Dadanayasa Arthatama Tbk	19-04-2002	√	√	√
46	SMDM	Surayamas Dutamakmur Tbk	12-10-1995	√	√	√
47	SMRA	Summarecon Agung Tbk	07-05-1990	√	√	√
48	TARA	Sitara Propertindo Tbk	11-07-2014	√	√	√

As mention earlier, there are 45 companies of Property and Real Estates that fits the criteria needed for the research to be done. There are total of 48 companies altogether, but ARMY, FORZ and GMTD does not fit the criteria due to their IPO dates came out at the year 2017 when the research needed the data coming from 2015 to 2017.

This study also uses the results of descriptive statistics to determine the Mean, Minimum, Maximum and Standard Deviations that exist in the processed data as shown in the following table:

Table 3. Results on Statistic Descriptives

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
DTS	135	1920190,00	701652200000,00	53018188523,2741	110202628308,28282
TI	135	-176555371112,00	1045623921870,00	62018535443,0371	135941153320,67151
NI	135	-529666113336,00	4182497137272,00	221862384234,0001	504513326127,81280
CF	135	-380029855467,00	4369835816681,00	274880572757,2742	563513680247,64600
Valid N (listwise)	135				

Source: Data processed by SPSS version 20

Table 3 above shows that, Debt Tax Shield (DTS) has a minimum value of Rp. 1,920,190,- from PT. Metropolitan Land Tbk. (MTLA) in 2015. While the maximum DTS value is Rp. 701,652,200,000,- owned by PT. Lippo Karawaci Tbk (LPKR) for the year 2017. The Debt Tax Shield has a three-year average value of Rp. 53,018,188,523,- and the standard deviation value for DTS is 110,202,628,308 which means that the DTS value has a deviation point of 110,202,628,308.

Taxable income (IT) has a minimum value of Rp. -176,555,371,112,- owned by PT. Bakrieland Development Tbk. (ELTY) in 2015, while the maximum value of IT is Rp. 1,045,623,921,870,- owned by PT. Bumi Serpong Damai Tbk. (BSDE) for 2017. Taxable Income has an average value of Rp. 62,018,535,443,- for three years and the standard deviation value for Taxable Income is 135,941,153,320, which means that the value of IT has a deviation point of that number.

For Net Profit (NI) there is a minimum value of Rp. -529,666,113,336,- owned by PT. Bakrieland Development Tbk. (ELTY) in 2015 and the maximum NI value of Rp. 4,182,497,137,272,- owned by PT. Bumi Serpong Damai Tbk. (BSDE) for 2017. The average value for Net Income for three years is Rp. 221,862,384,234,- and the standard deviation value or deviation point for Net Income is 504,513,326,127.

Cash Flow (CF) has a minimum value of Rp. -380,029,855,467,- which is also found in PT. Bakrieland Development Tbk. (ELTY) for 2015 and the maximum value of Cash Flow (CF) is Rp. 4,369,835,816,681,- also owned by PT. Bumi Serpong Damai Tbk. (BSDE) in 2017. Meanwhile, the average value for Cash Flow (CF) for three years is Rp. 274,880,572,757, - and the deviation point value or standard deviation for Cash Flow is 563,513,680,247.

Analyzing depreciation tax shield requires related elements with it, such as Earning Before Interest and Depreciation (EBITDA), Total Depreciation (TD) from all fixed assets and property investments, also Effective Tax Rates (ETR) that come from tax burdens and fiscal profits. All of these elements must first be clearly calculated because surely each company has different values and amounts to harmonize. The difference is included in Commercial Profit, the tax rate charged and the tax burden paid, the depreciation method used is even different, where some companies use the straight line method while others use the declining balance method. Both methods are allowed in tax laws to be used so that many companies always try to empower ways and methods which are more appropriate so that they are profitable to have a large amount of total depreciation in order to reduce profits and ultimately reduce the tax burden that must be paid to the state.

The following are the results and discussion of the Depreciation Tax Shield analysis that the author has obtained from the data processed at 45 Property and Real Estates companies listed on the Indonesia Stock Exchange for a three-year period starting from 2015 to 2017. Before that, the author will explain the analysis and calculation of EBITDA, Total Depreciation and the Effective Tax Rate that is subsequently used as a complement to the Depreciation Tax Shield analysis.

