

# THE EFFECT OF CAPITAL INTENSITY ON TAX AGGRESSIVENESS WITH CORPORATE SOCIAL RESPONSIBILITY AS A MODERATING VARIABLE

(Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange 2017-2021)

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Received date: 23.8.2022 | Revised date: 20.9.2022  
Accepted date: 12.10.2022 | Published date: 31.12.2022

## ABSTRACT

The purpose of this research is to examine the relationship between capital intensity and tax aggression, controlling for the impact of corporate social responsibility. In this analysis, the population consists of manufacturing firms traded on the IDX between 2017 and 2021. Secondary information from the website [www.idx.co.id](http://www.idx.co.id) is utilised. The effective tax rate serves as a surrogate for tax aggression (ETR). According to this research, there is a negative correlation between capital intensity and tax aggression, and the positive correlation between capital intensity and CSR is neither strengthened nor weakened.

**Keywords:** Capital intensity, tax aggressiveness, corporate social responsibility

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## PRELIMINARY

### Background of the problem

Taxes are an important element in the Indonesian economy because taxes are the main source of income for the country. The government is currently trying to take continuous improvement actions to maximize tax revenue so that taxpayers are obedient in paying taxes by improving the tax system so that tax payments become easier (Fitria, 2018). The Indonesian government system that is made cannot optimize tax revenue because many companies and individuals tend to prefer to minimize taxes, so companies and individuals will tend to fight taxes aggressively.

In Indonesia, there are still many large companies that take tax countermeasures, which causes the Indonesian state to be classified as high in tax aggressiveness. The Tax Justice Network informs that in Indonesia, it is estimated that losses of up to US\$ 4.86 billion or Rp. 68.7 trillion occur due to tax evasion. The Tax Justice Network, entitled *The State of Tax Justice 2020: Tax Justice in the time of Covid-19*, stated that from this figure as much as Rp. 67.6 trillion did tax evasion from corporations in Indonesia and the rest came from individual taxpayers of Rp. 1,1 trillion. Tax payments made by corporations are less than they actually are. Meanwhile, individual taxpayers who are classified as rich people, hide their assets and income more. The estimated value of tax avoidance is 5.7% of the target at the end of 2020. The estimated value of tax avoidance is 5.16% compared to the realization of tax revenue at the end of 2019 which was Rp. 1,332 trillion (Nasional.kontan.co.id, 2020).

Several variables, including capital intensity and corporate social responsibility, might affect a company's level of tax aggression. Capital intensity is the proportion of a firm's total capital expenditures that go toward purchasing fixed assets, which may lower the firm's taxable income and overall profit (Harjito, et al., 2017). High fixed asset ownership will result in a high depreciation expense as well. Depreciation expense is not solely to do tax avoidance but to increase company productivity so that the depreciation expense can reduce company profit and decrease tax expense (Novitasari, et al., 2016). Therefore, the higher the capital intensity, the lower the company's tax aggressiveness. This research is supported by previous research conducted by Wardani (2020), Budianti & Curry (2018) dan Maulidah & Prastiwi (2019) shows that capital intensity on tax aggressiveness has a negative effect. On the other hand, there are previous studies that have been studied by Ayem & Setyadi (2019) dan Harjito et al., (2017) states that capital intensity on tax aggressiveness has a positive effect.

The introduction of corporate social responsibility is anticipated to exacerbate the negative association between capital intensity and tax aggressiveness in the organisation. Widespread disclosure of corporate social responsibility may minimise a company's tax aggressiveness via excellent fixed asset management to improve its commercial operations, not to prevent tax evasion, therefore enhancing the company's public image (Wardani, et al., 2021). Consistent with earlier studies, Zuhro (2021) concludes that a company's CSR efforts may boost the impact of

its capital intensity and tax aggression. Agustin (2020) demonstrates, however, that CSR does not mitigate the link between capital intensity and tax aggression. Based on this argument, the researcher tries to take a novelty by adding the moderating effect of corporate social responsibility on tax resistance. The purpose of this study is to examine and examine whether there is an effect of capital intensity on tax aggressiveness by moderating corporate social responsibility.

## LITERATURE AND THEORY BASIS

### Stakeholder Theory

The Stakeholder hypothesis was proposed by Freeman and Reed (1983) to explain to whom the corporation is accountable. One aspect of providing stakeholders with the information they anticipate relates to the capital intensity of a corporation. Muzakki and Darsono (2010) define “capital intensity” as “the proportion of a firm’s total assets that are fixed assets employed for investment” (2015). Businesses might benefit from depreciating their fixed assets by lowering their tax aggressiveness and increasing their profits.