Table 4. Average of EBITDA, Total Depreciation and ETR of Property and Real Estates companies listed on the Indonesia Stock Exchange for the year 2015-2017

YEAR	EBITDA (Rp.)		Total Depreciation (Rp.)		ETR (%)	
	\bar{x}	Δ	\bar{x}	Δ	\bar{x}	Δ
2015	307.160.347.690	-	198.869.776.211	-	0,22	-
2016	255.707.496.425	-24%	232.348.930.745	17%	0,22	0,01
2017	288.774.914.915	13%	271.320.508.305	17%	0,23	0,04

From table 4 above it can be concluded that EBITDA has decreased during the year 2015-2017 where in 2015 the average EBITDA for Property and Real Estates companies was Rp. 307.160,347,690,-. But in 2016, the average of EBITDA decreased by 24% and become Rp. 255.707,496,425,-. Likewise in 2017, the average of EBITDA is Rp. 288,774,914,915, - which means there has been an incline of 13% from the previous year but still not high enough as it was in the year 2015. This shows that many Property and Real Estates companies experience a decrease in Earning Before Interests and Depreciation due to the increase in the total depreciation achieved by these companies using different methods available for deduction. This also shows that many companies seek to minimize profit before interest and depreciation so that the amount of tax burden paid is reduced by utilizing interest expenses, depreciation expenses and other expenses.

For total depreciation, Property and Real Estates companies experienced a significant increase over the three-year period 2015-2017. Where in 2015, the average total depreciation was Rp. 198,869,776,211,- but in 2016, an increase in total depreciation of 17% caused the amount of average depreciation to be Rp. 232,348,930,745,-. The same increase of 17% also occurred in 2017, where the average of total depreciation rate rose to Rp. 271,320,508,305,-. This shows that the Property and Real Estates companies listed on the Indonesia Stock Exchange experienced a significant increase due to the empowerment of depreciation expenses for each total fixed assets owned by the company as well as property investments. Each purchase will increase the number of assets so that it also encourages the increase in the company's total depreciation. Of course this increase in total depreciation helps companies reduce their net income and ultimately reduce the tax burden that must be paid annually.

While the effective tax rate is seen to experience a not significant increase from 2015 where the ETR average was 0,22 for the 45 Property and Real Estates companies listed on the Indonesia Stock Exchange. An increase of 0,01 occurred in the following year, namely in 2016 so that average ETR is at a fixed rate of 0,22. It can be concluded that in 2015 and 2016 ETR was stable even though these companies experienced a decrease in the average EBITDA and an increase in the average total depreciation on the same year. But in 2017 an increase of 0,04 occurred on ETR so that the tariff rose to 0,23 from the previous year.

Compatibility occurs where even though total depreciation increased by 17% that year, the amount of EBITDA also increased by 13% and this affected the ETR achieved.

With the calculation and analysis of the data on the elements concerned with a depreciation tax shield analysis, the results and discussion can then be presented to achieve the depreciation tax shield in 45 Property and Real Estates companies listed on the Indonesia Stock Exchange as follows:

Table 5. Processed data of Depreciation Tax Shield, Taxable Income, Net Income and Cash Flow of Property and Real Estates companies listed on Indonesia Stock Exchange for the year 2015-2017

No.	Stock Code	Year	Depreciation Tax Shield (DTS) (Rp.)	Taxable Income (TI) (Rp.)	Net Income (NI) (Rp.)	Cash Flow (CF) (Rp.)
1.	APLN	2015	335.055.322	284.730.236	854.190.709	1.189.246.031
		2016	425.130.982	240.233.456	720.700.455	1.145.831.437
		2017	491.122.237	474.123.103	1.422.369.308	1.913.491.545
2.	ASRI	2015	59.872.357	189.739.324	569.217.971	629.090.328
		2016	80.127.919	147.838.352	443.515.057	523.642.976
		2017	101.159.431	361.166.108	1.083.498.323	1.184.657.754
3.	BAPA	2015	1.024.275.597	358.733.373	973.051.064	1.997.326.661
		2016	1.602.108.352	714.992.717	1.086.767.716	2.688.876.068
		2017	1.212.320.792	3.913.509.814	9.330.018.767	10.542.339.559
4.	BCIP	2015	2.011.256.492	1.596.102.337	4.788.307.045	6.799.563.537
		2016	1.939.610.361	9.482.007.382	41.734.931.021	43.674.541.382
		2017	3.382.343.999	15.455.309.779	46.365.929.167	49.748.273.166
5.	BEST	2015	1.652.351.011	8.434.956.404	206.091.258.643	207.743.609.655
		2016	5.758.143.122	38.390.905.456	302.119.231.897	307.877.375.020
		2017	5.702.109.655	45.284.585.029	442.876.481.704	448.578.591.359
6.	BIKA	2015	10.115.208.139	19.433.410.098	58.300.230.294	68.415.438.433
		2016	13.044.300.847	-15.271.596.349	-61.741.711.438	-48.697.410.591
		2017	11.773.794.200	-8.068.913.436	-34.030.672.830	-22.256.878.631
7.	BIPP	2015	15.967.643.142	31.290.315.300	93.870.945.900	109.838.589.042
		2016	20.118.465.364	6.967.650.033	20.902.950.098	41.021.415.461
		2017	25.771.910.755	-7.602.069.079	-22.806.207.238	2.965.703.518
8.	BKDP	2015	20.990.325.599	-7.056.750.678	-21.170.252.035	-179.926.436
		2016	25.372.435.025	-7.237.072.294	-21.711.216.881	3.661.218.144
		2017	30.777.648.951	-10.833.383.303	-32.500.149.910	-1.722.500.959
9.	BKSL	2015	26.159.023.469	15.511.555.206	46.534.665.618	72.693.689.087
		2016	29.279.030.085	140.597.645.605	421.792.936.814	451.071.966.899
		2017	32.525.559.301	117.077.593.427	351.232.780.281	383.758.339.582
10.	BSDE	2015	136.641.626.565	472.416.384.671	1.889.665.537.962	2.026.307.164.527
		2016	161.019.048.488	413.088.580.261	1.652.354.321.044	1.813.373.369.532
		2017	187.338.679.409	1.045.623.921.870	4.182.497.137.272	4.369.835.816.681
11.	COWL	2015	43.141.590.523	-44.496.174.806	-133.488.524.418	-90.346.933.895
		2016	48.694.580.153	-5.694.993.365	-17.084.980.096	31.609.600.057
		2017	52.904.989.700	-16.909.659.990	-50.729.000.996	2.175.988.704
12.	CTRA	2015	148.560.698.564	377.601.919.060	1.507.482.251.315	1.656.042.949.879
		2016	176.061.000.000	238.828.600.000	955.314.400.000	1.131.375.400.000
		2017	263.409.750.000	264.497.500.000	793.492.500.000	1.056.902.250.000
13.	DART	2015	63.615.367	44.441.452	133.324.356	196.939.723
		2016	51.139.223	46.631.435	139.894.305	191.033.528
		2017	69.461.197	6.090.853	18.272.560	87.733.757
14.	DILD	2015	101.706.475.113	104.800.346.183	314.401.038.548	416.107.513.661
		2016	113.072.086.402	74.821.597.336	224.464.792.007	337.536.878.410