### Stewardship Theory

Stewardship theory means that the needs of all parties are used as the basis for a manager’s actions. If a difference in goals is found between the steward and the principal, the steward seeks to work together to carry out orders based on the principal’s wishes by upholding the common interest which can be taken into consideration with the direction of achieving common goals Ariani & Prastiwi, 2020). The increase in company resources will lead to an increase in corporate social responsibility in managing resources. If the company’s resources continue to be large, the corporate social responsibility activities it carries out will also be large (Kusuma Wardani & Pratiwi Wijayanti, 2022).

### Tax Aggressiveness

According to Feryansyah et al. (2020), tax aggressiveness is a management activity that reduces a company’s taxable earnings via legal (tax avoidance) or illegal (tax evasion) tax planning (tax evasion). There are acts that do not break the regulations, and corporations who engage in tax aggression do so for their own personal benefit as well as that of the company.

## Capital Intensity

A company's capital intensity is a function of its investment in the form of fixed assets. The amount of wealth a corporation has relative to the amount it invests in fixed assets is referred to as capital intensity. The cost of depreciation incurred by the corporation increases in direct proportion to the value of its investment in fixed assets (Adnyani & Astika, 2019).

## Corporate Social Responsibility

Corporate social responsibility is a form of responsibility that the company has to interested parties inside and outside the company. The company will maintain a positive image of this community, especially in terms of paying taxes (Dewi, *et al.*, 2019). The bigger the company, the greater the social responsibility in a company.

## HYPOTHESIS DEVELOPMENT

### The Effect of Capital Intensity on Tax Aggressiveness

Capital intensity is a form of fixed assets owned by a company as capital material for company investment (Maulidah & Prastiwi 2019). According to (Delgado, *et al.*, 2012) Capital intensity is related to the economic life of the fixed asset itself, which will result in a depreciation expense every year. Although the depreciation of fixed assets may lower a business's taxable income, the primary motivation for doing so is to facilitate operations rather than evade taxation. This conforms to the stakeholder theory, which states that a firm's fixed assets serve a purpose in aiding the functioning of the firm in creating an annual depreciating item. More infrastructure means more revenue, which means a corporation is less likely to engage in aggressive tax evasion strategies (Muzakki & Darsono, 2015).

H1: Capital intensity has a negative effect on tax aggressiveness

### Corporate Social Responsibility Can Strengthen the Effect of Capital Intensity on Tax Aggressiveness

The relationship between capital intensity and tax aggressiveness has a negative relationship. Regarding the number of fixed assets owned by the company, it will tend to cause tax aggressiveness, all of this is caused by the depreciation of its fixed assets so that the tax burden paid will decrease because the profits can decrease.

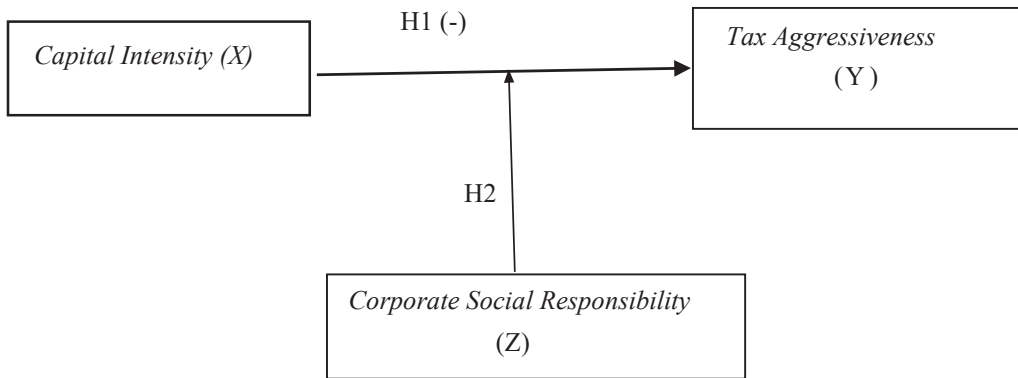
The existence of CSR in large companies can convince the public that companies with large fixed assets do not carry out tax aggressiveness through depreciation expense, but only to carry out the operations of a company. CSR disclosure is very important in terms of gaining public trust, in order to achieve common goals, companies must reduce tax aggressiveness activities in companies (Maulidah & Prastiwi, 2019). In accordance with the theory of stewardship, the

existence of CSR can fulfil the interests of the organization so that it can strengthen companies that have high capital intensity and aim to carry out the operations of a company well in long-term business sustainability for the next ten to twenty years so that the company's tax aggressiveness activities will be lower (Dharma & Ardiana, 2016).