No.	Stock Code	Year	Depreciation Tax Shield (DTS) (Rp.)	Taxable Income (TI) (Rp.)	Net Income (NI) (Rp.)	Cash Flow (CF) (Rp.)
		2017	139.700.281.476	43.168.190.023	129.504.570.068	269.204.851.544
15.	DMAS	2015	6.327.622.510	345.174.323.281	1.035.522.994.553	1.041.850.617.063
		2016	8.760.644.943	193.840.501.354	581.521.516.427	590.282.161.370
		2017	13.816.885.905	167.560.917.072	502.682.769.747	516.499.655.652
16.	DUTI	2015	107.014.112.544	167.969.958.320	503.909.874.961	610.923.987.504
		2016	115.920.574.276	211.093.741.857	633.281.339.909	749.201.914.185
		2017	124.528.725.350	163.253.068.307	489.759.204.922	614.287.930.271
17.	ELTY	2015	149.636.257.869	-176.555.371.112	-529.666.113.336	-380.029.855.467
		2016	180.845.688.686	-139.208.728.017	-417.626.184.050	-236.780.495.364
		2017	204.649.809.113	-77.602.944.149	-232.808.832.448	-28.159.023.335
18.	EMDE	2015	16.483.157.452	15.317.069.734	45.951.209.201	62.434.366.652
		2016	21.071.875.972	16.819.998.550	50.459.995.651	71.531.871.623
		2017	24.031.867.129	26.552.970.628	79.658.911.884	103.690.779.013
19.	FMII	2015	4.032.471.011	42.862.627.123	128.587.881.368	132.620.352.379
		2016	515.806.194	74.238.169.410	222.714.508.229	223.230.314.423
		2017	425.789.056	2.483.282.654	7.449.847.962	7.875.637.018
20.	GAMA	2015	239.022.948	301.225.339	4.856.973.090	5.095.996.038
		2016	461.734.911	121.221.443	1.008.723.854	1.470.458.765
		2017	417.054.077	20.034.062	328.298.410	745.352.486
21.	GPRA	2015	12.902.492.861	11.250.582.578	62.580.530.832	75.483.023.694
		2016	2.305.536.424	1.098.944.479	46.232.258.044	48.537.794.468
		2017	27.930.612.577	9.490.065.190	28.470.195.569	56.400.808.146
22.	GWSA	2015	4.563.794.061	317.278.534.244	951.835.602.731	956.399.396.792
		2016	7.669.568.690	53.777.888.802	161.333.667.465	169.003.236.156
		2017	10.986.965.924	47.643.093.777	142.929.296.819	153.916.262.743
23.	JRPT	2015	37.419.906	125.470.946	751.147.323	788.567.229
		2016	60.873.050	193.982.085	833.497.795	894.370.845
		2017	90.419.062	271.798.002	890.554.421	980.973.483
24.	KIJA	2015	14.891.235.120	7.536.237.124	337.520.918.359	352.412.153.479
		2016	36.769.017.580	23.154.190.170	489.345.538.046	526.114.555.626
		2017	280.302.544.077	38.257.985.133	91.821.908.161	372.124.452.238
25.	LCGP	2015	223.785.163	326.920.412	980.761.235	1.204.546.398
		2016	203.537.956	1.589.316.599	6.357.266.394	6.560.804.351
		2017	275.628.806	-3.311.169.766	-9.933.509.299	-9.657.880.493
26.	LPCK	2015	17.991.960.787	186.103.506.553	744.414.026.212	762.405.986.999
		2016	28.349.010.470	137.467.718.334	412.403.155.001	440.752.165.471
		2017	27.928.800.000	76.149.600.000	304.598.400.000	332.527.200.000
27.	LPKR	2015	608.269.610.528	321.207.462.830	963.622.388.310	1.571.891.998.838
		2016	581.023.400.000	311.549.400.000	1.246.197.600.000	1.827.221.000.000
		2017	701.652.200.000	233.425.800.000	933.703.200.000	1.635.355.400.000
28.	MDLN	2015	62.101.024.645	240.027.299.630	720.081.900.593	782.182.925.238
		2016	70.452.813.602	137.642.311.095	412.926.942.353	483.379.755.955
		2017	82.519.561.408	169.197.835.166	507.593.527.139	590.113.088.546
29.	MKPI	2015	257.119.881.382	222.565.007.117	667.694.818.934	924.814.700.317
		2016	289.202.070.187	299.949.848.902	899.850.020.218	1.189.052.090.405
		2017	321.168.783.792	298.432.115.755	895.298.090.472	1.216.466.874.264
30.	MMLP	2015	879.613.369	32.750.665.069	98.251.995.208	99.131.608.577
		2016	1.635.686.500	99.806.249	299.418.748	1.935.105.248
		2017	2.520.451.250	73.276.083	219.828.248	2.740.279.498
31.	MTLA	2015	1.920.190	1.430.483	240.575.283	242.495.473
		2016	19.632.810	16.443.962	305.453.981	325.086.792
		2017	19.768.027	24.443.666	528.826.361	548.594.388
32.	MTSM	2015	6.629.841.233	-577.844.187	-1.733.532.560	4.896.308.674
		2016	6.668.709.917	-151.429.407	-454.288.221	6.214.421.696