H2: Corporate social responsibility can strengthen the negative effect of capital intensity on tax aggressiveness

### Research Framework

### Research Framework



Picture 1 Hypothesis framework

## RESEARCH METHODS

The nature of the research used is a form of quantitative research. This study uses secondary data so that the research is in the form of numbers and in processing this research data using SPSS 20. The sample used in this study is a manufacturing company listed on the Indonesia Stock Exchange (IDX) in 2017-2021.

### Operational definition

#### *Tax Aggressiveness*

Tax aggressiveness is the company's desire in an effort to reduce the tax burden to be paid, whether done in an illegal (tax escape) or legal (tax avoidance) (Natalya, 2018). The main proxy used to measure that the company is taking tax aggressiveness is the effective tax rate (ETR) proxy. The lower the ETR value indicates that the tax burden paid is smaller so that there is a high tax aggressiveness action in the company, and vice versa if the higher the ETR value, the lower tax aggressiveness action

$$ETR : \frac{\text{Total Company Tax Expense}}{\text{Profit Before Tax}}$$

### Capital Intensity

Capital intensity is the amount of a company's capital invested by a company in the form of fixed assets which can result in reduced net income and tax burden (Harjito *et al.*, 2017). *Capital intensity* proxied using the ratio of total fixed assets which refers to the research (Ariyani, *et al.*, 2019) with the following formula

$$\text{Capital Intensity} = \frac{\text{Total fixed assets} - \text{depreciation}}{\text{Total Assets}}$$

### Corporate Social Responsibility

Corporate social responsibility is a way to reduce negative effects and increase positive operational effects for the company on all stakeholders in the social, economic and environmental spheres to achieve the country's sustainable development goals (Pradnyadari, 2015). Disclosure of corporate social responsibility uses the standards that have been applied by the Global Reporting Initiative (GRI-G4) with a total of 91 indicators. The CSR disclosure formula is as follows:

$$\Sigma \text{ CSRDi} = \frac{\Sigma \text{Xi}}{\text{n}}$$

## RESULTS AND DISCUSSION

### Descriptive Statistical Analysis

**Table 1** Descriptive Statistics Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ETR_Y	158	,172	,325	,24639	,033091
CI_X1	158	,032	,760	,36747	,173275
CSR_Z	158	,055	,385	,16918	,073236
Valid N (listwise)	158				

Table 1 shows the results of descriptive statistical tests which state that the effective tax rate variable has an average value of 0.24639 and a standard deviation of 0.033091. The minimum value is 0.172 which is owned by PT Ultrajaya Milk Industry & Trading Company Tbk, and the maximum value is 0.325 which is owned by PT Indofood Sukses Makmur Tbk. While the Capital Intensity variable has an average value of 0.36747 and a standard deviation of 0.173275. The minimum value is 0.032 which is owned by PT Duta Pertiwi Nusantara Tbk, and the maximum value is 0.760 which is owned by PT Semen Baturaja (Persero) Tbk. And the Corporate Social Responsibility variable has an average value of 0.16918, and a standard deviation of 0.073236, so the value is greater than the average, which means that the CSR variable has a small distribution variance. The minimum value is 0.055 owned by PT Gudang Garam Tbk and the maximum value is 0.385 owned by PT Wijaya Karya Beton Tbk.

### Hypothesis Testing Analysis

Classical Assumption Test consists of a normality test, multicollinearity test, heteroscedasticity test and autocorrelation test. After testing the classical assumption, it is known that there is a problem with the autocorrelation test. Therefore, all data will be transformed to the natural logarithm (LN) with the intention that the data passes the classical assumption test and it is said that this research is worthy of the next test, namely the simple linear regression test.

**Table 2** Simple Linear Regression Analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1,372	,022		-62,844	,000
	LN_CI	,033	,016	,158	2,003	,047

a. Dependent Variable: LN\_ETR

Based on table 2 shows the test results of simple linear regression analysis with data that has been transformed to the natural logarithm (Ln). The test results revealed a significant value of  $0.047 < 0.05$  with a t value of 2003 that capital intensity had a positive effect on LnETR or capital intensity had a negative effect on tax aggressiveness. So the hypothesis that says the negative effect of capital intensity on tax aggressiveness is acceptable.

When the company's fixed assets are getting bigger, the company's aggressive tax countermeasures are decreasing (Maulidah & Prastiwi, 2019). Capital intensity has increased, and the ETR is also getting higher, so a high ETR illustrates the low tax aggressiveness of the company. The increase in capital intensity results in a high amount of depreciation of fixed assets which will reduce the company's profit before tax. This means that the company is not solely for tax avoidance aggressively, but for another purpose, namely to carry out the operations of a company well in long-term business continuity long (Dharma & Ardiana, 2016).



### Analysis of Moderating Variables

**Table 3** Absolute Difference Analysis

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-1,399	,019		
	Zscore(LN_CI)	,023	,011	,169	2,032 ,044
	Zscore(LN_ETR)	-,029	,011	-,217	-2,739 ,007
	Moderasi	-,010	,015	-,055	-,652 ,515

Dependent Variable: LN\_Y

Table 3 shows the absolute difference analysis test which aims to test the moderating variable using to prove the relationship between the dependent variable and the moderating variable. The table below shows a significant value of  $0.515 > 0.05$  with a t value of  $-0.652$ , meaning that the corporate social responsibility variable cannot moderate the effect of capital intensity on tax aggressiveness. So the hypothesis that corporate social responsibility can strengthen the negative effect of capital intensity on tax aggressiveness cannot be accepted.

These findings suggest that a company's ability to fight taxes vigorously is unaffected by the quantity of corporate social responsibility it has. The stakeholder thesis, which contends that a firm cannot exist just to serve its own interests but also that it must help its shareholders, creditors, and the community, serves as more support for this. The association between capital intensity and tax aggression in a firm is unaffected by whether corporate social responsibility is improving or declining in that organisation. Corporate social responsibility may not have a significant impact on the link between capital intensity and tax aggression because shareholders may place greater weight on other pieces of information and because CSR as assessed by GRI G-4 is currently at a low level.

## CONCLUSION

The study's findings demonstrated that capital intensity has a detrimental impact on tax aggression. Nevertheless, corporate social responsibility has no detrimental impact on capital intensity or tax aggressiveness. The inference is that the corporation will extend its operational activities more to optimise its business continuity by not fighting forcefully against taxes that might be detrimental to the state. In addition, investors are advised to be more careful before investing and pay more attention to company profits to fight tax aggressively. The research shows that it is better for companies not to fight taxes so they are not subject to sanctions that can reduce the company's good image.



This research is also limited to only examining manufacturing companies so that the results obtained cannot be generalized to other forms of companies in other fields in Indonesia. Before conducting research, it is advisable to conduct an assessment with several researchers. The assessment is carried out on the indicators of the company's CSR disclosure indicators as well as in selecting other variables for testing the independent variable tax aggressiveness using different years or adding years of observations that can show the actual condition of the company. Taking the type of industry in other fields can also be done to obtain comparisons between different types of industries from this research.