No.	Stock Code	Year	Depreciation Tax Shield (DTS) (Rp.)	Taxable Income (TI) (Rp.)	Net Income (NI) (Rp.)	Cash Flow (CF) (Rp.)
		2017	6.703.633.118	-659.640.248	-1.978.920.743	4.724.712.374
33.	NIRO	2015	27.843.498.220	-10.302.616.269	-30.907.848.806	-3.064.350.586
		2016	43.677.383.664	-7.805.561.477	-23.416.684.432	20.260.699.233
		2017	82.325.766.709	893.287.171	2.679.861.512	85.005.628.220
34.	OMRE	2015	85.056.702.335	59.772.471.998	179.317.415.994	264.374.118.329
		2016	81.574.023.525	79.076.128.390	237.228.385.170	318.802.408.695
		2017	81.598.424.806	-16.983.608.636	-50.950.825.907	30.647.598.900
35.	PPRO	2015	443.010.816	68.080.535	204.241.604	647.252.421
		2016	497.306.471	99.382.740	298.148.219	795.454.689
		2017	545.184.386	70.110.172	210.330.515	755.514.901
36.	PLIN	2015	10.424.705.445	93.184.477.993	279.553.433.980	289.978.139.424
		2016	17.926.284.747	92.055.634.911	276.166.904.734	294.093.189.481
		2017	1.004.825.243	134.647.644.563	403.942.933.689	404.947.758.932
37.	PUDP	2015	11.959.082.708	3.765.400.126	27.591.952.360	39.551.035.068
		2016	14.139.586.581	3.504.484.734	22.919.928.181	37.059.514.762
		2017	13.253.849.508	621.109.141	4.775.802.615	18.029.652.123
38.	PWON	2015	456.116.099	356.285.503	1.068.856.508	1.524.972.607
		2016	539.466.162	432.940.920	1.298.822.760	1.838.288.922
		2017	630.839.642	517.922.943	1.553.768.828	2.184.608.470
39.	RBMS	2015	618.907.573	-771.409.540	-2.314.228.620	-1.695.321.047
		2016	699.269.357	-1.678.286.887	-5.034.860.662	-4.335.591.305
		2017	801.506.337	3.629.945.180	10.889.835.540	11.691.341.877
40.	RDTX	2015	80.296.823.211	64.008.557.326	192.025.671.977	272.322.495.188
		2016	88.750.424.578	64.341.018.918	193.023.056.755	281.773.481.333
		2017	97.796.720.333	62.285.622.316	186.856.866.949	284.653.587.282
41.	RODA	2015	1.465.171.440	116.786.665.640	350.359.996.919	351.825.168.359
		2016	2.043.235.968	16.107.213.904	48.321.641.713	50.364.877.681
		2017	2.736.253.274	6.015.105.305	18.045.315.914	20.781.569.187
42.	SCBD	2015	313.456.458	50.529.167	151.587.500	465.043.957
		2016	343.542.366	42.706.440	128.119.319	471.661.686
		2017	373.918.930	65.717.469	197.152.406	571.071.335
43.	SMDM	2015	27.564.016.000	19.202.114.438	57.606.343.313	85.170.359.313
		2016	30.088.016.216	5.073.413.815	15.220.241.444	45.308.257.660
		2017	35.775.442.332	5.102.829.021	15.308.487.064	51.083.929.396
44.	SMRA	2015	322.832.863	266.502.218	799.506.655	1.122.339.518
		2016	389.247.707	154.034.956	462.104.868	851.352.575
		2017	470.044.428	134.964.876	404.894.627	874.939.056
45.	TARA	2015	514.334.808	471.912.158	1.415.736.475	1.930.071.283
		2016	378.939.006	718.777.995	2.156.333.984	2.535.272.989
		2017	459.031.286	319.119.571	957.358.713	1.416.389.999

According to table 5, with elements of EBITDA, the total depreciation and ETR that has been processed before, the depreciation tax shield data can be analyzed later. As can be seen, each Property and Real Estates company has a total depreciation tax shield that varies from year to year, which affects the increase or decrease in taxable income, net income and cash flow.

All of these variables are related and continuous with each other, where the depreciation tax shield is used to be a protector and deduction of taxable income so that the amount becomes small and the tax burden paid is also small. This certainly affects the net income to be achieved for the year so that the company can avoid taxes in a legal way without having to violate the established law.

The following table is the average and growth for Depreciation Tax Shield, Taxable Income, Net Income and Cash Flow:

Table 6. The average and growth of DTS, TI, NI and CF for Property and Real Estates companies listed on the Indonesia Stock Exchange in 2015-2017

YEAR	DTS (Rp.)		TI (Rp.)		NI (Rp.)		CF (Rp.)	
	\bar{x}	Δ	\bar{x}	Δ	\bar{x}	Δ	\bar{x}	Δ
2015	43.086.231.890	-	68.020.750.776	-	233.940.910.024	-	277.963.799.129	-
2016	48.467.393.801	12%	54.900.849.672	-19%	196.441.284.867	-16%	244.908.678.668	-12%
2017	63.106.574.717	30%	63.134.005.880	15%	220.735.671.882	12%	283.842.246.599	16%

From table 6 above, it can be seen that there has been a significant increase in the average debt tax shield (DTS) in Property and Real Estates companies from 2015 of Rp. 43,086,231,890,- increased by 12% in 2016 to Rp. 48,467,393,801,-. This increase is of course caused by increased assets from the purchase of investment property so that the total depreciation per year also increases. In 2017, the average debt tax shield has increased by 30% to become a total of Rp. 63,106,574,717,-. This continuous increase for three consecutive years shows that it is true that total depreciation can be used as a deduction from the company's net income which causes the tax burden to be paid to be smaller than it should be.