## REFERENCES

- Adnyani, N. K. A., & Astika, I. B. P. (2019). Pengaruh Profitabilitas, *Capital Intensity*, Dan Ukuran Perusahaan Pada *Tax Aggressive*. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 6(8), 594 – 621.
- Agustin, E. A. (2020). *Pengaruh Ukuran Perusahaan Dan Capital Intensity Terhadap Tax Aggressiveness Dengan Tanggung Jawab Sosial Perusahaan Sebagai Variabel Moderasi*.
- Ariani, M. O., & Prastiwi, D. (2020). Pengaruh *Corporate Social Responsibility* Terhadap Agresivitas Pajak Dengan Kinerja Keuangan Sebagai Variabel Moderasi. *Jurnal Akuntansi Unesa*, 8(3), 1 – 8.
- Ariyani, P., Lestari, S., Pratomo, D., & Asalam, A. G. (2019). Pengaruh Koneksi Politik Dan Capital Intensity Terhadap Agresivitas Pajak. *Jurnal Aset (Akuntansi Riset)*, 11(1), 41 – 54. <https://doi.org/10.17509/Jaset.V11i1.15772>
- Ayem, S., & Setyadi, A. (2019). Pengaruh Profitabilitas, Ukuran Perusahaan, Komite Audit Dan Capital Intensity terhadap Agresivitas Pajak. *Jurnal Akuntansi Pajak Universitas Sarjanawiyata Tamansiswa*, 1(2), 228 – 241. <https://doi.org/10.24964/Japd.V1i1.905>
- Budianti, S., & Curry, K. (2018). Pengaruh Profitabilitas, Likuiditas, Dan Capital Intensity Terhadap Penghindaran Pajak (Tax Avoidance). *Prosiding Seminar Nasional Cendekiawan 4*, Jakarta.
- Delgado, Fernandez-Rodriguez, E., & Martinez-Arias, A. (2012). Size And Other Determinants Of Corporate Effective Tax Rates In Us Listed Companies. *International Research Journal Of Finance And Economics*, (98), 160 – 165.
- Desi Natalya. (2018). Pengaruh *Capital Intensity*, *Leverage* Dan Profitabilitas Terhadap Tax Agresivitas Dengan Kinerja Pasar Sebagai Variabel Moderating. *Media Akuntansi Perpajakan*, 3(1), 37 – 55.
- Dewi, L. K., Widiastara, A., & Amah, N. (2019). Pengaruh Profitabilitas Dan Manajemen Laba Terhadap *Tax Avoidance* Dengan *Corporate Social Responsibility* Sebagai Variabel Moderating. *Fakultas Ekonomi Dan Bisnis Universitas PGRI Madiun*, 321 – 333.
- Dharma, I., & Ardiana, P. (2016). Pengaruh Leverage, Intensitas Aset Tetap, Ukuran Perusahaan, Dan Koneksi Politik Terhadap *Tax Avoidance*. *E-Jurnal Akuntansi*, 15(1), 584 – 613.
- Feryansyah, Handajani, L., & Hermanto. (2020). *The Effect Of Earnings Management On Tax Aggressiveness With Good Corporate Governance And Dividend Policy As Moderating Variables*. *Jurnal Emba*, 8(4), 140 – 155.
- Fitria, E. F. (2018). Pengaruh *Capital Intensity*, *Inventory Intensity*, Profitabilitas Dan *Leverage* Terhadap Agresivitas Pajak. *Issn Seminar Mahasiswa Nasional Ekonomi Dan Bisnis*, 2(1), 1 – 14.
- Harjito, Y., Sari, C. N., & Yulianto, -. (2017). *Tax Aggressiveness Seen From Company Characteristics And Corporate Social Responsibility*. *Journal Of Auditing, Finance, And Forensic Accounting*, 5(2), 77. <https://doi.org/10.21107/Jaffa.V5i2.3765>

- Kusuma Wardani, D., & Pratiwi Wijayanti, A. (2022). Reslaj: Religion Education Social Laa Roiba Journal Pengaruh Corporate Social Responsibility Terhadap Tax Aggressiveness Dengan Ukuran Perusahaan Sebagai Variabel Moderasi. *Reslaj: Religion Education Social Laa Roiba Journal*, 4(3), 616 – 627. <https://doi.org/10.47476/Reslaj.V4i3.842>
- Maulidah, H. A., & Prastiwi, D. (2019). Pengaruh *Corporate Social Responsibility*, Intensitas Modal, Dan Persaingan Terhadap Agresivitas Pajak Perusahaan Hidayatul Awalina Maulidah Jurusan Akuntansi, Fakultas Ekonomi, Universitas Negeri Surabaya Dewi Prastiwi Jurusan Akuntansi, Fakultas Eko. *Akunesa: Jurnal Akuntansi Unesa*, 8(1).
- Muzakki, M. R., & Darsono. (2015). Pengaruh *Corporate Social Responsibility* Dan *Capital Intensity* Terhadap Penghindaran Pajak. *E-Jurnal Akuntansi*, 4(3), 445 – 452.
- Nasional.Kontan.Co.Id. (2020). *Akibat Penghindaran Pajak, Indonesia Diperkirakan Rugi Rp 68,7 Triliun*.
- Novitasari, S., Ratnawati, V., & Silfi, A. (2016). Pengaruh Manajemen Laba, *Corporate Governance*, Dan Intensitas Modal Terhadap Agresivitas Pajak Perusahaan (Studi Empiris Pada Perusahaan Property Dan Real Estate Yang Terdaftar Di Bei Periode Tahun 2010-2014). *Jurnal Online Mahasiswa Fakultas Ekonomi Universitas Riau*, 4(1), 1901 – 1914.
- Pradnyadari, I. D. A. I. (2015). Pengaruh Pengungkapan *Corporate Social Responsibility* Pendahuluan. *Universitas Atma Jaya Yogyakarta*.
- Wardani, Dewi Kusuma Primastiwi, A., & Agustin, E. A. (2021). *Corporate Social Responsibility* Sebagai Pemoderasi Pengaruh Ukuran Perusahaan Terhadap Tax Aggressiveness. *Ilmiah Akuntansi Dan Finansial Indonesia*, 4(2), 15 – 24.
- Zuhro, S. (2021). Pengaruh *Capital Intensity* Terhadap *Tax Avoidance*: Peran Moderasi Corporate Social Responsibility. *Jurnal Ekonomi Dan Bisnis, Universitas Muhammadiyah Gresik*.