However, for the average taxable income (IT) in the Property and Real Estates companies listed on the Indonesia Stock Exchange, it appears that there has been a decline of 19% in 2016, namely Rp. 54,900,849,672,- where in the previous year, namely 2015, the average taxable income was Rp. 68,020,750,776,-. This decrease was caused by a 24% decrease in EBITDA and followed by a stable effective tax rate (ETR) of 0.22 in the same year. Taxable income (IT) is obtained by multiplying EBITDA with ETR. While in 2017, there has been an increase in the average of IT by 15% to Rp. 63,134,005,880,- which was caused by an increase in EBITDA of 13% as well as ETR which increased by 0.04 to 0.23 in that year.

For net income (NI) in Property and Real Estates companies listed on the Indonesia Stock Exchange, it can be seen that the average net income in 2015 was Rp. 233,940,910,024,- but has decreased by 16% to Rp. 196,441,284,867,-. This decrease was influenced by EBITDA which decreased 24% from 2015 followed by a decrease in taxable income which was as much as 19%. This effects are because the formulation of net income (NI) is by reducing taxable income (IT) from EBITDA. For 2017, the average net income (NI) has increased by 12% to become Rp. 220,735,671,882,-. This increase occurred because EBITDA increased by 13% and taxable income (TI) which rose to 15%. So that these two elements influence the rise and fall of the average net income (NI) in Property and Real Estates companies.

Once the values, average and growth of the Debt Tax Shield (DTS), taxable income (IT) and Net Income (NI) are known, the next and last step is to make out the value of Cash Flow related to the depreciation tax shield because the DTS value can be added back to in cash flow to add more strength to the company's net resources. Seen from table 6 above, the average cash flow (CF) is Rp. 277,963,799,129,- for the year 2015, but in 2016 there has been a decline in the average Cash Flow (CF) of 12% to become Rp. 244,908,678,668,-. Cash Flow is obtained by adding a Depreciation Tax Shield with Net Income so that the figure shows the true value which is losing state income which is equal to the tax avoided

by the company and the value added in cash flow. This decrease of 12% in 2016 was caused by a decrease in Net Income of 16% so that even though the DTS increased by 12%, the two factors if added still made the average cash flow decrease. But in 2017, the average cash flow is Rp. 283,852,246,599,- which showed an increase of 16% due to a significant increase in the Depreciation Tax Shield in the same year which was 30% and an increase in Net Income of 12%.

This research concludes that, there are 45 Property and Real Estates companies listed on the Indonesia Stock Exchange have taken advantage of tax avoidance using a depreciation tax shield where the total total tax avoided for three years from 2015 to 2017 is Rp. 154,660,200,408,-. Of course this value is a loss for the country because Indonesia's biggest income comes from taxes. However, the company cannot be penalized because this is not illegal because it does not violate tax laws so that the government cannot impose sanctions on companies or entities that do tax evasion by utilizing loopholes such as the depreciation tax shield.

CONCLUSION

Based on the results of research and discussions that have been conducted on the analysis of depreciation tax shield on Property and Real Estates companies listed on the Indonesia Stock Exchange for 2015-2017, it can be concluded that:

1. The tax shield's depreciation has increased from 2015 to 2017 due to an increase in the total number of fixed assets and property investments made.
2. Taxable income decreased in 2016 by 19% from the previous year which was influenced by the low EBITDA with a decrease of 24% and an increase of 13% in 2017 which affected the increase in taxable income by 15%.
3. Net income in 2016 decreased by 16% compared to 2015 where it was connected to ETR which was stable and equal to 2015 which was 0.22 and then increased to 0.23 in 2017, causing net income to increase by 12%.
4. Cash flow has decreased by 12% in 2016, which has an effect on the amount of total depreciation but is also related to the decrease in taxable income so that in 2017 cash flow has increased by 16% due to taxable income which also increases and total depreciation by the amount the big one.

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